

Fiches techniques des équipements fixes et mobiles

ANNEXE 2 - Pièce 1

Fiches techniques des groupes mobiles primaires et
secondaires

GROUPE MOBILE MODELE ROAD CLASSIFIER H3800**Description générale**

La cellule d'alimentation est installée sur le groupe et alimente le crible avant le concasseur

Grille relevable avec contrôle à distance

Des flancs amovibles sur la trémie de chargement permettent d'augmenter la largeur de chargement

L'inclinaison de la grille entre 7 et 17°

Une goulotte mobile à l'avant du crible facilite la maintenance et le contrôle

Tous les convoyeurs embarqués sont à motorisation électrique et sont repliables hydrauliquement pour le transport, sauf le convoyeur des recyclés.

Le transporteur d'alimentation du crible et le transporteur de stockage des fines sont capotés

Le groupe complet est transporté en une seule partie, sa mise en place demande environ 30 minutes.

Des passerelles et escaliers d'accès permettent la circulation autour du crible pour le contrôle et l'entretien.

Un variateur de fréquence sur l'alimentateur permet d'en réguler le débit

L'armoire électrique embarquée contient tous les appareils électriques de commande et de contrôle du groupe : fusibles, contacteurs, voyants d'état, boutons poussoirs, asservissements etc.

Des arrêts d'urgence « coup de poing » sont placés aux endroits appropriés.

Plans :

- Encombrement général : 401-090000
- Transport du groupe : 401-100000

Cellule d'alimentation

- Alimentateur vibrant type PF 0830 (800 X 3000) avec moteurs électriques à balourds de 2,3 kW

Concasseur

- Un concasseur giratoire modèle H-3800
- Appareil livré complet avec ses pièces d'usure
- Bâti supérieur à deux bras, comportant deux ouvertures d'alimentation

- Conasseur fourni avec :

- * la centrale de lubrification et le système HYDROSET motorisé, pour réglage sous charge et débouillage du concasseur

- * le réfrigérant d'huile par circulation d'air prévu pour température ambiante maxi de 40 °

- * le dispositif de surpression interne du bâti inférieur du concasseur

- * la transmission complète comprenant :

- la poulie réceptrice sur concasseur
- la poulie motrice
- le jeu de courroies trapézoïdales

- * les supports élastiques (Qté 4) d'appui du concasseur sur le châssis

- * la trémie circulaire d'alimentation du concasseur, boulonnée sur le bâti supérieur

- * le jeu de tuyaux flexibles avec embouts filetés pour raccordements de la centrale hydraulique aux circuits hydrauliques du concasseur

- * le carter de protection de la transmission

- * le moteur électrique d'entraînement du concasseur

- du type asynchrone à rotor à cage

- puissance nécessaire 132 kW - 4 pôles - forme B3

- * le démarreur statorique du moteur d'entraînement du concasseur :

- * Appareil livré en standard sans ASFI

Crible des concassés

- Type Freeclassifier FC 318 3 étages
- * Equipé d'une boîte d'alimentation de grande dimension permettant une bonne distribution des matériaux à l'alimentation.

- * Suspension avant et arrière par ressorts hélicoïdaux

- * Mécanisme constitué de 2 moteurs électriques à balourds puissance unitaire 11 kW

- * Surfaces criblantes :

- 1er étage : toiles métalliques à tension longitudinale

- 2ème étage : toiles métalliques à tension longitudinale

- 3ème étage : toiles métalliques à tension longitudinale

Transporteurs

- Embarqués sur le groupe

- Alimentation du crible

- . Longueur : 10,60 m

- . Largeur de bande : 800 mm

- . Moteur : 11 kW

- . Vitesse de bande : 1,3 m/s
- Recyclage vers le concasseur secondaire (convoyeur externe au groupe)
 - . Longueur : 9 m
 - . Largeur de bande : 650 mm
 - . Moteur : 4 kW - 4 pôles
 - . Vitesse de bande : 1,1m/s
- convoyeur des fines
 - . Longueur : 9.5 m
 - . Largeur de bande : 800 mm
 - . Moteur : 5.5 kW
 - . Vitesse de bande : 1,25 m/s
- 3 Convoyeurs de mise en stock
 - . Longueur : 8 m
 - . Largeur de bande : 650 mm
 - . Moteur : 4 kW - 4 pôles
 - . Vitesse de bande : 1,1m/s

Motorisation

- Entièrement réalisée par moteurs électriques alimentés depuis une installation électrique voisine ou bien un groupe électrogène (non fourni) puissance nécessaire 250 kVA 400 V
- Circuits puissance : 400 V - Triphasé - 50 Hz
- Circuits commande : 230 V - Monophasé - 50 Hz

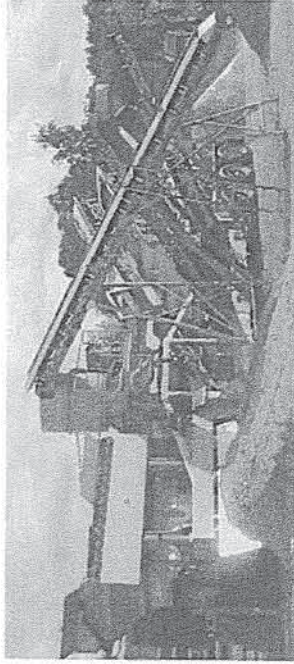
Système hydraulique

- Pour la commande des pieds télescopiques d'appui au sol du groupe, mise en place hydraulique des convoyeurs et du crible.

- Groupe hydraulique de commande 3 kW - 24 V

Remarque

- Avec pivot d'attelage : 3 ½ ou 2"
- A 2 essieux, 4 roues 385/65R/22.5
- Freins à commande pneumatique
- Eclairage code de la route

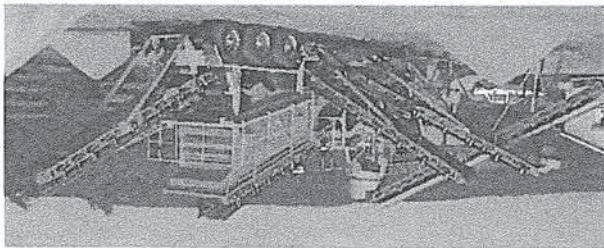


Sandvik RoadClassifier 3800 General information

- RC 3800 is superior in its function and can produce 3 calibrated fractions. The Unit can also be used as a screen Unit.
- Well known Sandvik H3800 crusher with a wide range of mantels and settings for different applications are available.
- ASRI is optional.
- The Screen is a FC 318 3-D which can take out 3 (4 as a screen unit) calibrated fractions
- Remote-controlled flippable static bar grizzly on feed hopper. Adjustable fixed position between 7-17°. The grizzly is divided in three sections, which can easily be taken off when the feeder is loaded from a conveyor and also changed according to individual wear. The whole grizzly can be removed if not required. Grizzly separation is accordingly to the crusher chamber 100mm air. 125mm.
- Foldable flaps on feed hopper can give wider loading area.
- IR level monitors on feed hopper give correct feeding to the screen.
- A foldable flap on each side can be used as a back-wall for a loading ramp and as protection against oversize stones falling from the tip able grizzly.
- Rollaway discharge chute on screen provides easy access for inspection and service.
- Flaps inside the chute provide adding top fractions with fine fractions.
- All conveyors are electrically driven and hydraulically foldable for transport.
- Oversize conveyor is equipped with stone brake and side protection plates intended only for screening natural gravel (to prevent rolling stones causing damage and accidents). Removed during transport.
- Dust-encapsulated feed conveyor, screen and conveyor for the finest fraction.
- Hydraulic supporting legs at front end make connection with semi-trailer easier.
- The whole unit can be transported in one piece if local transport legislation permits, start-up time approx. 30 minutes.
- Walkways (with stepladders) around the screen, to provide easy access for inspection and service.
- Self-contained galvanised steel switchgear cabinet fixed on-board the unit. The cabinet contains all the components necessary for power distribution and control - fuses, contactors, indicating lamps, control push buttons, interlocking relays, etc.
- Emergency stop push buttons are placed at strategic locations.
- Frequency inverter for feeder and conveyor for coarsest product, to provide step less regulation of feed rate and conveyor speed.
- 220V transformer for power outlet (2pc.10A, 1pc.16A).
- 32-pole connection for external control of the Unit.
- The Unit has no on-board genset due to the axle load limits.
- The design and manufacture of RoadClassifier™ 3800 complies with ISO 9001

SANDVIK ROADCLASSIFIER 3800 Specification Summary

05-01



- Optional extra equipment**
1. Belt scale for the feed conveyor.
 2. Ball-deck beneath the third deck in the FC 318 screen.
 3. Electrical heating system for feeder bottom and feed hopper.
 4. Electric heaters under the feed conveyor and the conveyor for the finest fraction.
 5. Dust collector, mounted above rear conveyor.
 6. Floodlights on illumination mast.
 7. Start Siren.
 8. N.F.-screen PJ 10/10, 2x1.8 kW vibrator motors.
 9. N.F.-conveyor 6m x 650mm.
 10. Control voltage 110 V
 11. ASR+.
 12. Synthetic oil
 13. Heating for the crusher oil incl. 6kVA genset.
 14. Diesel heating for the crusher oil.

Dimension	4.46m / "
Operation Height	3.00m / "
Width	17.70m / "
Length	4.46m / "
Transport Height	3.00m / "
Width	17.70m / "
Length	46.5
Weight	25 000 KG
Feed station	PF 0830
Crusher	2 x 2,3 kW electric motor 5kbn
Type	Sandvik H3800
Feed opening	100 mm (TS)
Drive	132 kW electric motor
Conveyors	Length Width Motor Speed
Feed con belt:	10.6 m 800mm11kW 1.3m/s
Rear con:	9.5 m 800mm5.5kW 1.25m/s
3 pro con:	8 m 650mm4kW1, 1.0m/s
Feed conv.	9 m 650 mm (external to crusher)
N.F.-conv.	6 m 500 mm
Screen	FC 318-3D
Product screen	2 x 11 kW electric motors
Motor	JF 10/10
NF-screen	2 x 1,8 kW electric motors
Motor	
Hydraulic system	
Coarse stone grizzly:	Hydraulic power pack, 400V, 4kW
Foldable conveyors, supporting legs, retractable screen:	
Hydraulic power pack, 24V (alt.400V), 3kW (alt 4kW)	
Requested power	Power limit 250 kVA 400V
Running gear	
Type:	King-pin 3 1/2" or 2" Leaf-sprung two-axle bogies, air brakes and running lights. 4 Tires 385/65R22.5.



Sandvik Rock Processing

MOBILE CRUSHING / SCREENING UNIT
TRSP DRAWING RC 3800

401-100000

SANDVIK
Sandvik Rock Processing

QTY	ITEM	DESCRIPTION	UNIT	REVISION	DATE	BY	CHK
1	RC H-3800	MOBILE CRUSHING / SCREENING UNIT	TRSP DRAWING RC 3800	1.00	2002-02-10		

RC H-3800
MOBIL KOMPART SIKTISSTATION-KONKROSS

VIA TRANSPORT

1. ANGD 17 700 (EKKL. VERKLEF)

2. HÖJD 4 460

3. BREDD 3 000

4. HÖJD 2 999

5. HÖJD 2 999

6. HÖJD 2 999

7. HÖJD 2 999

8. HÖJD 2 999

9. HÖJD 2 999

10. HÖJD 2 999

11. HÖJD 2 999

12. HÖJD 2 999

13. HÖJD 2 999

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15. HÖJD 2 999

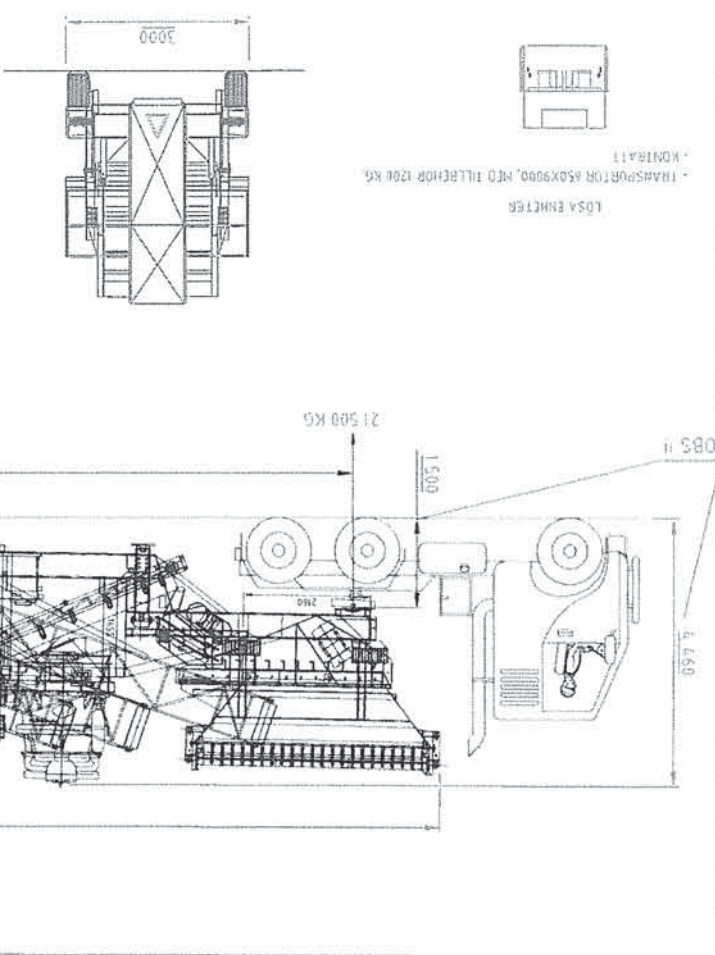
16. HÖJD 2 999

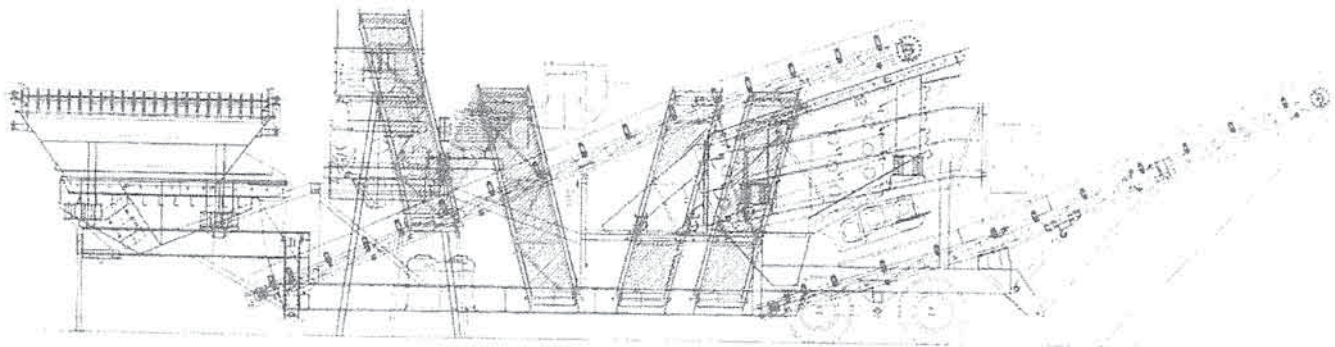
17. HÖJD 2 999

18. HÖJD 2 999

19. HÖJD 2 999

20. HÖJD 2 999





40115, 40116
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PROJECT NO.	2007	DATE	
		MOBILE CRUSHING/ SCREENING UNIT	
Sandvik Rock Processing		RC 3800	
		PART NO. 401-090000-0	

KOMATSU®

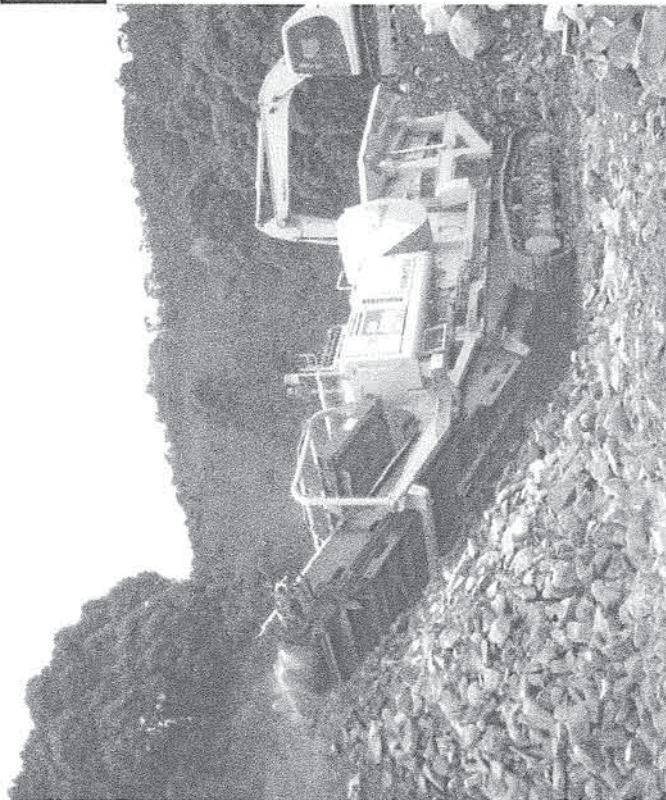
BR550JG-1

FLYWHEEL HORSEPOWER
228 kW 306 HP @ 1950 rpm

OPERATING WEIGHT
47500 kg 104,720 lb



**BR
550
JG**



MOBILE CRUSHER

BR550JG-1 Mobile Crusher

Komatsu's newly designed BR550JG-1 enters the market as the most technologically advanced machine available. With excellent crushing power and a treatment capacity of **100-460 ton/h** 110-507 U.S. ton/h, the Komatsu BR550JG-1 is the optimum choice for your work site.

Rotating lamp flashes to indicate travel mode, excessive load on crusher or abnormal condition.

High performance jaw. The FS44300A maximum-capacity jaw provides high performance with a simple design that facilitates easy maintenance. Komatsu's unique design allows the discharge setting to be changed with a simple one-touch adjustment in less time than the competition.

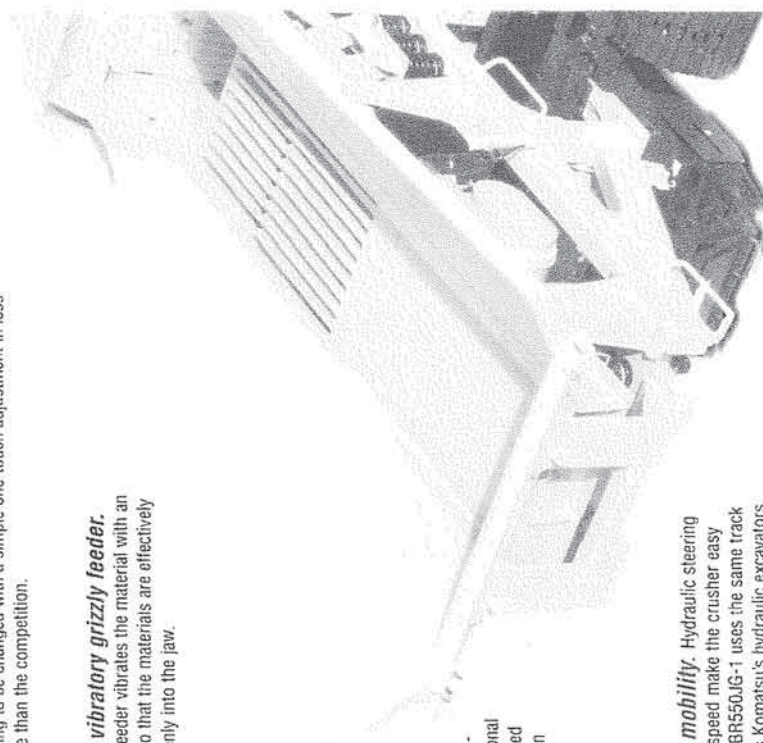
Newly designed vibratory grizzly feeder.

The vibratory grizzly feeder vibrates the material with an elliptical movement, so that the materials are effectively separated and fed evenly into the jaw.

HydraMind hydraulics and all-hydraulic drive system.

Fully hydraulic drive system gets you working right away. HydraMind system supplies the optimal amount of oil through load-sensing and pressure-compensated valves. Optional equipment can be connected through hydraulic outlets in the chassis.

Outstanding mobility. Hydraulic steering and high travel speed make the crusher easy to relocate. The BR550JG-1 uses the same track undercarriage as Komatsu's hydraulic excavators.



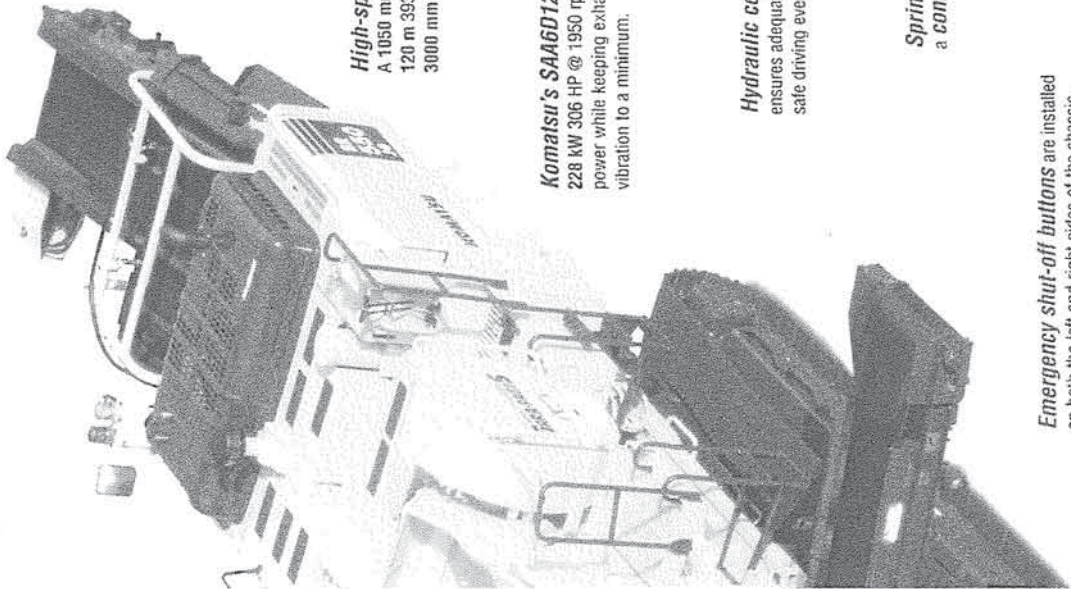
FS4430QA
MOBILE CRUSHER

FLYWHEEL HORSEPOWER
228 kW 306 HP @ 1950 rpm

OPERATING WEIGHT
47500 kg 104,720 lb

TREATMENT CAPACITY
100-460 ton/h
110-507 U.S. ton/h

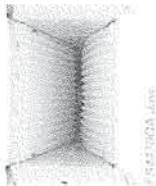
Foldable hopper for easy loading and transport. The hopper is accessible from three sides for material loading. The rear side is especially low—just 3365 mm 11'0" high.



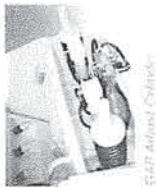
Designed with the operator in mind, the crusher offers the most up-to-date technological advancement to assist with your crushing needs.

Equipped with FS4430QA Jaw Crusher

The powerful FS4430QA jaw crusher with bow-type fixed jaw at high rpm allows you to adjust setting ranges from 55 mm to 200 mm 2'2"-7'9" (OSS) for maximum crushing capabilities, including concrete debris and hard rock. Komatsu's one-touch discharge setting adjustment also allows greater control over your crushing capacity.



FS4430QA Jaw



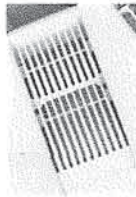
5.44' Adjust Operator



Adjustable Discharge



Load/Unload Control



Discharge Flap



3000 mm 9'10"

- **Maximum crushing efficiency.** The Komatsu semi-automatic feeder system senses the load on the crusher and adjusts the feed rate accordingly to maximize efficiency for all types of rock and concrete debris.
- **Hopper for easy loading.** The loading height of the hopper is only 3365 mm 11'0" (rear side).
- **Newly designed vibrating grizzly feeder.** By raising the feeder angle to an incline of 4° the muck is more effectively removed and the reciprocating movement of the 2-stage grizzly feeder reduces clogging. Also, an optional muck conveyor is available to separate the materials.
- **High-speed, large-capacity conveyor belt.** A 1050 mm 3'5" (1000 mm 3'4") wide belt moves quickly to discharge crushed materials. Discharge height is 3 m 9'10", which facilitates stacking and screening the products.
- **High-volume capacity.** By utilizing the latest technology in the development of the large-sized, high-speed crusher, the Mobile Crusher maximizes the volume of materials that can be crushed and passed through the grizzly feeder.

High-speed, large-capacity conveyor belt.

A 1050 mm 3'5" (1000 mm 3'4") wide belt moves at 120 m 393'8" per minute. The discharge height is 3000 mm 9'10".

Komatsu's SAA6D125E-2 engine provides

228 kW 306 HP @ 1950 rpm for maximum crushing power while keeping exhaust gas, noise, and vibration to a minimum.

Hydraulic conveyor lifter at the high position ensures adequate ground clearance when driving, and safe driving even when on uneven ground.

Sprinkler nozzle and a **connector** are standard.

Emergency shut-off buttons are installed on both the left and right sides of the chassis.

Treatment Capacity

Maximum treatment capacity (with a muck content of 30%).

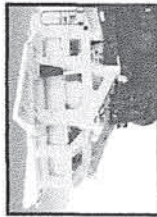
	Unit: ton/h U.S. ton/h				
	55 mm	70 mm	100 mm	150 mm	200 mm
Material	2-2	2.8	3.8	5.0	7.9
Material Stone	—	—	130-180	200-280	280-400
Concrete debris	100-140	110-160	150-220	230-330	320-460
	110-154	127-176	165-243	254-364	353-507

The treatment capacity of the material shown in the table is based on aggregate having unconfined compression strength of about 1000 kg/cm², that of the concrete debris is based on concrete debris containing no steel bars, and all the material is assumed to be dry and equal to or smaller than the optimum feed-to-matched size.

The treatment capacity is the sum of the quantity of the material crushed by the crusher and the quantity of the material that passed through the grizzly bar. It depends on the type and properties of the material and the working condition.

When the crusher discharge setting is 55-100 mm 2'2"-3'9", only concrete debris can be crushed.

BF550UG-1 MOBILE CRUSHER



Front View



Lifting Function of Conveyor

- **High mobility.** The overall height for transportation is reduced below 3.4 m (11'2") by employing the hydraulic cylinder to fold the hopper. The BF550UG-1 has high ground clearance. The hydraulic conveyor elevator function ensures ample ground clearance when relocating the machine. The optional radio controller allows remote control travel functions.

Maximum Reliability and Minimal Maintenance. Komatsu equipment offers exceptional reliability and the leading edge in technological advancement. The new trouble monitoring system improves maintenance, while standard features such as the pre-cleaner and double cleaner element are installed to increase operator comfort and improve dust resistance. A large ground clearance under the crusher means easier maintenance. Even if trouble occurs it can be repaired in a short time.

Comfortable Design. In addition to a low-noise engine made with sound-absorbing materials, Komatsu installs low-speed and high torque hydraulic pumps, a muffler, and other standard parts to reduce noise and vibration. In addition, every crusher is equipped with a standard water sprinker nozzle to suppress dust and improve the environment.

Easy Operation. The Mobile Crusher offers high-performance functions. The crusher setting can be completed in 3 minutes with the easy setting adjustment mechanism. The crusher, feeder, discharge conveyor belt, and optional equipment can all be operated at the touch of a button. With the optional remote operator control is maximized.

- Safety**
- Emergency shut-off buttons are located on the left and right sides of the chassis, on the control panel, and the remote control (optional).
 - A rotating lamp flashes when there is a malfunction on the monitor display (for example, when overheating occurs) and the operator is also alerted by a buzzer in the event of an abnormal shut-down on the conveyor belt or optional equipment.
 - A switch is provided to change between crushing and travel modes.
 - Handrails and safety guards are provided for all sections.



Remote Control Panel



Openings on Crusher Side



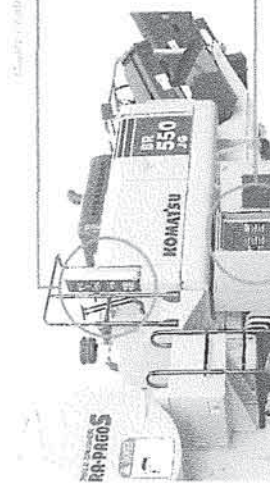
Large Torque Engine



Water Sprinker Nozzle



Main Control Panel



ENGINE

Model Komatsu SAA6D125E-2
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged and aftercooled (air to air)
 Number of cylinders 6
 Bore 125 mm 4.92"
 Stroke 150 mm 5.91"
 Piston displacement 11.04 ltr 674 in³
 Flywheel horsepower 228 kW 306 HP @ 1950 rpm (SAE J1349)
 Governor All-speed, electrical

HYDRAULIC SYSTEM

Type Variable capacity with pistons (inclined plate type)
 Main pump Variable-capacity pistons
 Pumps for Travel, crusher, conveyor and options
 Maximum flow 2 x 310 ltr/min 2 x 82 U.S. gpm
 Maximum pressure 380 kg/cm²
 Maximum travel speed 3 km/h 1.9 mph
 Hydraulic system (travel, crusher, feeder, conveyor, and option):
 Travel 220 ltr/min 58 U.S. gpm
 Crusher 325 ltr/min 86 U.S. gpm
 Feeder 110 ltr/min 29 U.S. gpm
 Main conveyor 90 ltr/min 24 U.S. gpm
 Muck conveyor 47 ltr/min 12 U.S. gpm
 Magnetic separator 38 ltr/min 10 U.S. gpm

TRANSPORTATION

Condition after rotary lamp and muffler are removed and mirror assembly are removed.

Condition after only rotary lamp and muffler are removed.
 (In some districts, the machine may need to be disassembled for transportation.)

Transport length	13430 mm	44'1"
Transport height	3385 mm	11'2"
Transport height*	3505 mm	11'6"
Transport width	2995 mm	9'10"

*Condition after only rotary lamp and muffler are removed.

OPERATING WEIGHT

Operating weight, including 500 mm shoes 47500 kg 104,720 lb
 Treatment capacity 100-160 ton/h 110-507 U.S. ton/h

CRUSHER

Jaw Komatsu FSH-300A
 Inlet size 1120 mm x 765 mm 44" x 30"
 Discharge setting (O.S.S.) 55 mm to 200 mm 2" to 7'9"
 Rotating speed (variable) 210-300 rpm

GRIZZLY FEEDER

Frequency Maximum 1000 rpm
 Size 1125 mm x 4105 mm 44" x 13'6"
 Drive type Hydraulic gear motor

UNDERCARRIAGE

Soil of track Sealed track
 Track adjuster Hydraulic
 Number of shoes 45 each side
 Number of carrier rollers 2 sets/one side
 Number of track rollers 5 sets/one side

COOLANT AND LUBRICANT CAPACITY

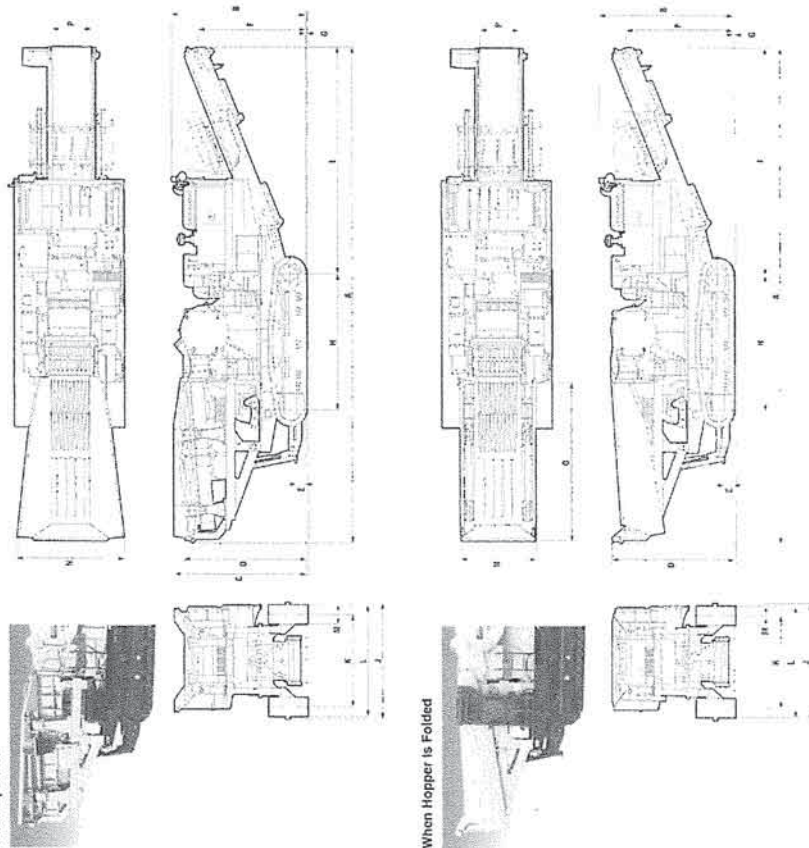
Fuel tank 605 ltr 160 U.S. gal
 Radiator 43.9 ltr 12 U.S. gal
 Engine 38 ltr 10 U.S. gal
 Final drive, each side 9 ltr 2.4 U.S. gal
 Hydraulic system 370 ltr 98 U.S. gal

BR550JG-1

MOBILE CRUSHER

DIMENSIONS

When Operated



When Hopper is Folded

A	Overall length	13430 mm	44' 1"	J	Overall width	3115 mm	10' 3"
B	Overall height	3640 mm	11' 11"	K	Track range	2480 mm	8' 2"
C	Feed height—side	3650 mm	11' 11"	L	Track width	2980 mm	9' 9"
D	Feed height—rear	3365 mm	11' 0"	M	Shoe width	500 mm	19' 7"
E	Minimum ground clearance (during travel)	350 mm	1' 2"	N	Hopper width	2005 mm	9' 2"
F	Discharge height	3000 mm	9' 10"	O	Hopper width when folded	2130 mm	7' 0"
G	Track thickness	30 mm	1"	P	Hopper length	4365 mm	14' 4"
H	Length of track on ground	3700 mm	12' 2"		Discharge conveyor belt width	1050 mm	3' 5"
I	Distance from outer center	6145 mm	20' 2"			1050-1000 mm (34'-0" and 33'-0")	

STANDARD EQUIPMENT

ENGINE:

- Engine, Komatsu SA6D125E-2
- 4-cycle, water-cooled, direct injection, turbocharged, and aftercooled (air to air)
- Net horsepower 228 kW 306 HP @ 1950 rpm

FUEL SYSTEM:

- Fuel, light oil, ASTM specification
- Governor, centrifugal method, all-speed method
- Cooling fan, suction type
- Air cleaner, centrifugal method with paper filter

ELECTRICAL SYSTEM:

- Starting motor, 11 kW 24 V
- Alternator, 50 ampere 24 V
- Battery, 140 Ah 2 x 12 V

UNDERCARRIAGE:

- Number of rollers:
 - Upper carrier, two sets/one side
 - Lower track, five sets/one side

SHOES:

- Assembled triple-grouser type, 500 mm 19.7"
- Tension adjustment, grease cylinder method (cushion springs attached)

CRUSHER:

- Type, FS4430DA single-toggle crusher
- Size, 1120 mm x 765 mm 44" x 30"
- Rotation, 210–300 rpm
- Drive method, hydraulic piston motor

FEEDER:

- Type, 2-step deck
- Speed-controlled grizzly feeder
- Dimensions (W x L), 1125 mm x 4105 mm 44" x 136"
- Grizzly bar opening, 45–70 mm 1.77–2.76"
- Drive method, hydraulic gear motor

BELT CONVEYOR:

- Width x length, 1050 mm x 10195 mm 35" x 333'
- Speed, 120 m/min 393.7 f/min
- Drive method, hydraulic piston motor

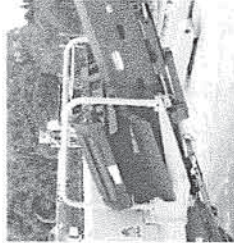
OPTIONAL EQUIPMENT

MAGNETIC SEPARATOR:

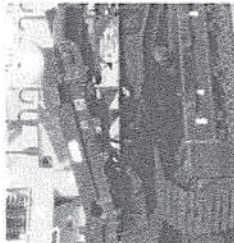
- Magnetic separator for primary conveyor, 900 mm 35" wide

RADIO REMOTE CONTROLLER:

- Muck conveyor assembly can be folded by hydraulic cylinder, 4000 mm x 600 mm 131' x 2'



Magnetic Separator



Muck Conveyor



Remote Controller

- Function:
- Travel Left/Right/Forward/Reverse
 - Crusher On/Off
 - Feeder On/Off
 - One-Touch
 - Retraction On/Off
 - Emergency Stop/Off
 - Horn

HES5679200

KOMATSU

Printed in Japan 200405 IP-AD (10)



STANDARD EQUIPMENT

ENGINE:

- Engine, Komatsu SAA6D125E-2
- 4-cycle, water-cooled, direct injection, turbocharged, and aftercooled (air to air)
- Net horsepower 228 kW 305 HP
- 1950 rpm
- Fuel system:
 - Fuel, light oil, ASTM specification
 - all-speed method
 - Governor, centrifugal method,
- Cooling fan, suction type
- Air cleaner, centrifugal method with paper filter

ELECTRICAL SYSTEM:

- Starting motor, 11 kW 24 V
- Alternator, 50 ampere 24 V
- Battery, 140 Ah 2 x 12 V

UNDERCARRIAGE:

- Number of rollers:
 - Upper carrier, two sets/one side
 - Lower track, five sets/one side

SHOES:

- Assembled triple-grouser type, 500 mm 19.7"
- Tension adjustment, grease cylinder method (cushion springs attached)

CRUSHER:

- Type, FS4430A single-toggle crusher
- Size, 1120 mm x 765 mm 44" x 30"
- Rotation, 210-300 rpm
- Drive method, hydraulic motor with V-belt

FEEDER:

- Type, 2-step deck
- Speed-controlled grizzly feeder
- Dimensions (W x L), 1125 mm x 4105 mm 44" x 136"
- Grizzly bar opening, 45-70 mm 1.77"-2.76"
- Drive method, hydraulic gear motor

BELT CONVEYOR:

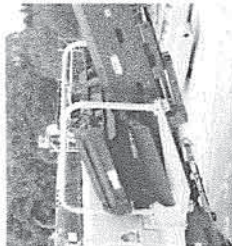
- Width x length, 1050 mm x 10195 mm 35" x 333"
- Speed, 120 m/min 393.7 f/min
- Drive method, hydraulic piston motor



OPTIONAL EQUIPMENT

MAGNETIC SEPARATOR:

- Magnetic separator for primary conveyor, 900 mm 35" wide



Magnetic Separator

MUCK CONVEYOR:

- Muck conveyor assembly can be folded by hydraulic cylinder, 4000 mm x 600 mm 131" x 2'



Muck Conveyor

RADIO REMOTE CONTROLLER:



Radio Remote Controller

- Function:
- Travel Left/Right
 - Forward/Reverse
 - Crusher On/Off
 - Feeder On/Off
 - One-Touch
 - Deceleration On/Off
 - Emergency Shutoff
 - Horn

HESS678200

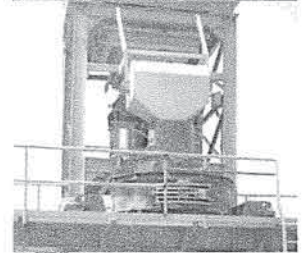
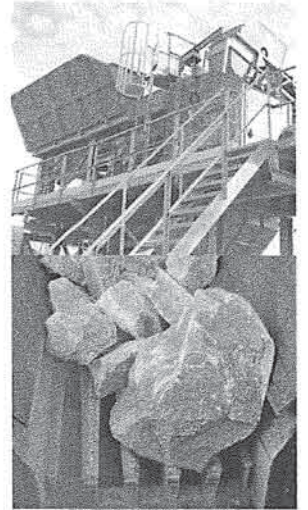
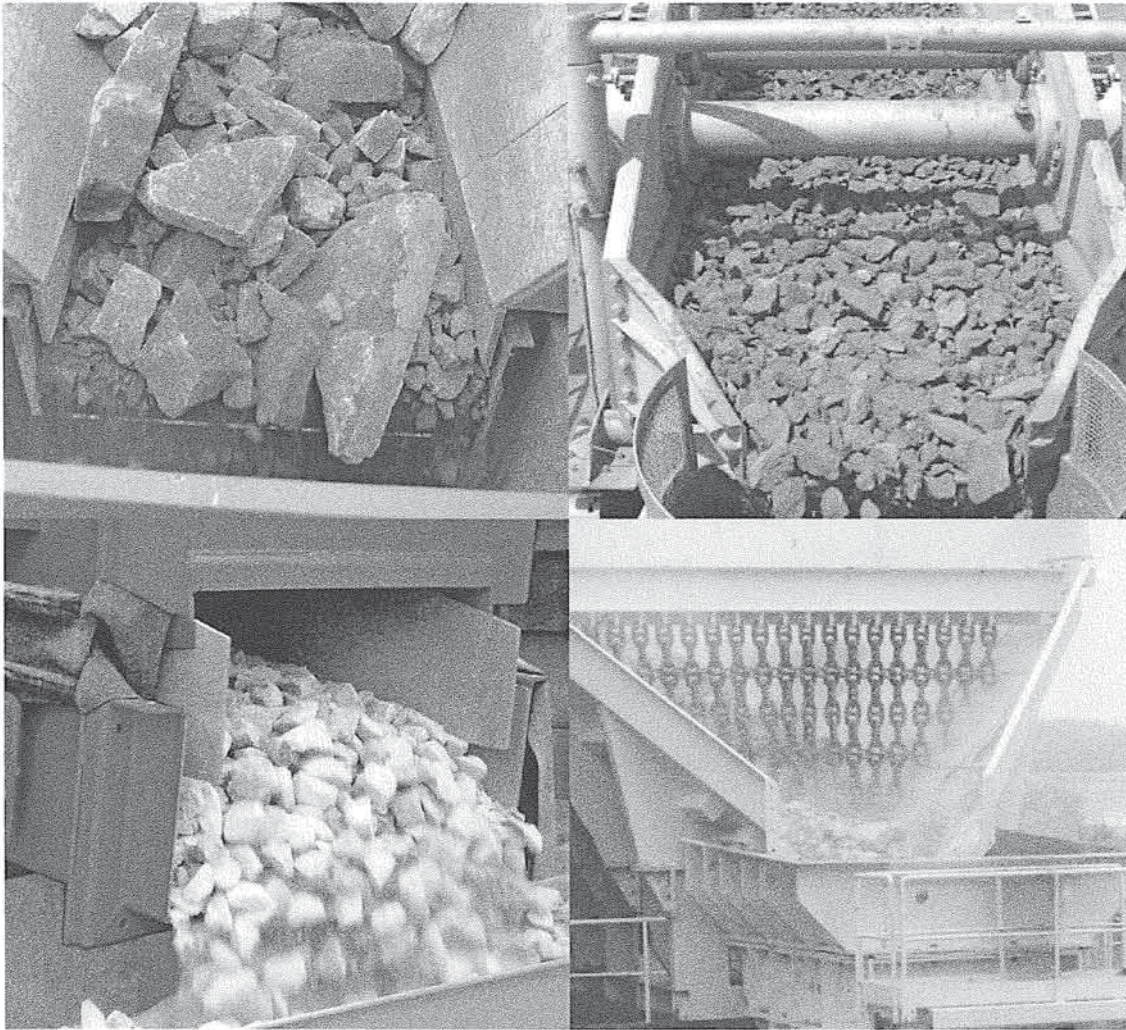
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KOMATSU

ANNEXE 2 - Pièce 2

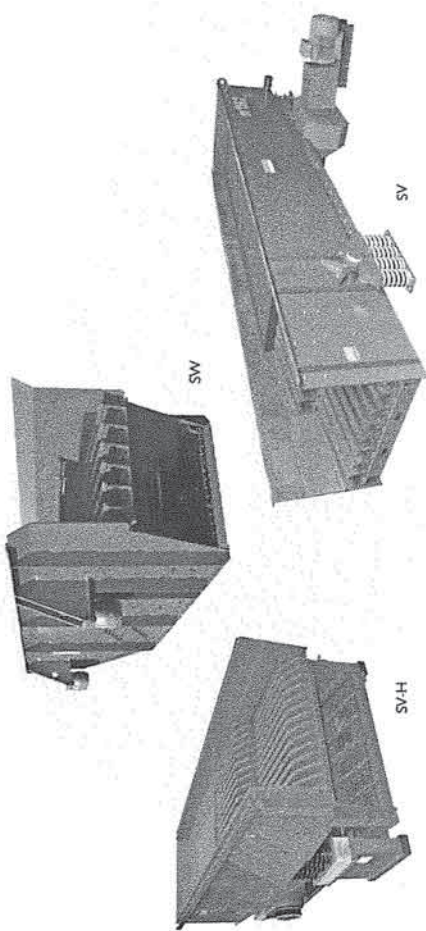
Fiche technique de l'alimentateur

Sandvik Feeders



SANDVIK

Sandvik grizzly feeders



Sandvik grizzly feeders come in three main types and many sizes to balance demands for capacity, impact resistance, weight and installation dimensions.

Besides handling large feed rates with coarse blasted rock, a primary feeder must also take the material impact from dump trucks or wheel loaders. Sandvik offers a range of primary grizzly feeders that balance the demands of capacity, impact strength, weight and installation dimensions.

SV-H, FOR YOUR HEAVIEST DUTIES

The heavy duty design of the SV-H feeder pays off in open pit applications with coarse feed of up to 1000 mm, and large hopper volumes, up to 200 m³.

The SV-H is designed to match the largest jaw crushers and impact crushers available. It scalps and bypasses material effectively to relieve the crusher, as well as removes low quality fine material.

The feeder's rugged body is all welded for maximum impact rigidity. Replaceable abrasion resistant (AR) steel wear liners are used on all exposed area, and suspended on coil springs are mounted for minimum transmission of dynamic loads.

The SV-H has a heavy-duty double shaft mechanism with gears in oil-bath lubrication and a separate electric motor and v-belt drive ensuring reliable and precise feed rate adjustment by speed and stroke. The feeder has two grizzly sections (integral type) in the top deck for separations from 75 to 225 mm. An installation at six degrees helps keep the grizzly clean and increases feeding and scalping capacity in a controlled way. A cross-tensioned optional second deck can be installed for removal of natural fines.

SV, FOR HIGH CAPACITY FEEDING AND SCALPING

The SV-unit is designed for high capacities, from 300 to 1400 t/h, in primary and secondary feeding application. The low profile makes the SV feeders cost-effective to install. The standard hopper volume is 26-45 m³ with max feed size up to 1 500 mm.

The SV feeder is highly adjustable for tailored performance, thanks to the following: adjustable grizzly gaps, easy adjustment of stroke length by extra counter weights, gear wheel transmission facilitating easy adjustment of stroke angle, spring pedestals for inclination adjustment, and optional electrical or hydraulic speed (capacity) adjustment.

With the SV unit, the maintenance is easily done and kept to a minimum. The heavy-duty double shaft mechanism

with gears are in an oil-bath for extended service intervals, thick replaceable wear plates are mounted on all exposed surfaces, and the mechanism is easily dismantled for easy servicing.

SW, THE BEST FOR MOBILE PLANTS

Sandvik SW feeders are specially developed for mobile and portable plants, and small to medium size stationary plants. Compact and high capacity with an effective grizzly design and an optional second deck for fines removal, they have proved equally well-suited for shot rock as for gravel.

Dual section grizzly design allows for a step that turns over large material, effectively liberating more fines. The two-section grizzly reduces the bar length which enables sufficient taper of the bars. Integral type exchangeable grizzly sections ensure structural rigidity and long wear life. A second deck screen section is available to combine scalping with fines removal.

Tapered side plate profiles over the pan bottom make it possible to use the full width of the feeder pan to maximize feeding performance.

They also maximize the live hopper volume using minimal height and allow for a spill proof hopper design.

The dual unbalanced electric motor drive makes a simple stepless feed rate adjustment possible off-line or on-line using a frequency converter. Sandvik's experience with unbalanced motor drives over the last decades has shown that they give very high availability and reliability, especially for this type and size of feeder, which is often installed under unfavourable conditions.

SV-H technical data

Model	Inside width (mm)	Inside length (mm)	Grizzly length (mm)	Second deck (m ²)	Inclination (°)	Weight (kg)	Motor effect (kW)	Max feed size (mm)	Capacity * (t/h)
SV1152H	1075	4857	2 x 1200	NA	0°	4956	18.5	700	360-600
SV1323H	1075	4857	2 x 1200	NA	0°	5256	18.5	700	360-600
SV1323H	1175	4825	2 x 1200	NA	6°	7240	22	900	400-800
SV1323H	1175	4825	2 x 1200	NA	12°	7390	22	900	400-800
SV1651H	1575	5220	2 x 1200	NA	6°	10 100	30	900	550-900
SV1651H	1575	5240	2 x 1200	NA	6°	10 500	30	900	550-900
SV1825H	1770	5225	2 x 1200	NA	6°	13 040	45	1000	700-1200
SV1825H	1770	5225	2 x 1200	2.2	6°	12 700	45	1000	700-1200

SV technical data

Model	Pan width (mm)	Feed length (mm)	Grizzly length (mm)	Grizzly area (m ²)	Total weight (kg)	Motor effect (kW)	Feed capacity * (t/h)
SV1012	1020	3000	1 x 900	0.9	3480	15	550
SV1232	1220	3000	1 x 900	1.1	3815	15	700
SV1532	1520	3000	1 x 900	1.4	4435	15	850
SV1832	1820	3000	1 x 900	1.6	5195	22	1000
SV2132	2120	3000	1 x 900	1.9	6025	22	1200
SV2432	2420	3000	1 x 900	2.2	6650	22	1400
SV1052	1070	4500	1 x 1200	1.2	4480	15	550
SV1252	1270	4500	1 x 1200	1.5	5215	22	700
SV1552	1570	4500	1 x 1200	1.8	6000	22	850
SV1852	1870	4500	1 x 1200	2.1	6700	22	1000
SV2152	2170	4500	1 x 1200	2.5	8195	37	1200
SV2452	2470	4500	1 x 1200	2.9	8975	37	1400
SV1242	1020	6000	2 x 900	1.8	5965	22	550
SV1542	1220	6000	2 x 900	2.2	6855	30	700
SV1842	1520	6000	2 x 900	2.7	8050	32	850
SV2142	1820	6000	2 x 900	3.3	10620	37	1000

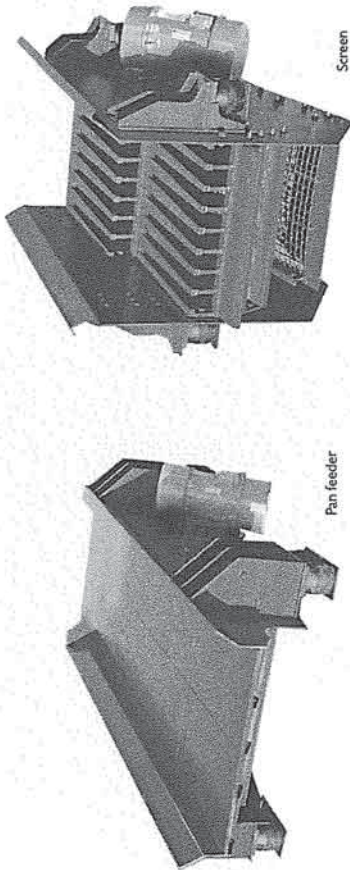
SW technical data

Model	Inside pan width (mm)	Inside pan length (mm)	Grizzly length (mm)	Grizzly Second deck (m ²)	Suspension type	Weight (kg)	Motor effect (kW)	Max hopper volume (m ³)	Max feed size (mm)	Capacity * (t/h)
SW0732D	655	3375	2 x 750	0.7 m ²	Rubber elements	2860	2 x 2.5	15	400	150-200
SW0842D	810	4220	2 x 900	1.2 m ²	Rubber elements	3300	2 x 4.0	15	500	200-250
SW1042D	980	4200	2 x 900	1.2 m ²	Rubber elements	4800	2 x 4.0	20	600	300-350
SW1052D	1000	4750	2 x 600	0.9 m ²	Coil Springs	4500	2 x 6.6	30	600	350-400
SW1252D	1200	4850	2 x 600	1.0 m ²	Coil Springs	5000	2 x 6.6	6	700	400-450

* At specified inclination and 1.6 t/m³. Capacities depend not only on feeder size but also on feeder inclination, level gradation, etc.



Sandvik feeder screens



ST units combine a separate pan feeder with a double-deck vibrating screen that has a stepped grizzly on the top deck. The result is better flow control, greatly superior fines removal and optimum crusher performance.

POWERFUL DRIVE WITH VARIABLE CAPACITY

ST units can significantly improve the total throughput of a primary station by their ability to keep a primary crusher fully fed even during varying feed conditions. The separate screen unit ensures efficient scalping and fines removal as well as high availability even with difficult materials. The separate feed unit gives better flow control than vibrating grizzly feeders as it can be regulated based on what tonnage is actually reaching the subsequent crusher.

COMPACT INSTALLATION

The live hopper volume is maximized and the total height minimized by inclined side plate upper edges.

Power consumption for the units is moderate despite the use of four motors. The ST units give low dynamic loads and very little excessive movement during start up and stopping.

EFFICIENT SCALPING

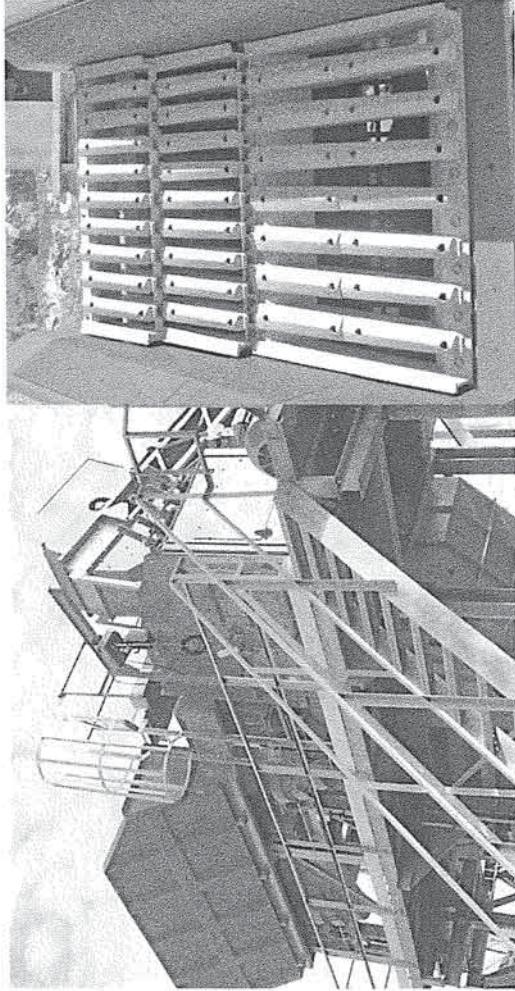
The feeder screen offers very good separations since it runs independently of the feeder. Consequently, the stroke length, stroke angle and motor speed can be optimized for effective scalping and fines removal.

The top deck has two grizzly sections with a step in between for efficient scalping and to keep the grizzly from pegging. The second deck has tensioned screening media and a scraper inclination for better fines removal. The linear motion vibration and

drive size ensure enough acceleration (g-force) to keep the wire mesh from blinding.

MINIMUM OPERATING COSTS

Low maintenance is achieved by using robust unbalanced electric motors on both the feeder and the screen. Bolt-on wear liners are provided on the bottom of the pan, as well as on the side walls above the scalping deck.



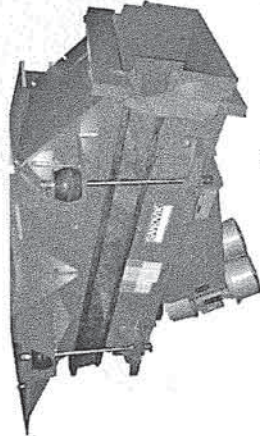
ST technical data

Model	Feeder Screen	Scalper pan width (mm)	Total pan height (mm)	Grizzly length (mm)	Grizzly length (mm) / Second deck (m ²)	Weights (kg)	Motor effect (kW)	Max hopper volume (m ³)	Max feed size (mm)	Capacity (t/h)
ST10843	ST10841	750	5500	2 x 1000	0.5 m ²	2350	4 x 4.0	15	500	100-240
ST10843	ST10822	750	5500	2 x 1000	0.5 m ²	2550	4 x 4.0	15	500	100-240
ST11043	ST11041	1020	5500	2 x 1000	0.6 m ²	2520	4 x 4.0	20	600	150-300
ST11043	ST11022	1020	5500	2 x 1000	0.6 m ²	2800	4 x 4.0	20	600	150-300
ST1243	ST1241	1150	5500	2 x 1000	0.9 m ²	2680	4 x 4.0	30	750	180-400
ST1243	ST1222	1150	5500	2 x 1000	0.9 m ²	3620	4 x 4.0	30	750	180-400
ST1343	ST1341	1300	5500	2 x 1000	1.0 m ²	2860	4 x 4.0	30	850	200-550
ST1343	ST1322	1300	5500	2 x 1000	1.0 m ²	3930	4 x 4.0	30	850	200-550
ST1673*	ST1541H	1600	6600	2 x 600 + 1 x 1200	2.9 m ²	5500	4 x 10.8	80	950	350-800
ST1673*	ST1627H	1600	6600	2 x 600 + 1 x 1200	2.9 m ²	6500	4 x 10.8	80	950	350-800

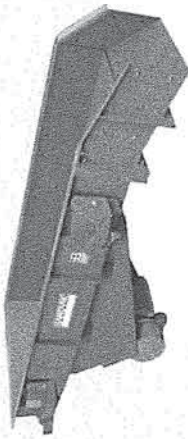
* Special extra heavy design



Sandvik pan feeders



SP



SP with u-lip

Sandvik pan feeders are built for high capacity feeding, with a simple interface and several options to facilitate installation.

The design and wide size range of Sandvik pan feeders is adapted to make proper access around crushers possible and decrease the total cost of the installation. Both base mounted and suspended installations can be accommodated.

SIMPLE PACKAGED FEEDING SOLUTIONS

Fully engineered feed chutes guarantee proper installation, reliable operation within a very wide capacity range and with the right flow geometry for very high capacities. The SP feeder is prepared for simple dust encapsulation. It has an adjustable inclination from 0-12 degrees to adapt to different materials and installation requirements. High sidewalls effectively prevent spillage and simplify feed chute design. The feed rate can either be adjusted by repositioning weight segments in the

drive or during operation using a frequency converter.

RELIABILITY AND HIGH PERFORMANCE

SP feeders offer large drive units and proper feed chutes designed to make high feed rates even of coarse materials possible. The dual unbalanced motors, rotate in opposite directions and self-synchronize to give the feeder pan its linear motion. The self-synchronization means that no gearbox or other transmission is needed. The linear motion (stroke) of Sandvik pan feeders will ensure efficient and accurate operation as well as low liner wear.

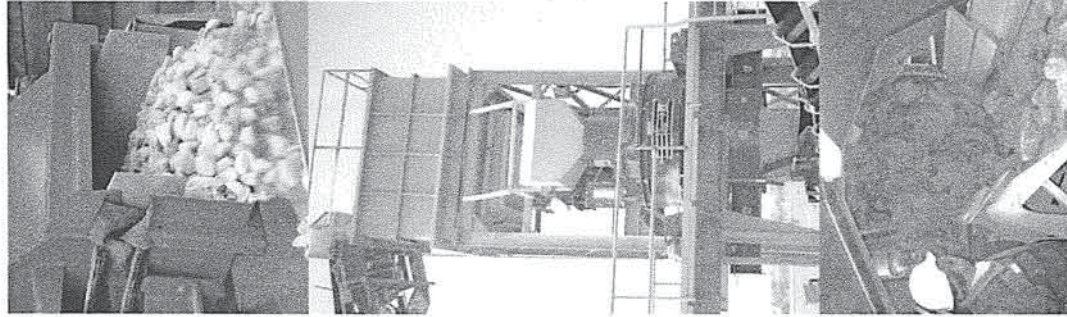
VARIOUS VERSIONS TO SUIT THE JOB

SP model with flat discharge end for unloading bins into crushers, onto screens and conveyors (i.e. loading

from a position perpendicular to the conveyor belt).

SP with u-lip which has a u-shaped extension tank to center the material better into a conveyor belt or crusher. H version, heavy-duty, for both models to enable feeding during large head loads, coarse material and high capacities.

A wide range of sizes is available to suit your needs. Many feeder lengths make installation flexible and can reduce your total cost of installation. Removable pan extensions are available for some sizes to suit installations where, for instance, access for maintenance above a crusher is critical. Heavy duty version with larger drive and heavier design is available for all sizes to make sure you get a feeder with the resilience and capacity you need.



SP technical data

Models	Pan width (mm)	Pan length (mm)	Wear plates Bottomside (mm)	Weight (kg)	Drive	Power input (kW)	Max feed size (mm)	Capacity * (t/h)
SP0715	650	1500	3/5	500	30-14/6	2 x 1.2	220	180
SP0725	650	2500	6/6	650	30-18/6	2 x 1.2	220	160
SP0818	800	1750	6/6	590	30-14/6	2 x 1.2	265	250
SP0825	800	2500	6/6	840	30-23/6	2 x 1.2	265	250
SP0830	800	3000	10/10	1950	45-50/6	2 x 4.5	200	700**
SP1030	1000	2000	10/6	840	30-23/6	2 x 1.2	330	400
SP1025	1000	2500	10/6	1200	40-27/6	2 x 2.3	330	375
SP1030	1000	3000	10/6	1420	40-35/6	2 x 2.3	330	400
SP1320	1250	2000	10/6	915	30-23/6	2 x 1.2	415	550
SP1325	1250	2500	10/10	1370	40-35/6	2 x 2.3	415	500
SP1423	1400	2250	16/10	2020	42-24/6	2 x 2.7	460	900
SP1623	1600	2350	16/10	2160	40-35/6	2 x 2.3	500	650
SP1630	1600	3000	16/10	2750	50-60/6	2 x 4.5	500	1300
SP0818H	800	1750	16/6	705	30-18/6	2 x 1.2	265	290
SP1020H	1000	2000	16/6	995	40-27/6	2 x 2.3	330	480
SP1025H	1000	2500	16/20	1500	45-42/6	2 x 2.7	330	430
SP1030H	1000	3000	20/6	1750	45-50/6	2 x 2.7	330	480
SP1320H	1250	2000	20/6	1195	40-35/6	2 x 2.3	415	630
SP1325H	1250	2500	20/10	1700	45-50/6	2 x 2.7	415	580
SP1623H	1600	2350	20/10	2290	45-50/6	2 x 2.7	500	740
SP1630H	1600	3000	20/10	2900	60-75/6	2 x 4.5	500	1500

** When max. feed size is bigger than 40 mm the capacity will decrease down to approx. 300 MTPH with max. size 200 mm.

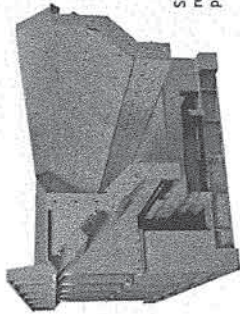
SP U-lip technical data

Model	Pan width (mm)	Discharge end width (mm)	Pan length (mm)	AR wear plates Bottomside * (mm)	Weight (kg)	Drive	Power input (kW)	Max feed size* (mm)	Capacity * (t/h)
SP1023	1000	600	2000	10/6+6	900	30-23/6	2 x 1.2	330	420
SP1028	1000	600	2500	10/6+6	1340	40-35/6	2 x 2.3	330	375
SP1323	1250	850	2000	10/6+6	1120	40-27/6	2 x 2.3	415	550
SP1328	1250	850	2500	10/10+6	1500	40-35/6	2 x 2.7	415	500
SP1426	1400	1100	2250	16/10+6	2000	45-47/6	2 x 2.7	460	900
SP1630	1600	1000	2500	16/10+6	2770	50-60/6	2 x 4.5	500	1250
SP1023H	1000	600	2000	20/6+6	1140	40-35/6	2 x 2.3	330	480
SP1028H	1000	600	2500	20/6+6	1610	45-42/6	2 x 2.7	330	430
SP1323H	1250	850	2000	20/6+6	1320	40-35/6	2 x 2.3	415	630
SP1328H	1250	850	2500	20/10+6	1840	45-50/6	2 x 2.7	415	580
SP1630H	1600	1000	2500	20/10+6	2950	60-75/6	2 x 4.5	500	1500

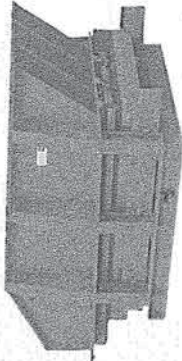
* Note: 1) All dimensions are for base mounted versions as per indication. Some deviations between base mounted and suspended version may exist. Always verify from valid dimensional drawing. 2) Capacities depend not only on feeder size but also on feeder inclination, feed gradation, etc.



Sandvik reciprocating plate feeders



SH primary reciprocating plate feeder unit



SH secondary reciprocating plate feeder



SH primary reciprocating plate feeder

Rugged, reliable, vibration-free, hydraulic reciprocating plate feeders for primary crushers, as well as for numerous secondary and other feeding applications.

Sandvik offers a range of hydraulic powered linear plate feeders for primary and secondary applications, all of which featuring easy and minimal maintenance.

EXCELLENT OPERATING CHARACTERISTICS

The SH feeders can be subjected to high head loads without affecting the feed rate. They handle sticky material well and can allow dumping of large size material directly since they always retain some material on the reciprocating plate.

MULTIPLE FEED RATE ADJUSTMENT POSSIBILITIES

The feed rate is easily adjustable, both by changing the stroke length and the stroke frequency. Stroke adjustment can be done without

stopping the feeder, completely automatically, remotely or manually by hand. The feeder can be started and stopped as often as required with shorter delays in the feeding than with a vibrating feeder.

SH - PRIMARY RECIPROCATING FEEDER

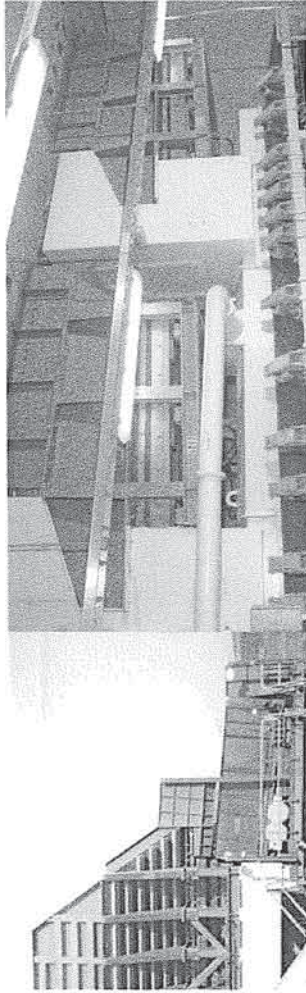
SH is a heavy reciprocating feeder for large primary stations with large volume, high drop height or where very large dump trucks are used. It has a robust feeder plate, skirts with an effective double wiper side sealing system and rear sealings, wear liners and a hydraulic drive unit with hydraulic cylinder, hoses and a control system (optional).

SH feeders are supported from below and a separate feed hopper or chute is used.

SH UNIT - PRIMARY RECIPROCATING FEEDER WITH HOPPER
This is a complete feed unit including a SH-feeder and in addition a complete heavy duty primary dump hopper with inclined walls. The hopper is equipped with wear liners and overflow curtain (optional). The volume of the hopper can be increased with hopper extension.

SH-SECONDARY RECIPROCATING PLATE FEEDER

The secondary range is primarily designed for tough secondary applications. These feeders are normally mounted underneath a silo or a bunker in order to discharge material at a belt conveyor. However, a special option is available for truck loading procedures (e.g. commonly used in underground mines).



MINIMUM OPERATING COSTS

- Low power consumption thanks to the low operating speed required.
- The reciprocating plate is the only moving part and the supporting rollers (with ball bearings) are never exposed to any dirt or dust.
- The long life wear liners are of a simple design, they can be made very thick and are easy to replace.

SIMPLE SELF-PROTECTING WEAR FREE DRIVE

- One hydraulic cylinder means a simple system to power the feeder.
- Oil lubrication of the hydraulic system minimizes wear and need for maintenance.
- The feeder is completely vibration free and the dynamic loads very small.

SPECIAL OPTIONS

Special options for either high or low ambient temperature are available.

Technical data SH and SH Unit for primary feeding

Model	Height (mm)	Weight (kg)	Motors (kW)	Max feed (mm)	Capacity range (m ³ /h)	Height (mm)	Weight (kg)	SH Unit
SH1041	860	3 450	11	700	0-300	3080	12 500	Hopper volume (m ³)
SH1351	918	5 250	22	1000	0-450	3610	21 600	15
SH1661	1110	9 000	37	1300	0-700	4400	39 300	30
SH2071	1420	17 100	55-90	1800	0-1100	6400	57 500	45
SH2571	1450	21 000	55-110	2400	0-1700			75

Technical data SH for secondary feeding

Model	Overall width (mm)	Overall height (mm)	Motor (kW)	Weight (kg)	Hopper volume (m ³)	Max feed (mm)	Capacity range (m ³ /h)
SH0835	1280	1460	7.5	3 000	1.5	250	0-150
SH1035	1480	1460	11	3 200	1.5	300	0-200
SH1335	1780	1460	15	3 500	2.5	400	0-250
SH1645	2250	2015	30	8 700	4	500	0-500
SH1645H	2250	2615	30	11 000	7	700	0-650
SH1955H	2550	2615	37	13 750	12	900	0-750
SH2255H	2850	2615	30-74	15 000	15	1200	0-950
SH2555H	3150	2615	60-110	17 000	18	1800	0-1100

* Capacity in m³/h at 0° inclination. Capacities depend not only on feeder size but also feeder inclination, feed gradation, etc.



Sandvik Wear Protection & Screening Media



Product Range

Wear Protection

- Rubber wear protection
Rubber wear plates, flat or corrugated, with steel backing or aluminium profiles
- Ceramic wear protection
Ceramic/rubber wear plates, with steel backing or aluminium profiles
- PU wear protection
Flat polyurethane wear plates with steel backing
- Modular wear protection
Modular dual hardness flat rubber wear plates
- Wear bars
Rubber wear bars with extruded aluminium profile
- Flexible rubber wear plates
Rubber wear plates with flexible metal reinforcement
- Flexible PU wear plates
Polyurethane wear plates with flexible metal reinforcement
- Rubber sheeting
Wear resistant rubber sheeting
- Polyurethane sheeting
Wear resistant polyurethane sheeting
- Ceramic sheeting
Ceramic/rubber sheeting
- Polyethylene sheeting
Low friction sheeting (UHMW-PE)

Screening Media

- Impact bars
Rubber impact bars with low friction UHMW-PE top surface
- Pulley lagging
Bolted high friction pulley lagging for drive pulleys
- Modular anti blinding screening media
Soft rubber modules with punched apertures
- Modular PU screening media
Polyurethane modules with moulded apertures
- Tensioned anti blinding PU screening media
Tensioned polyurethane panel with dam bars and punched apertures
- Tensioned rubber screening media
Tensioned rubber panels with punched apertures
- Tensioned PU screening media
Polyurethane telescopic chute with optional automatic level sensor
- Dust encapsulation
Flexible rubber sheeting for dust encapsulation
- Grip strip & Grip corners
Rubber profiles for attaching dust encapsulation sheeting

Dust Encapsulation

- Telescopic chute
Polyurethane telescopic chute with optional automatic level sensor
- Dust encapsulation
Flexible rubber sheeting for dust encapsulation
- Grip strip & Grip corners
Rubber profiles for attaching dust encapsulation sheeting



Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, machinery and tools for rock excavation, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. The Group had at the end of 2007 about 47,000 employees and representation in 130 countries, with annual sales of more than SEK 86,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of machinery, cemented-carbide tools, service and technical solutions for the excavation of rock and minerals in the mining and construction industries. Annual sales 2007 amounted to about SEK 33,100 M, with approximately 15,200 employees.



SANDVIK MINING AND CONSTRUCTION. TEL +46 40 40 68 00. FAX +46 40 40 68 98.

www.sandvik.com

DESCRIPTION SYNTHETIQUE DES ALIMENTATEURS (TRADUCTION EN FRANCAIS)

✓ Alimentateur à tablier vibrant

Sandvik offre une gamme d'alimentateurs primaires qui permet de combiner une capacité d'alimentation élevée, la résistance aux chocs, un poids et des dimensions optimisés des installations.

Le SV-H est conçu pour correspondre aux plus grands concasseurs à mâchoire et concasseurs à percussions disponibles.

L'alimentateur a deux sections dans le pont supérieur pour des séparations de 75 à 225 mm. Un deuxième pont facultatif peut être installé pour le déplacement des fractions plus fines.

L'unité est conçue pour des capacités de traitement importantes, de 300 à 1400 t/h d'alimentation primaire et secondaire. Le volume de trémie standard est 26-45 m³ avec une taille maximale d'alimentation de 1500 mm.

L'alimentateur SV peut être ajusté selon les performances voulues, grâce aux éléments suivants : des écarts réglables, une longueur ajustable, l'ajustement facile de l'angle d'attaque, et une inclinaison adaptable.

Avec l'unité SV, la maintenance est aisée et minimale. Le mécanisme de puits double résistant est conservé dans de l'huile permettant ainsi une utilisation prolongée. Des plaques d'usure remplaçables sont montées sur toutes les surfaces exposées et le mécanisme est facilement démontable pour un entretien aisé.

✓ Trémies d'alimentation

Les unités ST peuvent significativement améliorer la sortie totale d'une installation primaire grâce à leur capacité de maintien permanent de l'alimentation du broyeur principal même en cas de conditions d'alimentation variables.

Les trémies d'alimentation assurent le déplacement de fractions fines et une capacité d'alimentation importante, même avec des matériaux grossiers. L'unité d'alimentation séparée permet un meilleur contrôle des flux que les alimentateurs à tablier vibrant puisqu'elle peut être réglée sur le tonnage réel atteint par le broyeur.

Les trémies d'alimentation offrent une très bonne séparation des matériaux puisqu'elles fonctionnent indépendamment de l'alimentateur. Par conséquent, la longueur, l'angle d'attaque et la vitesse du moteur peuvent être optimisés pour un scalping efficace et le déplacement de fractions fines. Le pont supérieur a deux sections vibrantes avec un pass au milieu assurant une action efficace et empêchant la machine de se bloquer. Le deuxième pont a une inclinaison plus raide pour un meilleur déplacement des fractions fines.

✓ Alimentateurs à fond plat

Le design et la large gamme de taille d'alimentateurs à fond plat Sandvik sont adaptés pour la mise en place d'un accès autour des broyeurs et la diminution du coût total de l'installation.

La rapidité d'alimentation de l'appareil permet d'adapter l'alimentateur à une grande variété d'opérations. L'alimentateur à fond plat SP a une inclinaison réglable de 0 à 12 degrés pour s'adapter aux matériaux variables et aux exigences de l'installation.

De hauts murs latéraux empêchent efficacement le renversement des matériaux et simplifient la configuration de l'alimentation. Le taux d'alimentation peut être ajusté en repositionnant des segments de poids ou pendant l'opération en utilisant un convertisseur de fréquence.

✓ Alimentateur à mouvements alternatifs

Les alimentateurs à mouvements alternatifs SH permettent le dépôt direct de matériaux de grande taille puisqu'ils conservent toujours un certain nombre de matériaux sur la plaque à mouvements alternatifs

Le taux d'alimentation est facilement réglable, tant en changeant la longueur d'attaque que la fréquence d'attaque. L'ajustement de l'attaque peut être fait sans arrêt de l'alimentateur, complètement automatiquement à distance ou manuellement. L'alimentateur peut être lancé et arrêté aussi souvent qu'exigé avec des délais d'alimentation plus courts qu'avec un alimentateur vibrant.

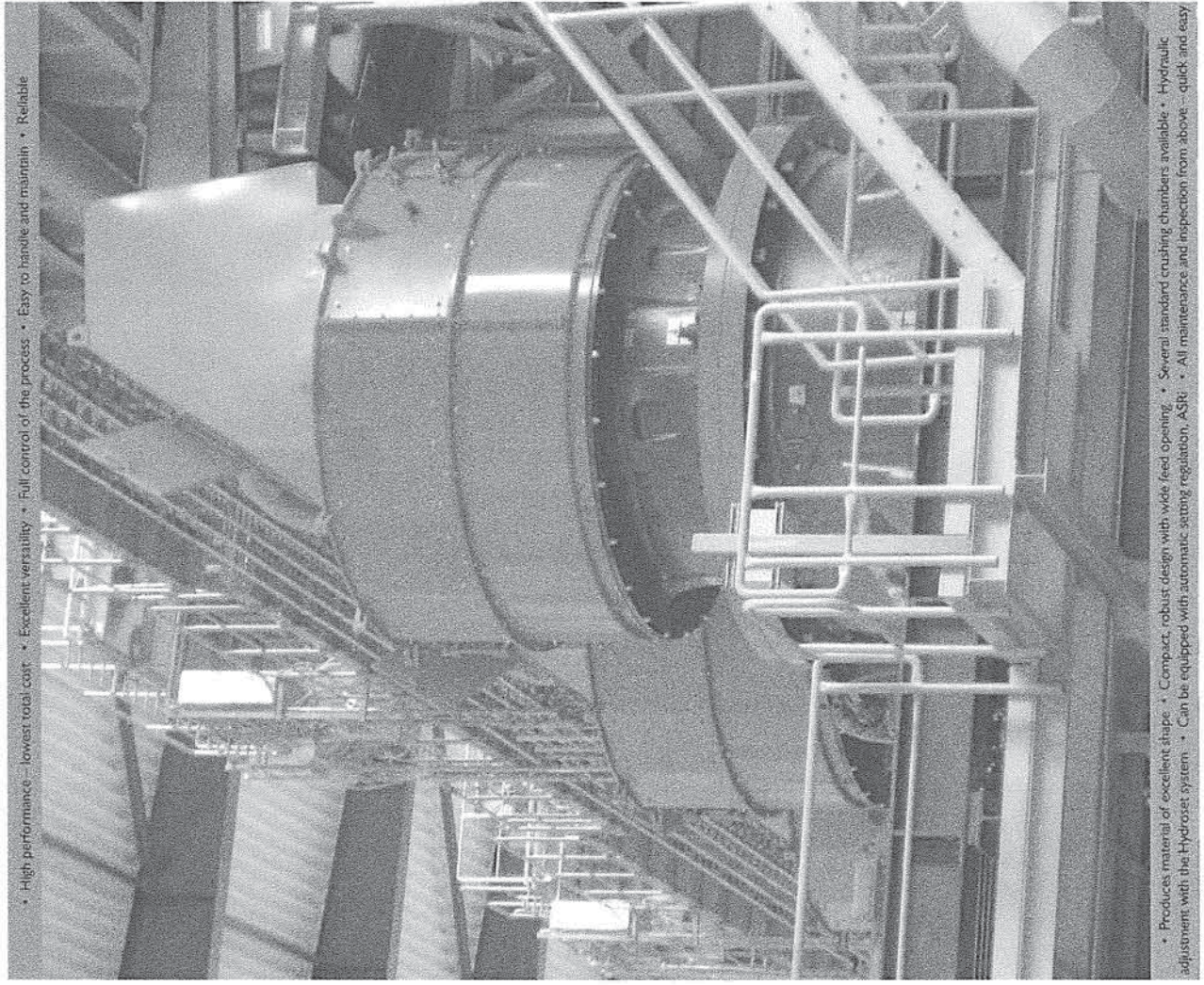
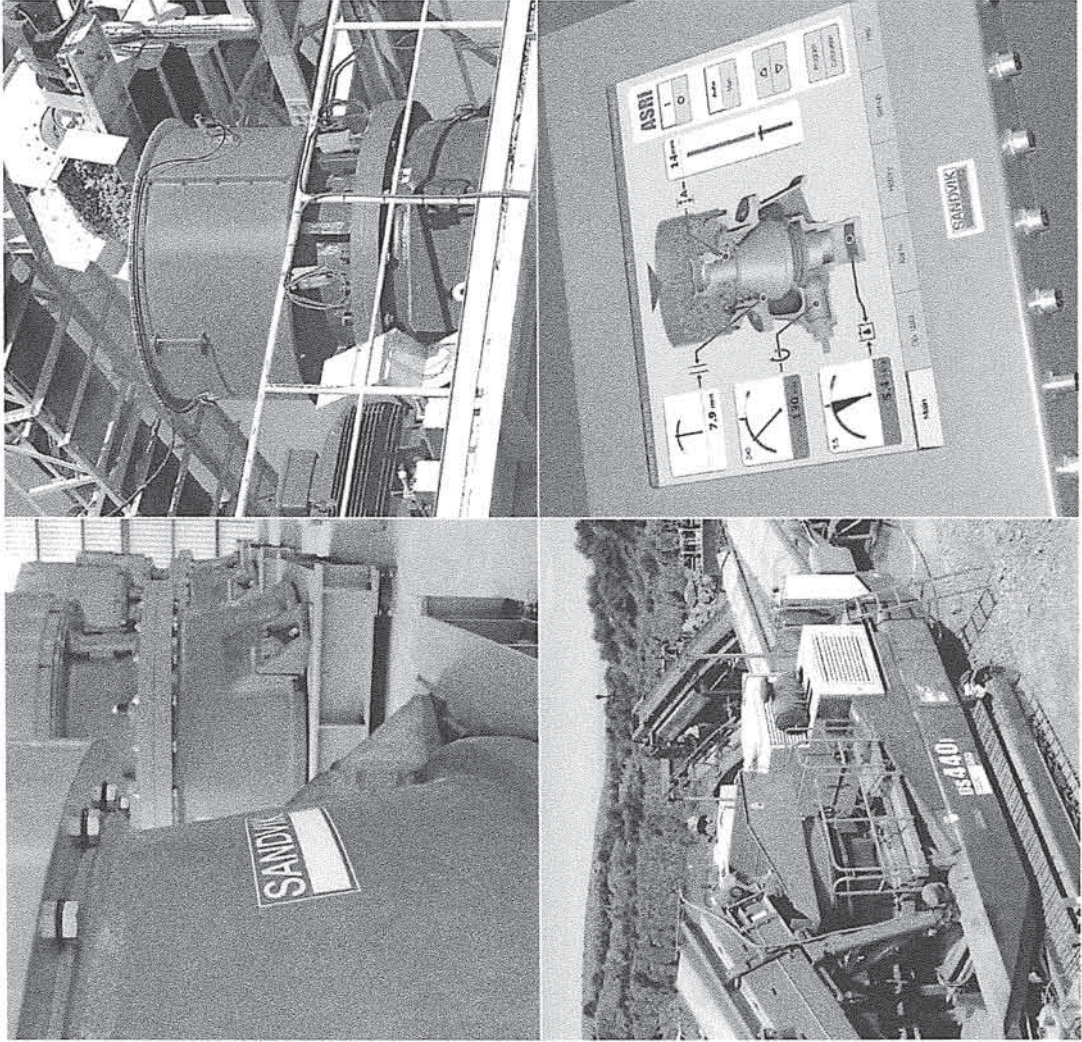
SH est un alimentateur imposant, adapté pour de grandes installations primaires, avec de grands volumes, d'importantes hauteurs de chutes, ou des installations nécessitant l'usage de très grands camions à benne

Il possède une plaque d'alimentation robuste, des plaques d'usure fonctionnelles, une unité d'énergie hydraulique avec cylindre hydraulique, des tuyaux et un système de commande facultatif. Les alimentateurs à mouvements alternatifs SH sont supportés par le dessous et une trémie d'alimentation séparée est utilisée.

ANNEXE 2 - Pièce 3

Fiches techniques des concasseurs à cônes

Sandvik Cone Crushers



• High performance – lowest total cost • Excellent versatility • Full control of the process • Easy to handle and maintain • Reliable

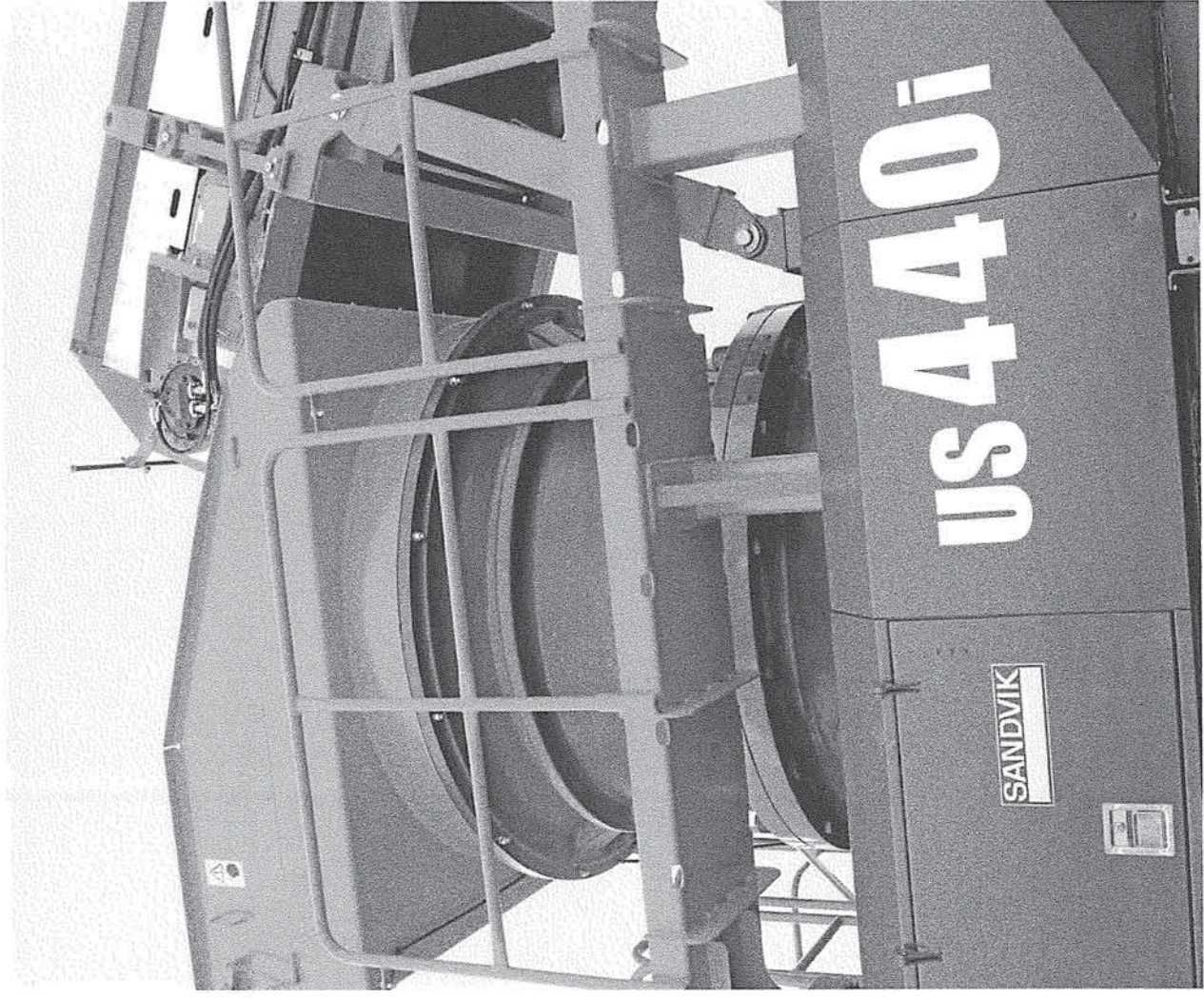
• Produces material of excellent shape • Compact, robust design with wide feed opening • Several standard crushing chambers available • Hydraulic adjustment with the Hydrosset system • Can be equipped with automatic setting regulation, ASR • All maintenance and inspection from above – quick and easy

Cone Crushers

Sandvik cone crushers are of advanced design with a small footprint and high capacity in relation to size. They have high reduction efficiency and give very good product shape. With hydraulically adjusted CSS, the option of automation, a choice of several different crushing chambers, and many other high-performance features, each model is versatile, user-friendly and highly productive.

The Sandvik CS- and CH-series of cone crushers have a wide field of use as they can easily be matched to changes in production through the proper selection of crushing chamber and eccentric throw. Our cone crushers are ideal for secondary and tertiary crushing and the compact and easy-to-service design makes them a perfect choice for mobile installations.

Our crushers provide automatic overload protection and can be equipped with our automatic setting system ASRi. This system optimizes cone crusher efficiency and automatically adapts the crusher to variations in feed conditions. By continuously measuring and compensating for crusher liner wear, ASRi allows you fully utilize crusher liners and schedule liner replacements to coincide with planned maintenance stops. ASRi also assists in keeping your crusher choke fed. This maximizes rock-on-rock crushing, which helps to optimize the quality of your final product.



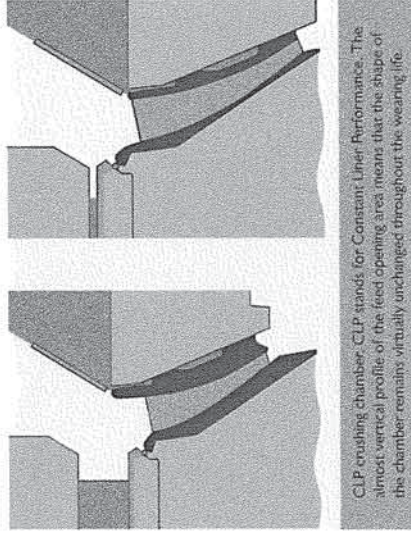
High Performance Lowest Total Cost

The hydraulically adjusted CS & CH cone crushers manufactured by Sandvik are characterized by robust design and high performance.

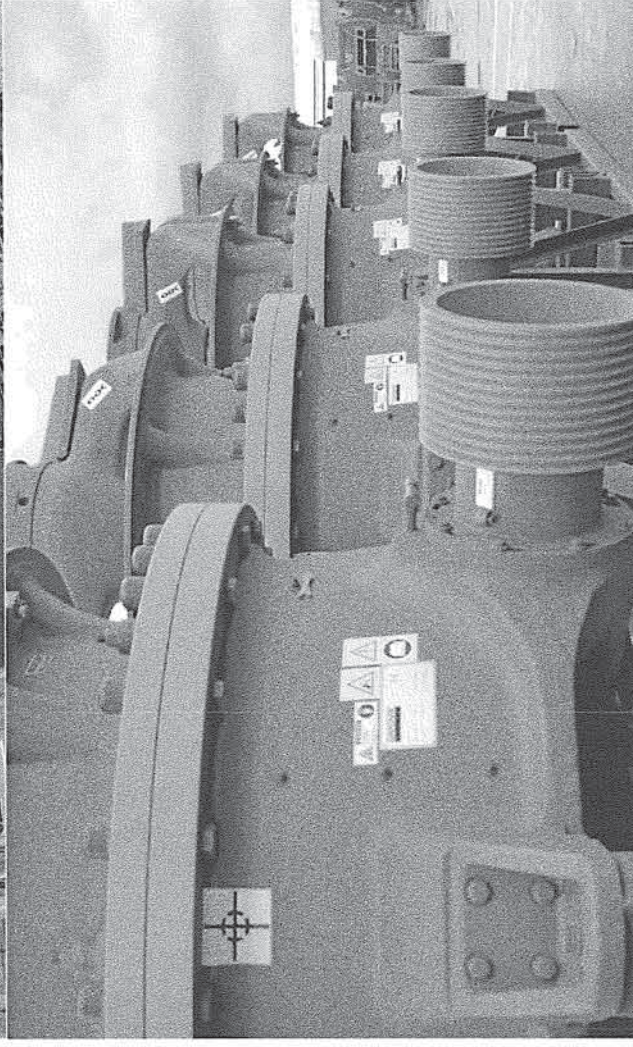
In combination with the CLP crushing chambers, high motor powers give these crushers capacities which are in most cases comparable with those of other, larger crushers.

The CLP advantages are:

- Constant feed acceptance capability
 - Increased output
 - High-quality products
 - Increased liner life
 - Lowest total cost
- Sandvik cone crushers can be equipped with an automatic setting system, ASRI, which can improve performance even more and also provides integration with sophisticated plant control systems.



CLP crushing chamber. CLP stands for Constant Liner Performance. The almost vertical profile of the feed opening area means that the shape of the chamber remains virtually unchanged throughout the wearing life.

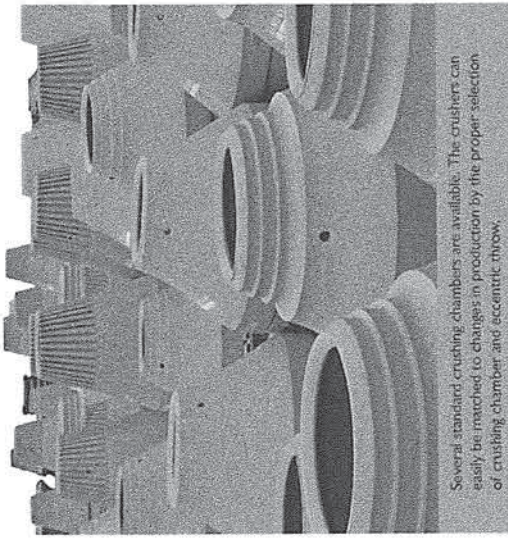


Excellent Versatility

Our cone crushers have a wide field of use. Several standard crushing chambers are available for each model.

The crushers can easily be matched to changes in production through the proper selection of crushing chamber and eccentric throw.

Sandvik cone crushers are an excellent choice as secondary crushers in combination with a jaw or a primary gyratory crusher or in the third or fourth crushing stage. Thanks to their built-in versatility, these crushers will enable you to cope with most production requirements in a changing future.



Several standard crushing chambers are available. The crushers can easily be matched to changes in production by the proper selection of crushing chamber and eccentric throw.

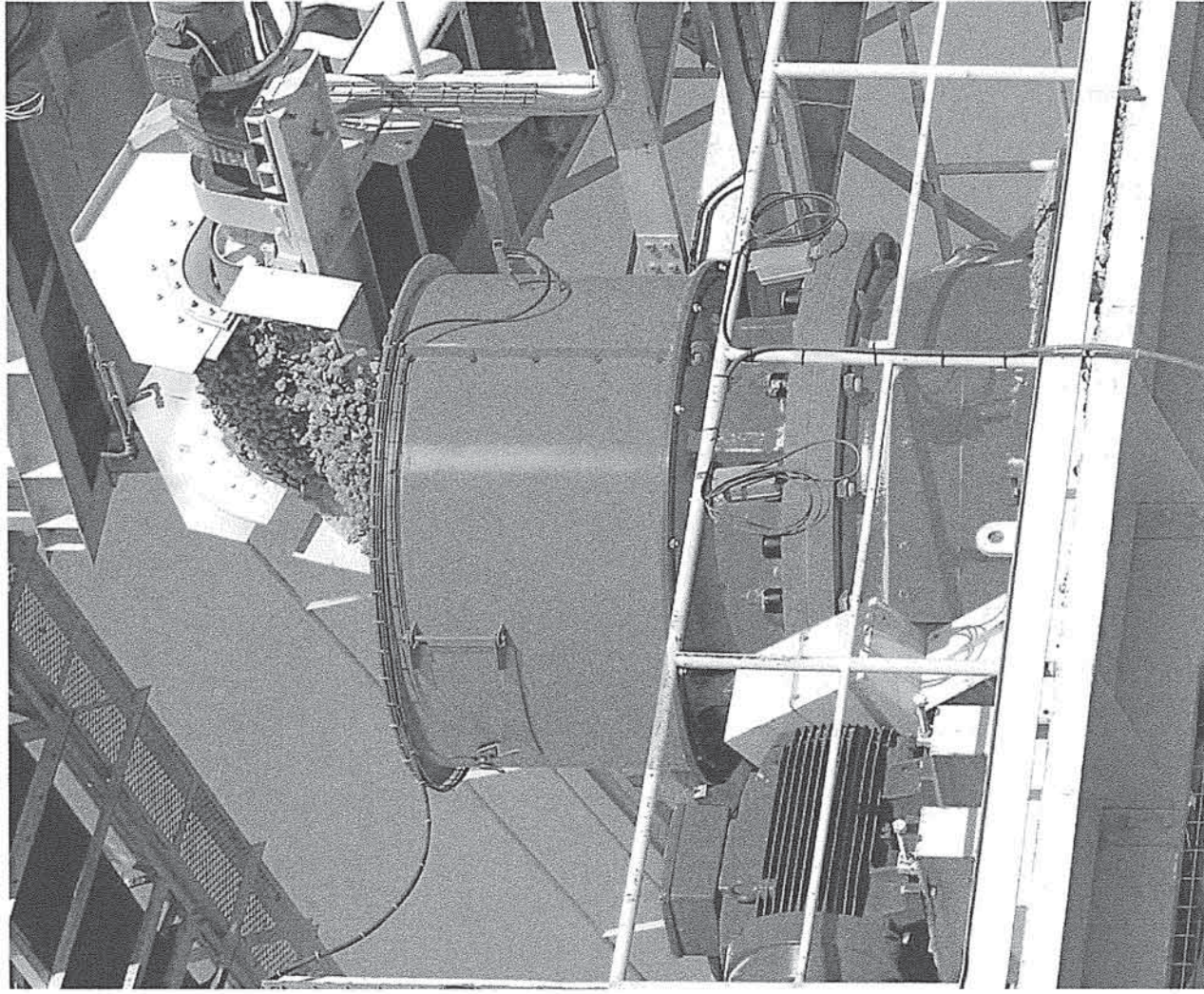
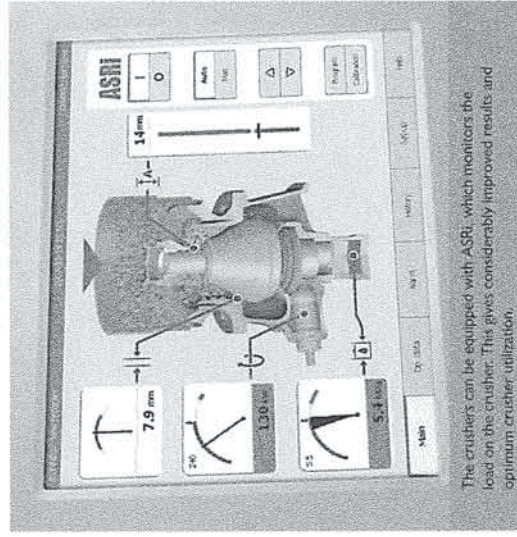


Full Control of the Process

The Hydrosert system provides safety and setting adjustment functions, and incorporates a heavy-duty hydraulic cylinder which supports the mainshaft and adjusts its position.

The Hydrosert system provides automatic overload protection to permit the passage of tramp iron or other uncrushable material. The system then automatically returns the mainshaft smoothly to its original position.

When the cone crusher is equipped with our automatic setting system, ASRI, the actual crushing load inside the crusher is continuously monitored. This makes it possible to optimize crusher utilization allowing you to squeeze the ultimate performance from your machine at all times.



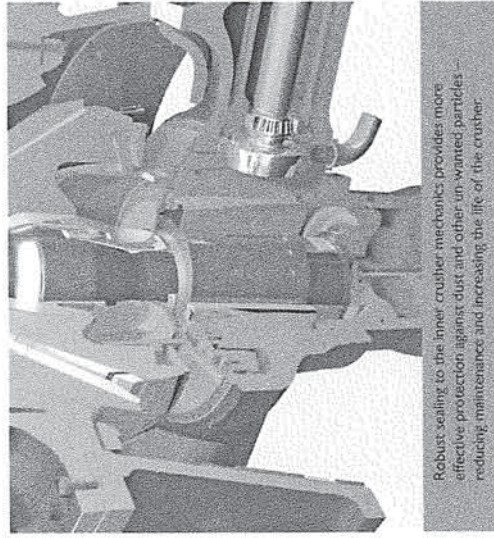
Easy to Handle and Maintain

Much attention has been paid to making our crushers as easy to operate and maintain as possible. All service and inspection is carried out from above, which makes the work easier and the maintenance costs lower.

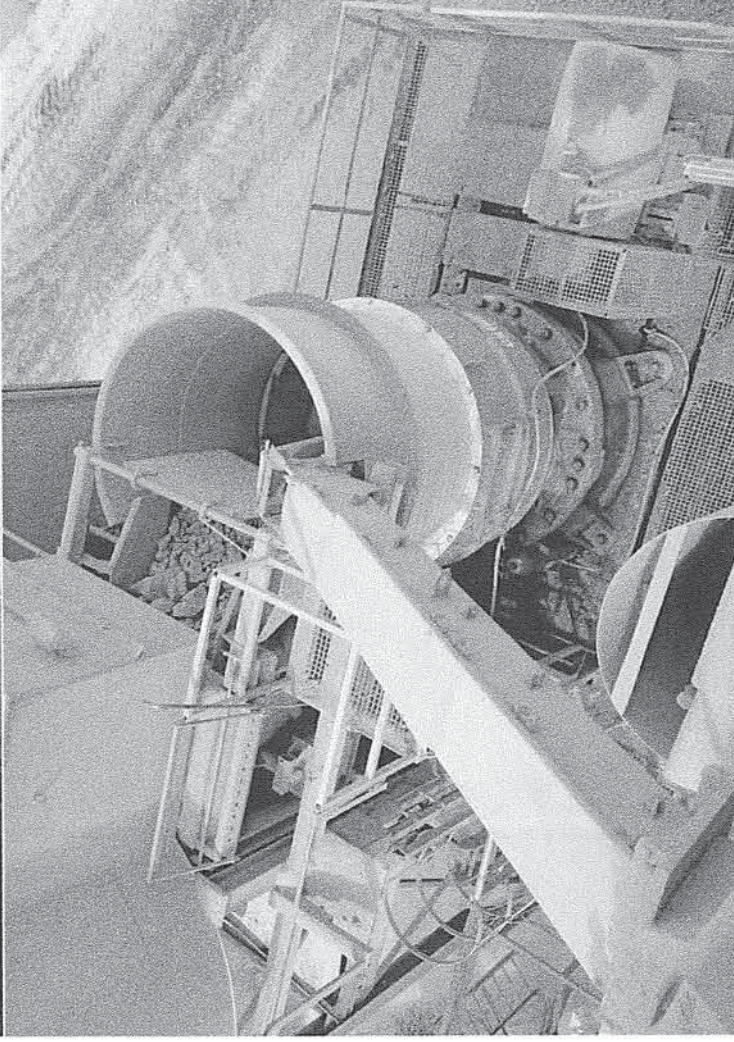
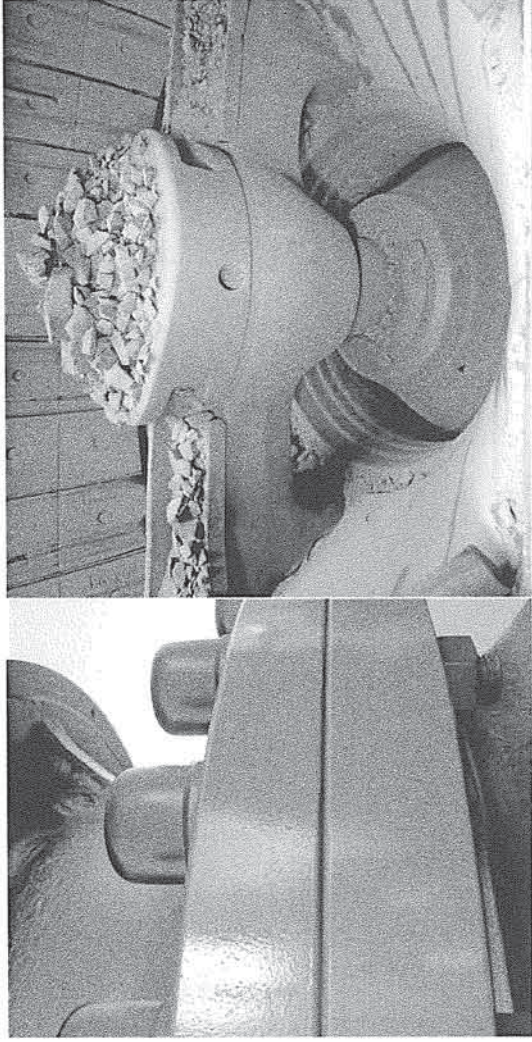
Robust sealing to the inner crusher mechanics provides more effective protection against dust and other unwanted particles – reducing maintenance and increasing the life of the crusher.

The automatic setting regulation system ASRi, not only optimizes production, it also keeps track of liner wear. This makes it easy to plan liner changes and minimize interruptions in production.

In addition to the high capacity, Sandvik CS & CH crushers are compact, which makes them very easy to move and to install.



Robust sealing to the inner crusher mechanics provides more effective protection against dust and other unwanted particles – reducing maintenance and increasing the life of the crusher.

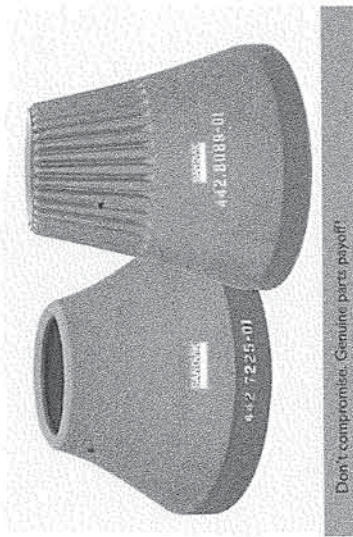


Customer Satisfaction

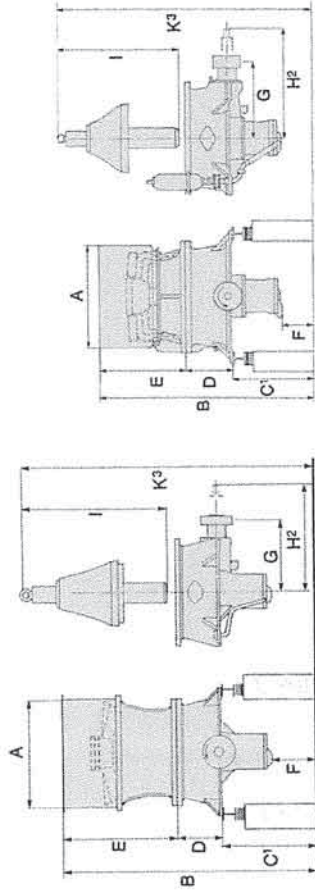
Building strong customer relationships is highly prioritized in our daily work to help you keep your Sandvik crushing system in operation, to improve your uptime and productivity, lower your costs and provide you with the best, possible total economy.

- Sandvik has vast experience and teams spanning the globe in order to provide you with total support.
- Sandvik has a highly efficient, worldwide service and distribution network to make sure all essential parts and consumables are available to you according to your needs.
- Sandvik offers intensive training courses tailored to fit your needs in order to help achieve optimum equipment performance.
- Sandvik offers efficient, cost-effective repair and rebuilding services when it becomes necessary, more economical or environmentally beneficial to repair, overhaul or rebuild the equipment.

Whatever your needs are, wherever you are and whatever the time is, Sandvik is here to support you.



Dimensions, mm



Note: Reference line (not floor level) giving minimal dimensions for removal of: 1. Hydrosset cylinder, 2. Pinion shaft, 3. Main shaft.

Dim.	CS420	CS430	CS440	CS660	CH420	CH430	CH440	CH660	CH870	CH880
A	0 1285	0 1635	0 2000	0 2800	0 1078	0 1380	0 1540	0 2104	0 2450	0 2860
B	2902	3485	4075	5100	2560	2892	3410	4215	5475	6456
C'	1020	1125	1300	1600	1020	1125	1300	1600	2200	2870
D	540	655	745	860	540	655	745	860	1228	1186
E	1342	1705	2030	2540	1000	1212	1365	1755	2045	2400
F	400	422	452	631	400	422	452	631	988	1151
G	843	1061	1280	1497	843	1061	1280	1497	1824	2073
H'	1270	1705	1900	2156	1270	1705	1900	2156	2650	3100
I	1703	2050	2420	2895	1425	1688	1985	2344	3095	3545
K'	3600	4250	4930	5355	3000	3570	4000	4835	6600	7770

Dimensions are intended only as a guide for preliminary planning of the installation and should not be used for the construction of foundations, etc.

Approximate Weights, kg

	CS420	CS430	CS440	CS660	CH420	CH430	CH440	CH660	CH870	CH880
Heaviest lift during maintenance	2300	5100	8100	16500*	1400**	2900**	4700**	7800**	13000**	22000**
Total weight	6800	12000	19300	35700	53000**	9200**	14300**	24200**	50000**	70000**

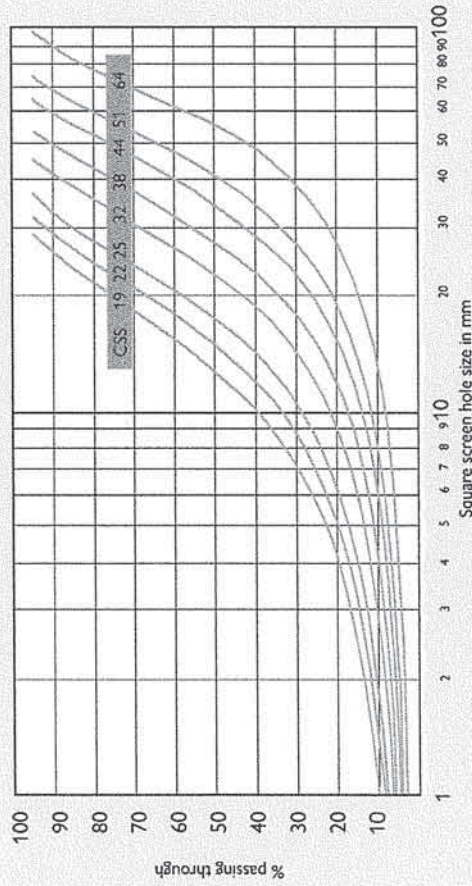
* 16500 kg = topshell assembly + spider assembly, 9700 kg = topshell assembly only.

** Applies to crusher with fine crushing chamber. With coarse crushing chamber, these weights are reduced by approximately 380 kg for the CH430, by 600 kg for the CH440, by 600 kg for the CH660, by 600 kg for the CH870 and by 3800 kg for the CH880 model.

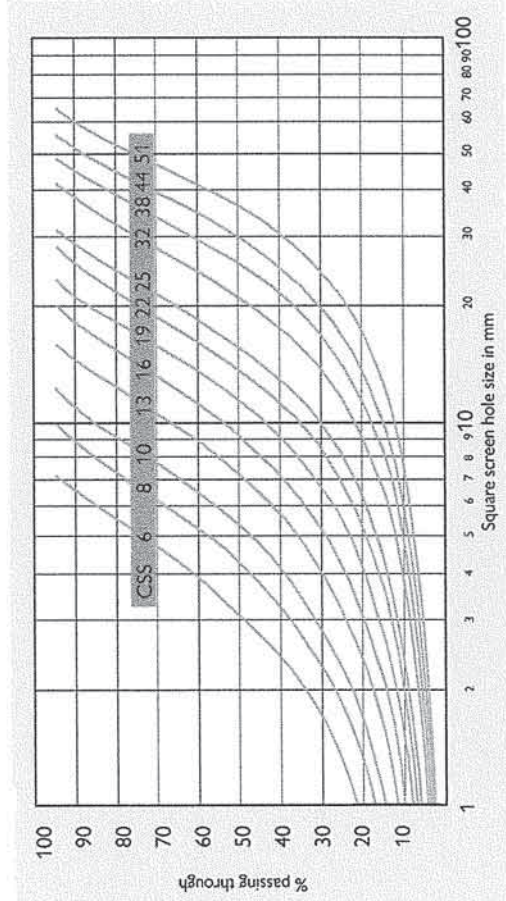
Product Curves

The product curve and the percentage of the crusher product that is smaller than the closed side setting (square hole, mm) is dependent on the crushability (W) of the material, the size distribution of the feed and other factors.

CS-crushers



CH-crushers



Crushing Chambers

CS-crushers

Three standard crushing chambers are available:

MC = Medium Coarse

C = Coarse

EC = Extra coarse

CH-crushers

Several standard crushing chambers are available:

EEF = Extra Extra Fine

EF = Extra Fine

EFX = Extra Fine Xtra

F = Fine

MF = Medium Fine

M = Medium

MC = Medium Coarse

C = Coarse

CX = Coarse Xtra

EC = Extra Coarse

CS-crushers

	Max motor size kW	Max feed size (mm)	19	22	25
CS420	90	240	EC	85	92-115
			C	70	76-95
			EC	360	126
CS430	132	300	C	108	116-145
			MC	235	91
			EC	450	96-123
CS440	220	400	C	300	195
			MC	300	
			EC	560	
CS660	315	C	500		

CH-crushers

	Max motor size kW	Max feed size (mm)	4	6	8
CH420	90	135	EC		
			C		
			M		36-44
			MF	50	36-67
			F	38	27-34
			EF	29	29-50
CH430	132	185	EC		
			C		
			MC		
			M		61
			MF	75	48-78
			F	50	51-83
CH440	220	175	EC		
			C		
			MC		
			M		
			MF	85	
			F	70	90-135
CH660	315	275	EC		
			CX		
			C		
			MC		
			M		
			MF	115	
CH870	520	300	EC		
			C		
			MC		
			M		
			MF	100	
			F	90	
CH880	600	370	EC		
			C		
			MC		
			M		
			MF	130	
			F	120	
EEF	85				
EEF	75				

Capacity, MTPH

Performance figures are approximate and give an indication of what the crusher can produce.

They apply to open circuit crushing of dry material with a bulk density of 1600 kg/m³. It is assumed that material much finer than the crusher's closed side setting (CSS) is removed from the feed.

Consult us regarding the application of the crusher since the chosen eccentric throw, degree of reduction, the material's crushability (W), the size analysis of the feed, the design of any recirculating circuit and the moisture content in the feed all affect performance of the crusher.

		Nominal capacity in t/h with crusher running at CSS mm													
		29	32	35	38	41	44	48	51	54	60	64	70	76	83
1-158	107-168	114-143	121												
1-112	96														
8-173	147-230	156-293	165-310	174-327	183-344	196-306	205-256	214							
7-199	135-254	144-270	152-285	161-301	169-264	180									
6-218	124-232	131-246	139-261	147-275	154-241	165									
225	239-299	254-381	269-484	284-511	298-448	318-398	333								
4-267	228-342	242-433	256-461	270-486	284-426	303-378	317								
318	336-420	353-618	376-753	394-788	411-823	446-882	469-922	504-631	562-983	604					
		Nominal capacity in t/h with crusher running at CSS mm													
		10	13	16	19	22	25	32	38	44	51	57	64	70	
46	50-85	54-92	58-99	62-105	66-112	76-128									
43-53	46-89	50-96	54-103	57-110	61-118	70									
38-74	41-80	45-76	48-59												
40-71	44-68	47-53													
32-57	35-48	38													
		30-40 with 80 % finer than 4.5-5.5 mm													
69-108	75-150	80-161	86-171	91-182	104-208	115-208									
66-131	71-142	76-152	81-162	86-173	98-197	109-150									
57	62-140	67-151	72-162	77-173	82-184	93-145									
54-84	69-131	75-142	80-152	85-162	91-154	104									
5-106	70-115	76-124	81-126	87-114	92										
54-88	59-96	63-102	68-105	72-95	77										
		70-90 with 80 % finer than 5-5.6 mm													
114-200	122-276	131-294	139-313	159-357	175-395	192-384									
101	109-218	117-292	125-312	133-332	151-378	167-335	183-229								
97-122	105-262	113-282	120-301	128-320	146-328	161-242									
114	124-227	134-245	144-263	153-281	163-289	176-281	194								
6-176	104-191	112-206	120-221	129-236	137-251	156-208									
		100-125 with 80 % finer than 6-7.5 mm													
177	190-338	203-436	216-464	246-547	272-605	298-662	328-511								
174-194	187-374	200-488	212-519	242-592	268-654	293-521	323-359								
171-190	184-367	196-480	209-510	238-582	263-643	288-512	317-353								
162-253	174-426	186-455	198-484	226-552	249-499	273-364									
197-295	211-440	226-470	240-500	274-502	302-403										
192	207-369	222-396	237-423	252-450	287-451	318-363									
195-304	210-328	225-352	241-376	256-400	292-401	323									
211-293	227-316	244-298	261-290												
448-588	477-849	544-968	601-1070	658-1172	725-1291	782-1393	849-1512	906-1331							
406	433-636	461-883	525-1018	581-1125	636-1232	693-1464	750-1461	806-1286							
380-440	406-723	432-837	482-954	544-1055	596-1155	657-1272	708-1373	769-1370	821-1206						
400-563	428-786	455-836	519-953	573-1054	628-1154	692-1271	746-1372	810-1248	865-1088						
379-424	407-716	434-765	462-814	527-928	582-857	649-718									
357-395	385-656	414-704	442-752	470-800	535-912	592-857	659-718								
304-517	328-558	352-598	376-639	400-680	455-775	503-728	551-669								
480-640	547-1277	605-1411	662-1546	730-1702	787-1837	854-1994	912-2128								
540-772	616-1232	681-1362	746-1492	821-1643	888-1773	962-1924	1027-1611								
541	576-864	651-1231	726-1351	795-1490	876-1642	946-1771	1025-1538	1094-123							
552-613	587-1043	669-1189	739-1314	810-1440	892-1586	962-1604	1045-1393	1115							
549-933	584-983	666-1132	736-1251	806-1370	888-1420	958-1245									
531	570-832	609-988	648-945	739-985	816-895										
401-502	433-631	465-678	496-724	528-770	602-803	665-721									
395-532	426-574	459-616	489-658	520-700	593-798	655-882	718-883	790							
356-479	384-517	412-554	440-592	468-630	534-575										

Features which make our cone crushers the best on the market

An easy-to-maintain crusher. Maintenance and inspection from above.

The crusher has a CLP crushing chamber as standard. *Ore* topshell is used for all crushing chambers.

The robust design provides the strength and stability necessary for the crushing of extra-hard materials. The design also results in low maintenance costs.

Inspection holes are provided in the bottomshell.

Prepared for the installation of ASRI, the Automatic Setting Regulation system.

1. Long life from liners of special alloy manganese steel.

2. An automatic overload protection system is standard. The CH880 Other sizes have an accumulator.

3. The interior of the crusher is protected from dust by a self-lubricating seal ring.

4. The bottomshell arms have liners of special alloy steel.

5. Quiet operation and long life thanks to bevel gears with hardened, spiral-cut teeth.

6. Product curve and capacity can be optimized by adjusting the eccentric bushing supplied with the crusher.

7. Large feed opening. The two topshell arms are protected against wear by robust liners of special alloy steel.

8. Mainshaft protected by replaceable sleeve and inner headnut.

9. CLP crushing chamber design maintains feed opening throughout the entire life of the liners.

10. Easy adjustment of gear backlash.

11. Robust design of the pinionshaft assembly. The pinionshaft and its bearings are built as a single unit which can be removed without taking the crusher apart.

12. Oil tank unit
- filtration
 - cooling and heating
 - circulation pump
 - monitors for temperature and flow rate
 - interlocks

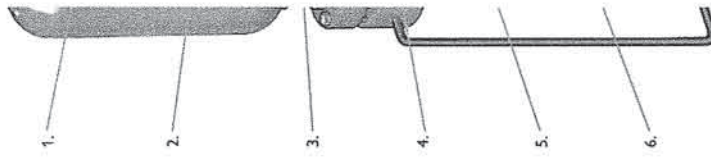
Lubrication

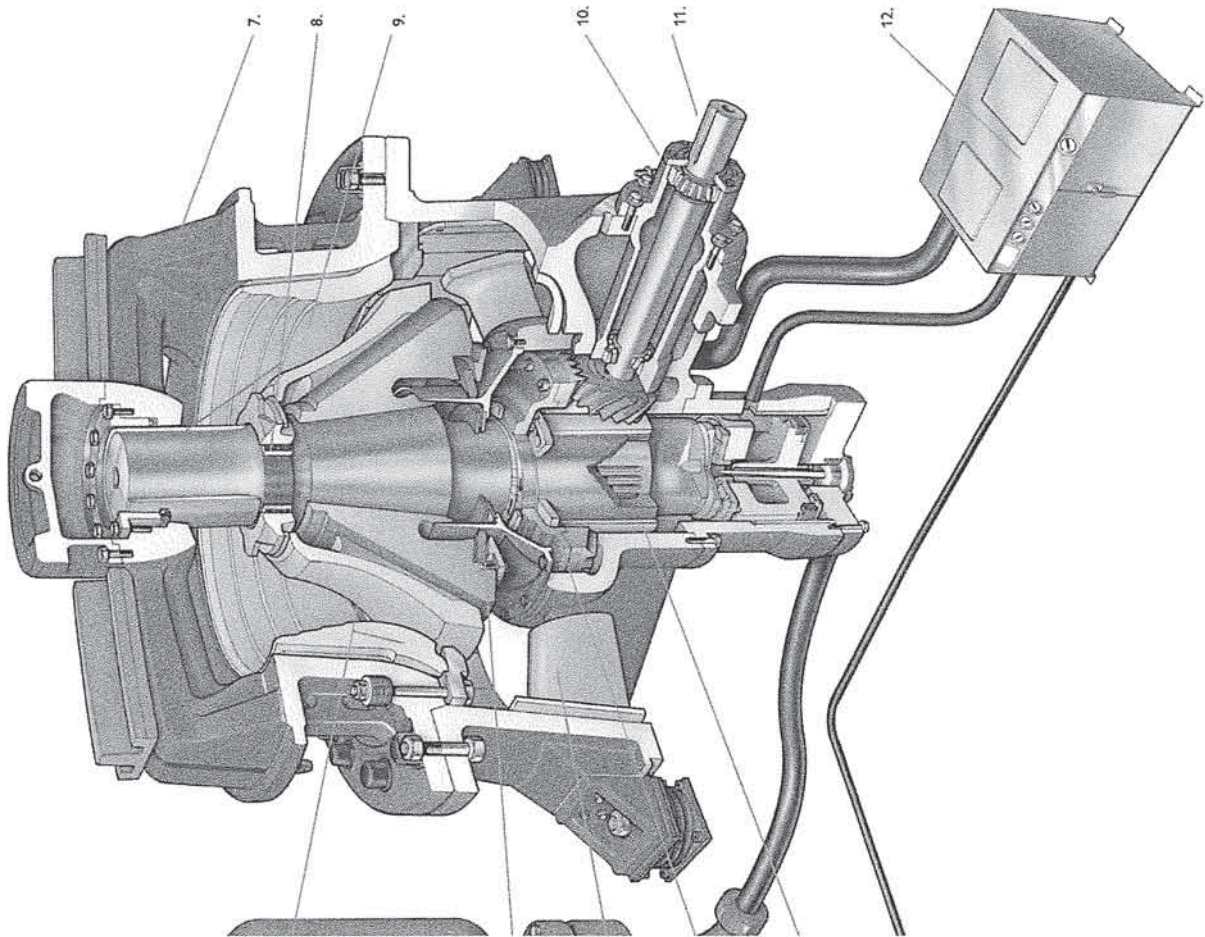
A. Separate lubrication for the spider bearing.

B. The oil tank unit automatically maintains oil flow to the various bearings. This system permits full lubrication even before the crusher itself is started since the pump is independent of the crusher. The oil is filtered and cooled automatically.

The oil tank for the lubrication and *Hydroset* systems is a self-contained unit incorporating filters, heating and cooling equipment, pumps, temperature and flow rate monitors and electrical interlocks.

C. The pinionshaft unit has separate lubrication.





Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, equipment and tools for the mining and construction industries, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. In 2009 the Group had about 44,000 employees and representation in 130 countries, with annual sales of nearly SEK 72,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of equipment, cemented-carbide tools, service and technical solutions for the excavation and sizing of rock and minerals in the mining and construction industries. Annual sales 2009 amounted to about SEK 32,600 M, with approximately 14,400 employees.



DESCRIPTION SYNTHETIQUE DES BROyeurs A CONE (TRADUCTION EN FRANCAIS)

Les broyeurs à cône Sandvik se distinguent par leur structure moderne et par une forte capacité de production par rapport à leur taille. Avec l'option d'automatisation, un choix de plusieurs chambres écrasantes différentes et beaucoup d'autres fonctions très performantes, chaque modèle est polyvalent, facile d'utilisation et fortement productif.

Les broyeurs à cône sont idéaux pour les broyages secondaire et tertiaire. Leur design compact et leur simplicité d'utilisation en font un choix parfait pour des installations mobiles

Ces broyeurs garantissent une protection automatique contre les surcharges et peuvent être équipés d'un système d'arrangement automatique ASRi.

L'association des chambres écrasantes CLP et de la puissance du moteur permet une capacité de broyage qui est dans la plupart des cas comparable à celle de plus grands broyeurs.

Les avantages CLP sont :

- Capacité d'acceptation d'alimentation constante,
- Production accrue,
- Produits de haute qualité,
- Le coût total le plus bas

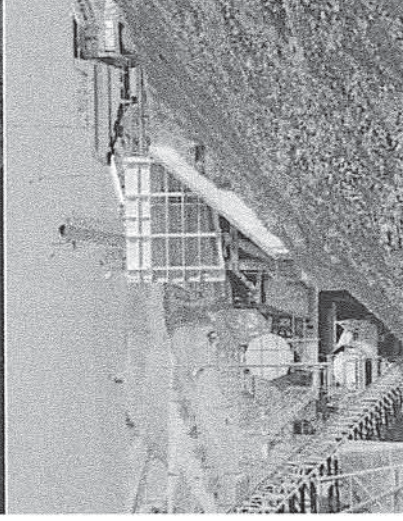
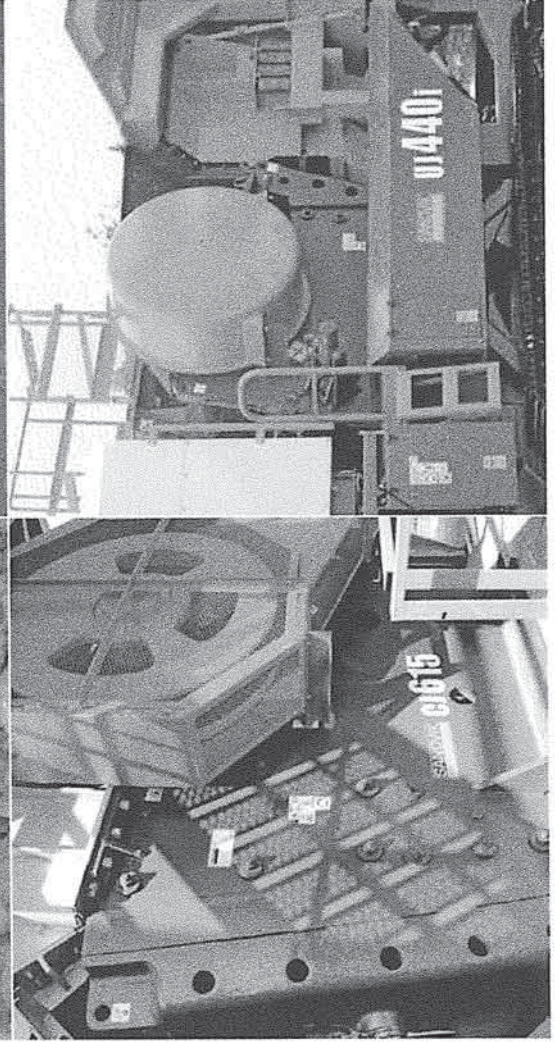
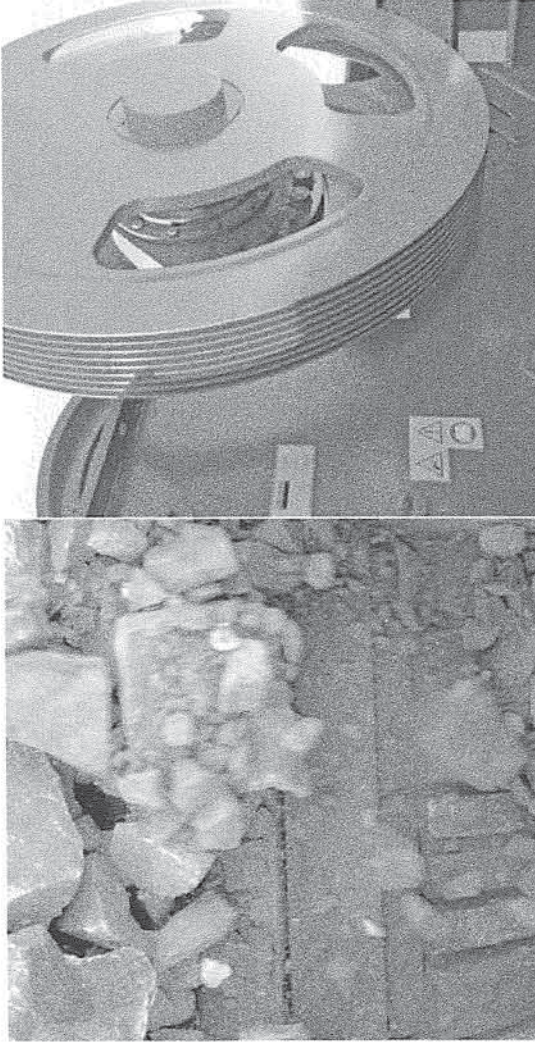
Les broyeurs à cône Sandvik sont un excellent choix comme broyeurs secondaires en association avec un concasseur à mâchoires, ou dans la troisième ou quatrième étape écrasante.

Les broyeurs sont conçus avec des parties sacrificielles pour protéger les composants principaux du broyeur comme l'armature, le balancier des mâchoires et les roulements. Ceci réduit les coûts de cycle de vie totaux de la machine et augmente son temps de fonctionnement, puisqu'il est moins cher de changer les parties sacrificielles que les composants principaux

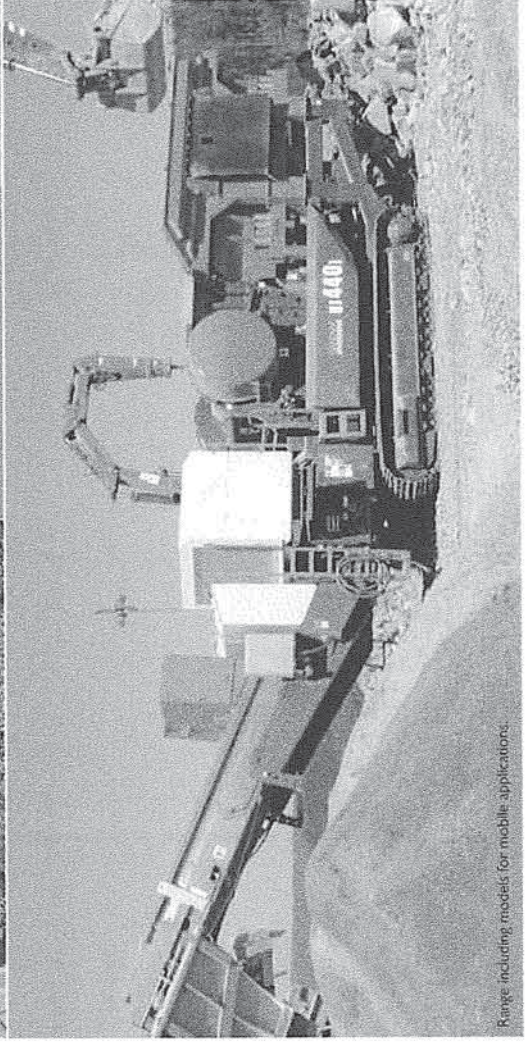
ANNEXE 2 - Pièce 4

Fiches techniques des concasseurs à mâchoires

Sandvik Jaw Crushers



Excellent durability thanks to welded frame.



Range including models for mobile applications.

The product of decades of experience

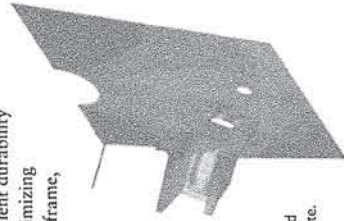
At Sandvik we have over a century of experience of designing and manufacturing jaw crushers. We also have a wealth of knowledge about customers' expectations and needs. This background has led to the current range of Sandvik jaw crushers which includes models specially suited for mobile applications. Strength has been increased and weight has been reduced. Sandvik's jaw crushers provide an excellent choice when high production and low total cost are sought.

ROBUST CONSTRUCTION

The Sandvik jaw crusher is a single toggle jaw crusher, characterized by attention to detail, in both design and manufacture. We have incorporated the best of the old and applied the benefits of the latest technology.

The frame consists of two side plates of rolled steel, plus hollow castings at front frame end and moving jaw which give a high rigidity/weight ratio. Large-radius transition areas reduce stress concentrations and welds are positioned in low-stress areas.

The advantage of a welded frame is that it is equally strong in all directions and ensures excellent durability against shock-loads. Thus minimizing the risk of failure on the main-frame, as with a bolted construction.



FEA (Finite element analysis) printout showing the predicted stress distribution in a side plate.

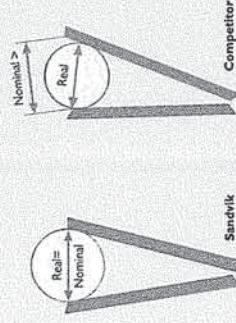
SANDVIK JAW CRUSHER

Symmetrical crushing chamber.
Effective feed opening = Nominal feed opening.

COMPETITOR

Conventional crushing chamber.
Effective feed opening < Nominal feed opening.

Effective feed opening



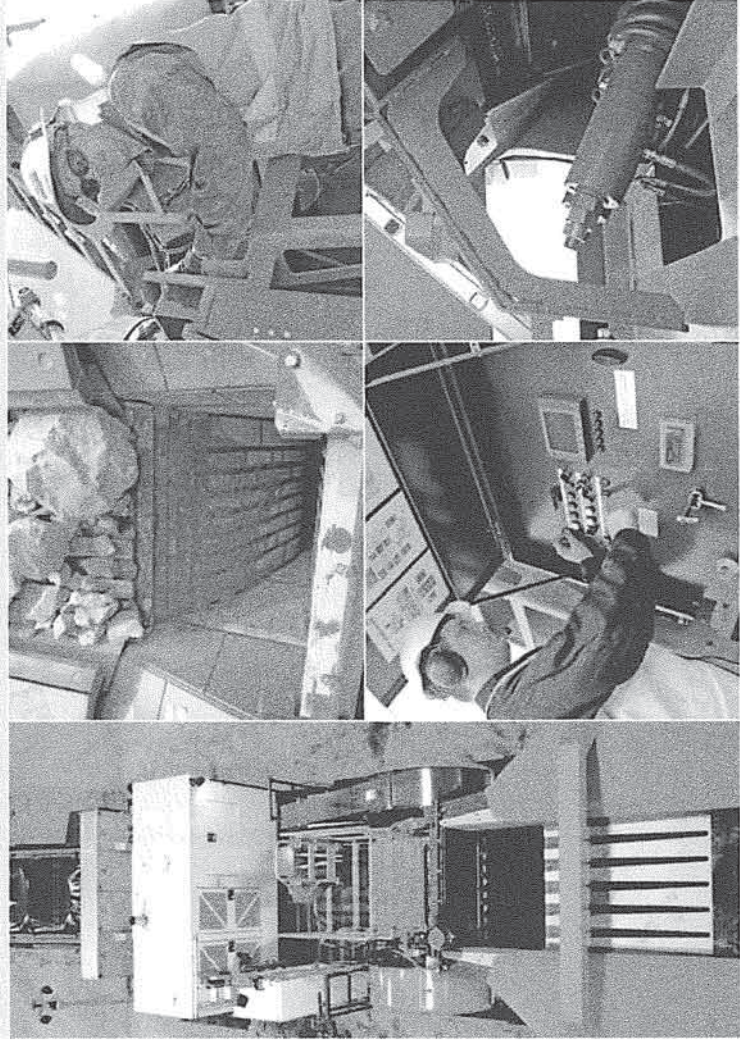
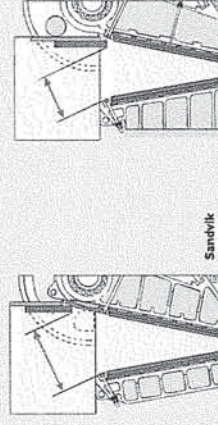
SANDVIK JAW CRUSHER

Active feed plate at the top of the feeding jaw means that no intrusive cross wall is required in the feed hopper. All of the effective feed opening is active. Material is crushed right at the top of the crushing chamber.

COMPETITOR

Cross wall required in feed hopper to protect top of moving jaw. Stationary cross wall reduces effective feed opening. Material cannot be crushed until it has dropped a good distance into the crushing chamber.

Active feed opening



OPTIMIZED PERFORMANCE

- High capacity
- High reduction
- Low jaw plate wear
- Large feed acceptance capability

These four factors are closely linked and the Sandvik jaw crusher provides a good balance.

The design of the deep symmetrical crushing chamber maximizes feed size, capacity and reduction.

An optimized nip angle ensures that the material progresses smoothly down through the crushing chamber to enable high reduction, productivity and superb utilization of jaw plates.

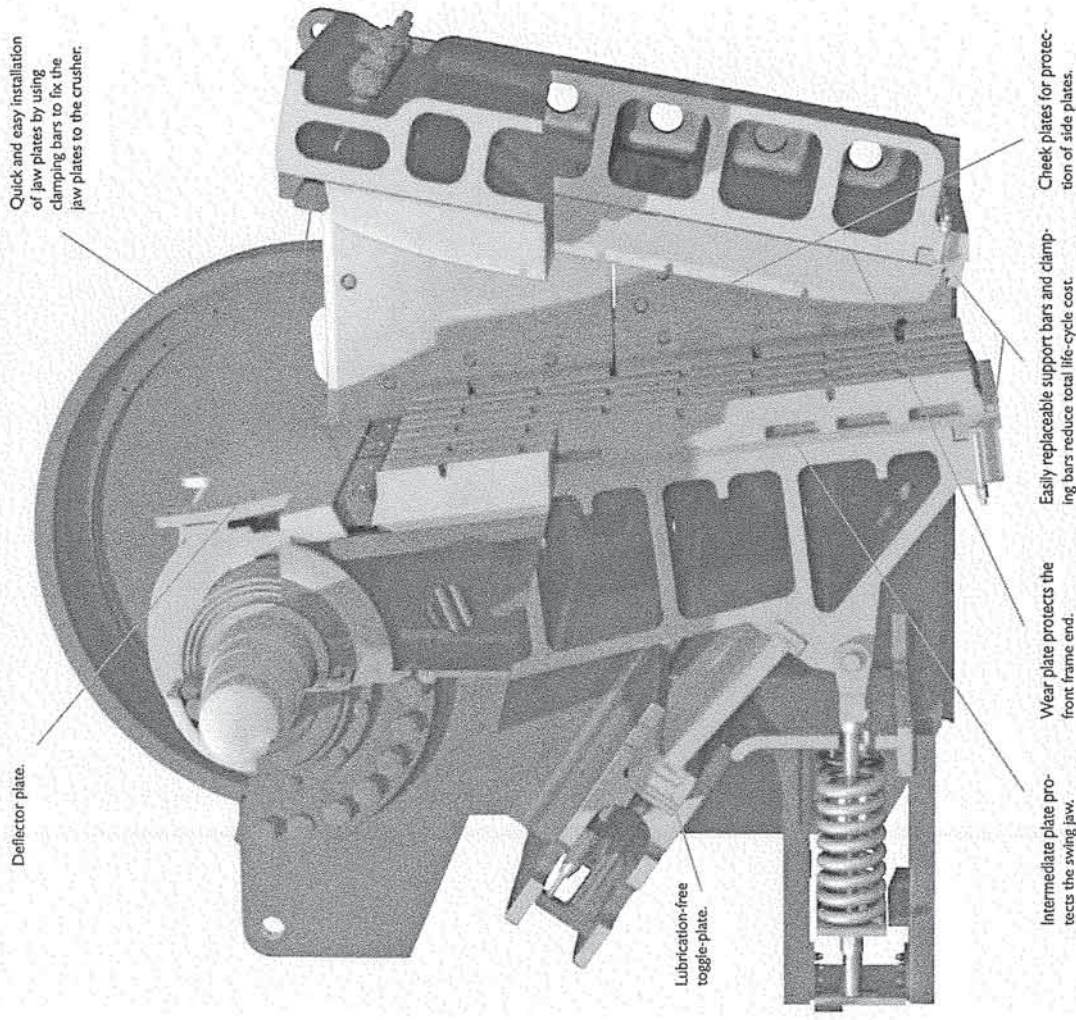
It is not just a large nominal feed opening that is necessary – the feed acceptance capability depends on a feed opening which is effective and active (see illustration). All crushers in the range have an almost square feed opening so that they can accept the largest material lumps without blockages.

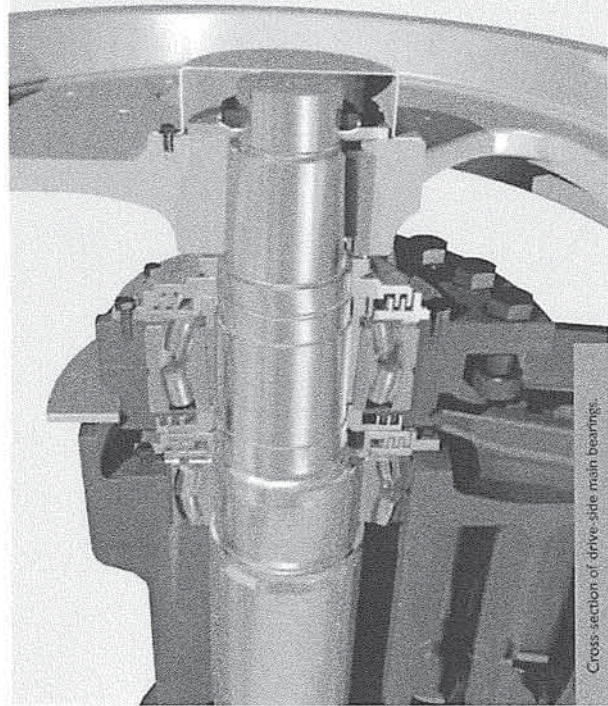
A thick, replaceable deflector plate protects the top of the moving jaw from the impact of the feed material. Large material lumps entering the crusher fall straight into the active region of the crushing chamber, so there is no need for a stationary cross-wall in the feed area.

MAINTENANCE FRIENDLINESS IN FOCUS

Thanks to carefully engineered design, Sandvik's jaw crushers secure trouble-free operation and increased uptime.

- Bearings are grease-lubricated and have grease-filled labyrinth seals to prevent the entry of dust.
- As a standard, grease lubrication hoses with a central distributor block offer safety value and make it easier for the operator to grease the bearings.
- Automatic lubrication system that can be connected to existing control systems for remote alarm indication ensuring protection of the roller bearings.
- Setting adjustment made with traditional shim plates.
- Quick and easy installation of jaw plates by using clamping and support bars to fix the jaw plates to the crusher.
- Designed with sacrificial parts to protect the main components of the crusher such as frame, swing jaw and bearings. This reduces total life-cycle costs and increases uptime, as it is less expensive to change the sacrificial parts than the main components.

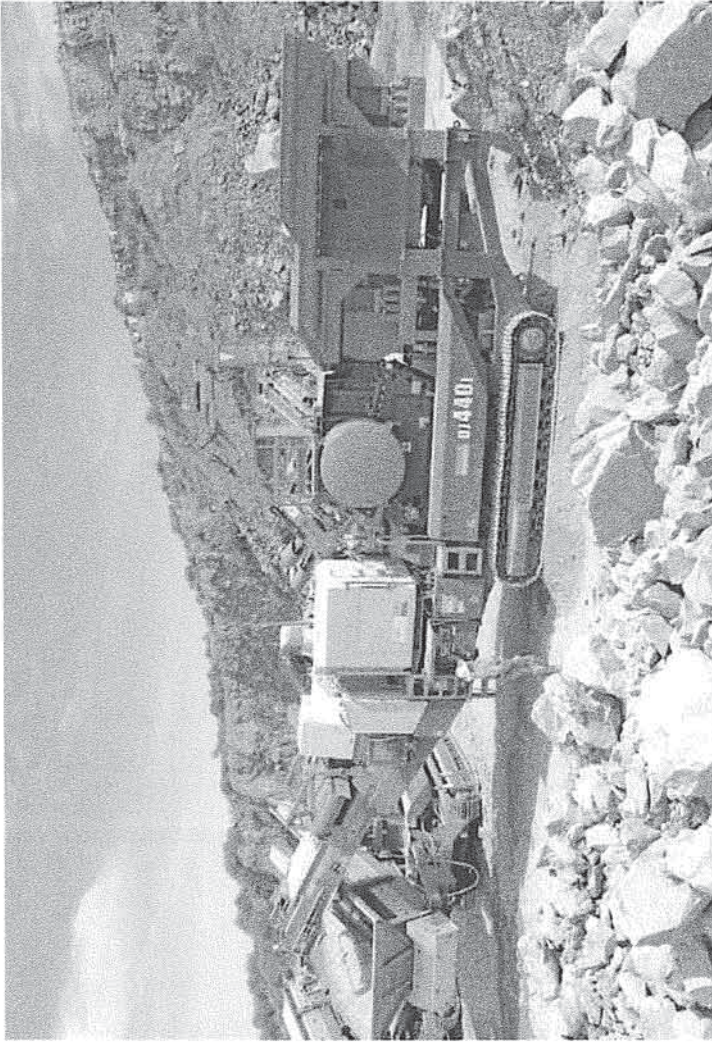




Cross section of drive-side main bearings

MULTIPLE ADVANTAGES

- Robust with low weight.
- Increased uptime thanks to operator-friendly design.
- Uniform welded construction.
- High capacity and high reduction.
- Effective, active feed opening.
- Jaw plates for all types of applications.



WT- Wide Teeth



CC- Coarse Corrugated



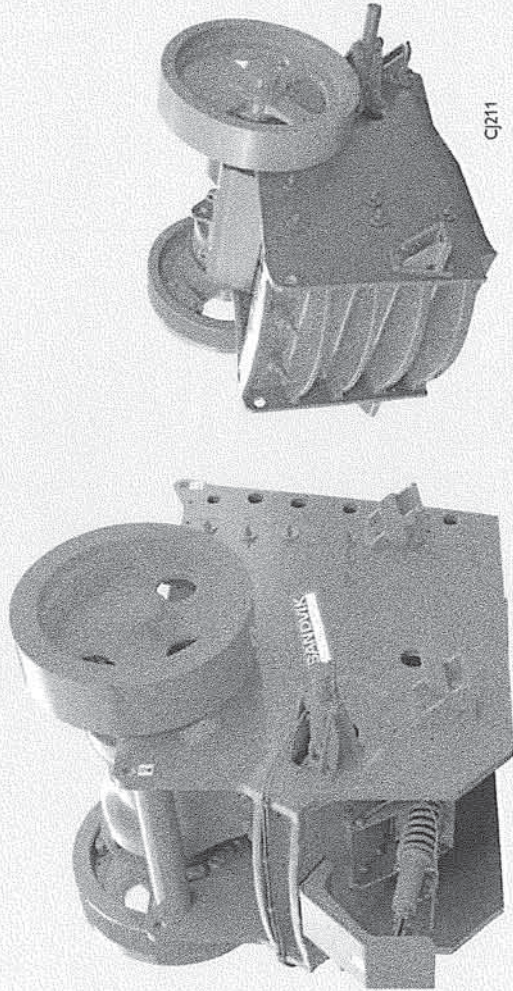
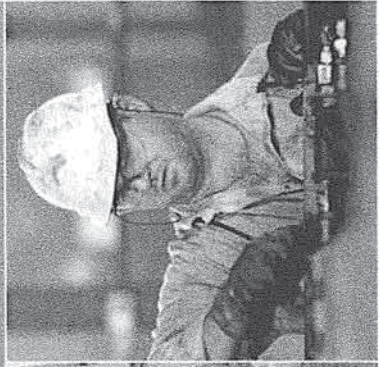
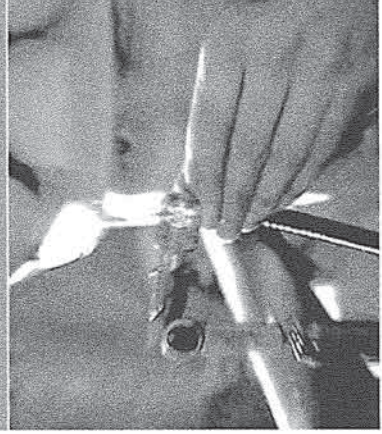
ST- Sharp Teeth



HD- Heavy Duty



C- Corrugated



C211

Protect your business... and your bottom line

HIGH PERFORMANCE.

COST-EFFECTIVE CRUSHING CHAMBERS

At Sandvik we have engineered rock crushers since 1896. Sandvik crushing chamber solutions are based on high-quality products with superior finish, supported by in-depth knowledge of every aspect in the crushing process.

Our mission is to work together with our customers to achieve the optimal crushing chamber application in terms of performance, cost-effectiveness and results.

VERSATILE RANGE OF JAW PLATES

Sandvik's wear parts are designed to give high performance and low operating costs. High quality material and experienced design ensure quality parts. Fine tuning in applications are ensured through the available range of alternative jaw plate designs.

All jaw plates are reversible. The "WT" jaw plate can also be used on both the stationary and moving jaw.

SUPPORT WHERE AND WHEN IT COUNTS

For most people, service is a matter of being available when problems occur. But we at Sandvik prefer seeing it as a matter of being proactive. Investment in, for instance, scheduled inspections and maintenance will help you protect your business from unexpected risks.

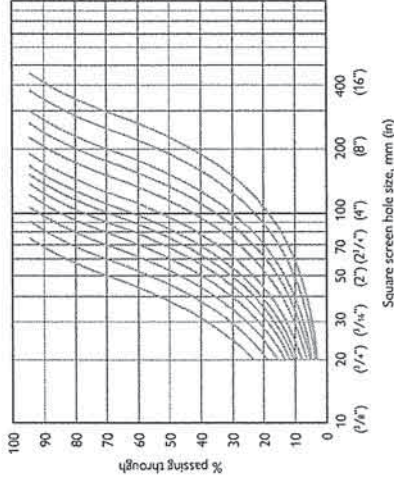
Moreover, availability of essential parts and consumables, efficient and quick logistical processes, fully trained operators... all these ensure trouble-free operations and maximize productivity.

Performance data

Product curves

The figure shows product distribution curves which are representative for medium-hard material [Impact Work Index (WI = 16)], with approx. 75% of the product smaller than the crusher's Closed Side Setting (CSS).

The shape of the product curve and the proportion of the product which will be smaller than the CSS depend on the characteristics of the feed material. Operation with common rock materials with different crushabilities (Work Index between 12 and 20) normally results in a product curve that is between 65% and 85% smaller than the crusher's CSS.

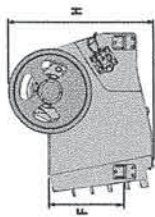


Capacity MTPH (STPH)

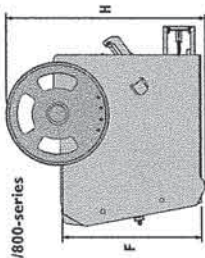
Crusher model	Crusher model		Crusher model		Crusher model		Crusher model		Crusher model	
	C.J.411	C.J.412	C.J.413	C.J.415	C.J.416	C.J.417	C.J.418	C.J.419	C.J.420	C.J.421
40	80-110 (90-120)									
50	95-135 (105-125)									
75	127-182 (140-175)	150-220 (160-220)								
100	160-250 (175-275)	200-285 (220-320)								
125	195-310 (215-340)	245-325 (270-360)	300-365 (330-435)							
150	230-370 (250-410)	285-430 (320-475)	355-465 (390-515)							
175	265-430 (290-475)	340-520 (425-555)	405-505 (445-585)							
200	300-490 (330-540)	385-575 (425-555)	445-580 (490-640)							
225		450-565 (475-625)	505-660 (555-730)							
250			550-720 (605-765)							
275										
300										

The capacity figures given in the table above are approximate and are intended only to give an indication of what the crushers can be expected to produce. They apply for the open-circuit crushing of dry blasted granite with a bulk density of 1600 kg/m³ (100 lbz/ft³) and a maximum size which can be fed into the crushing chamber without difficulty. The lower values apply for a feed from which the material finer than the crusher's CSS has been removed. The higher values apply for a feed which includes the fine material. The minimum CSS at which the crusher can be operated depends on the feed size distribution, the material's crushability (WI), the degree of contamination and moisture in the feed, the type of jaw plates fitted and the condition of the manganese.

CJ211



CJ400/600/800-series



Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, equipment and tools for the mining and construction industries, stainless materials, special alloys, metallic and ceramic resistance materials as well as process systems. In 2011 the Group had about 50,000 employees and representation in 130 countries, with annual sales of more than 94,000 MSEK.

Sandvik Construction is a business area within the Sandvik Group providing solutions for virtually any construction industry application encompassing such diverse businesses as surface rock quarrying, tunneling, excavation, demolition, road building, recycling and civil engineering. The range of products includes rock tools, drilling rigs, breakers, bulk-materials handling and crushing and screening machinery. In 2011 sales amounted to more than 9,000 MSEK, with approximately 2,600 employees (pro forma rounded numbers).

Other data

	Crusher model									
	CJ211	CJ400	CJ411	CJ412	CJ412	CJ412	CJ412	CJ412	CJ412	CJ412
Feed opening	1100/700	895/660	1045/840	1200/830	1200/830	1200/1100	1300/1130	1500/1070	1500/1300	1500/1300
mm	43x27	35x28	41x33	47x33	47x33	47x43	51x45	59x42	59x51	59x51
in										
L = Max length	2.39	2.65	2.89	3.23	3.23	3.61	3.76	4.11	4.50	4.50
m	0.94	1.01	1.18	1.27	1.27	1.42	1.48	1.61	1.77	1.77
in										
W = Max width	2.45	1.88	2.09	2.57	2.57	2.35	2.47	3.00	2.90	2.90
m	0.96	0.74	0.82	1.01	1.01	0.92	0.97	1.18	1.08	1.08
in										
H = Max height	2.17	2.38	2.82	2.95	2.95	3.51	3.85	3.33	4.19	4.19
m	0.86	0.94	1.11	1.16	1.16	1.38	1.52	1.31	1.65	1.65
in										
D = Flywheel diam.	1.23	1.60	1.86	1.86	1.86	1.86	2.17	1.76	2.17	2.17
m	0.48	0.63	0.74	0.74	0.74	0.74	0.86	0.70	0.86	0.86
in										
F = Feed height	1.12	1.56	1.88	1.93	1.93	2.50	2.68	2.39	3.05	3.05
m	0.44	0.62	0.74	0.76	0.76	0.98	1.05	0.94	1.20	1.20
in										
Shipping volume	14.1	13	20	23	23	32	38	48	58	58
m ³	498	447	704	810	810	1127	1323	1650	2042	2042
ft ³										
CSS min-max	40-200	50-175	75-225	75-275	75-275	125-275	125-300	125-300	150-300	150-300
mm	1.6-7.9	2.0-7.0	3.0-9.0	3.0-11.0	3.0-11.0	5.0-11.0	5.0-12.0	5.0-12.0	6.0-12.0	6.0-12.0
in										
Total weight	15000	14500	22000	27000	27000	39000	44000	54000	64500	64500
kg	33100	32000	48500	59500	59500	86000	97000	119100	142200	142200
lbs										
Motor power	90	75	110	132	160	160	200	200	200	200
kW	125	100	150	200	250	250	275	275	275	275
hp										
Crusher speed	270	270	240	240	210	210	225	200	200	200
rpm										



DESCRIPTION SYNTHETIQUE DES CONCASSEURS A MACHOIRES (TRADUCTION EN FRANCAIS)

Le concasseur à mâchoires Sandvik est un concasseur à bascule simple, caractérisé par l'attention portée aux détails, tant dans la conception que dans la fabrication.

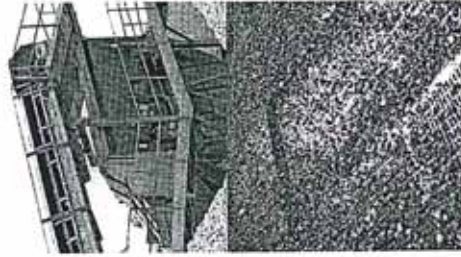
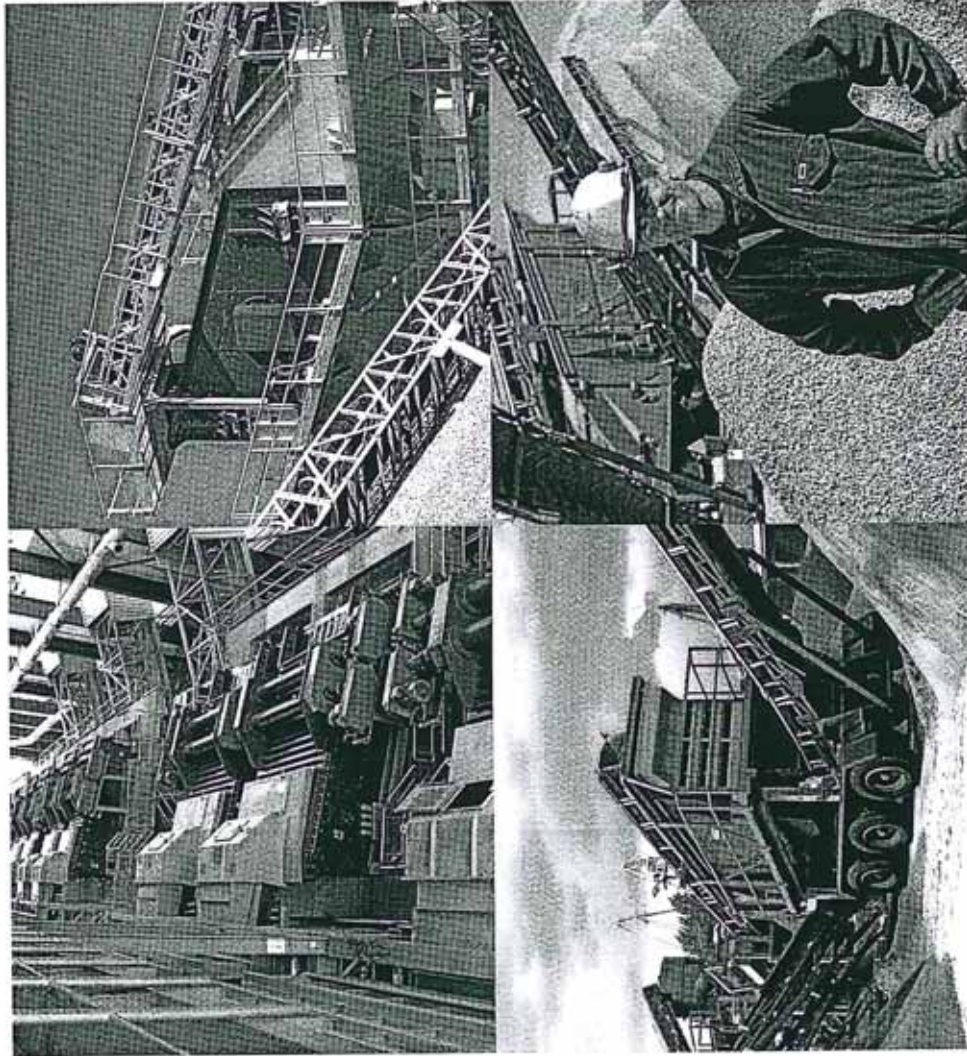
Son armature soudée permet le maintien d'une puissance constante quelle que soit la direction choisie et une grande résistance contre les chocs, minimisant ainsi le risque de dommages sur l'unité centrale.

Des performances optimisées :

- Grande capacité,
- Efficacité de réduction,
- Plaques d'usure des mâchoires droites,
- Capacité d'alimentation élevée,
- La conception de la chambre écrasante symétrique maximise la taille et la capacité d'alimentation,
- L'angle d'écrasement optimisé assure que les matériaux progressent sans à-coups dans la chambre écrasante pour permettre une réduction efficace, une productivité accrue et une utilisation optimale des plaques des mâchoires,
- Tous les broyeurs de la gamme ont une ouverture d'alimentation presque carrée pour qu'ils puissent accepter les plus grandes masses possibles de matériaux sans blocage,
- Une plaque de déflecteur épaisse et remplaçable protège le sommet de la mâchoire des impacts des matériaux.

Fiches techniques des cribles

Sandvik Screens



A great range of screens for all applications

Sandvik offers you a wide range of quality screens. But that is not all. Many of our sales people have a long experience with numerous types of screens and are well qualified to help you select the right equipment for your plant. Sandvik has supplied customers with crushing & screening equipment for over half a century. Whether you need a stand-alone screen or a complete process solution, Sandvik can provide you with equipment that is easy to install and fully functioning from day one.

SCREENS FOR ALL APPLICATIONS

Vibrating equipment commonly used for separating different grades of crushed minerals uses either stratification (screening with a vibrating bed) or free-fall screening.

Conventional screens used in the aggregate industry have great versatility as regards separation limits and material size processed. They work on the stratification principle: the vibration of the machine sifts the material bed so that finer material passes through the coarser material. This enables particles smaller than the mesh of the screen to pass through it.

Screens operating on the free-fall principle have been developed as an alternative to conventional screens. They are used successfully in both mobile and stationary

plants. Sandvik have further developed simple free-fall screening by building each deck in several sections and optimizing the inclination of the deck sections. Free-fall screens can be built much shorter and with smaller footprint than conventional screens of comparable capacities.

Sometimes, non-abrasive, soft or sticky materials and materials with high moisture content are best screened with equipment that does not rely on vibration as an operating principle. Sandvik offers roller screens that are ideal for careful screening of such materials.

A FULL RANGE OF SCREENING MEDIA

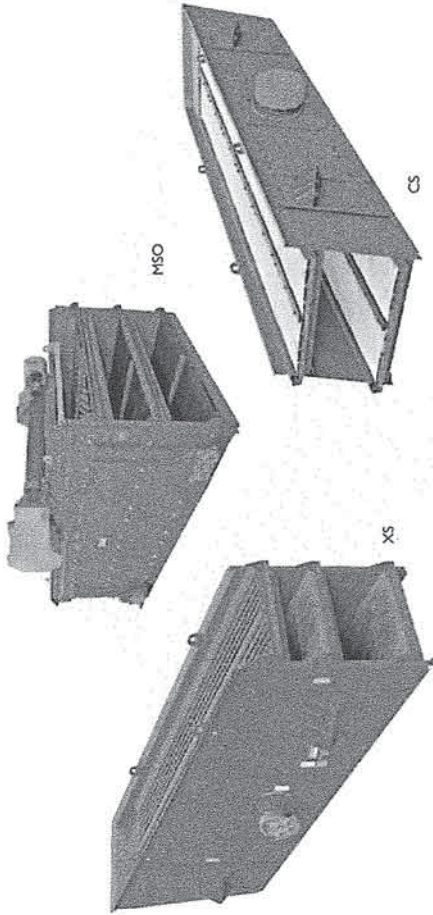
A reliable, efficient screen is not the only thing you need for optimizing your screening process. An efficient screen also needs efficient wear protection, dust encapsulation and screening media products, thus satisfying increased requirements for clean air, efficient production and high up-time.

Sandvik has a full range of screening media for vibrating screens, in polyurethane and other rubber qualities.

Take a closer look at the Sandvik range of machines and media. The people at Sandvik are the people who can help you optimize your screening process!

SANDVIK
CORPORATION

Sandvik Circular motion screens



Inclined circular-motion screens for extra heavy-duty, heavy-duty, medium and fine screening applications. MSO models have a variable-ellipse motion

XS PRIMARY SCREEN

The primary XS screens are circular motion inclined screens with two or three decks, and can be fitted with wire mesh, polyurethane and rubber screening media or steel plate on the top deck. They are heavy and have more powerful motors and drives than a regular circular motion screen. The primary screens have been designed for screening immediately after a primary crushing operation, allowing a maximum feed size of up to 400 mm.

CS CLASSIFICATION SCREEN

The CS classification screens are intended for heavy-duty, medium and fine screening applications. The screens are circular motion inclined screens

in two, three and four deck designs. Standard inclination is 18-20 degrees, depending on the size of the machine. The decks can be equipped with any kind of modern screening media of polyurethane and rubber, wire mesh or steel plate.

The CS range of screens is built for general quarrying applications and with a separation range from 80 mm to 2 mm. The maximum feed size is generally limited to 150 mm, depending somewhat on the selected screening media. The CS screens can also be used as splitter screens to divide flows within a plant and are frequently used for final screening of finished fractions. This range is also available with a successful water spray system.

MSO CLASSIFICATION SCREEN

The MSO inclined screen has circular motion stroke in the center of the screen and elliptical stroke at the feed and discharge end. The primary advantage of that is that it increases the material speed at the feed end while at the same time it decreases the material speed at the discharge end. It is evident that the combined effect of these aspects will result in a more accurate screening, especially with short fractions. Screens are available with 1, 2 or 3 decks in the standard range of screens and half decks are available as an option. The MSO is a classification screen using the same mechanism as the LF screen. MSO has a maximum feed size of up to 300 mm and a separation of 140-2 mm.

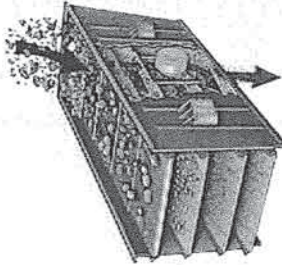
PRIMARY SCREEN XS

Model	Dimensions, mm width x length	Weight kg
XS 43 D	1200 x 3600	3480
XS 43 T	1200 x 3600	3840
XS 63 D	1500 x 4200	4700
XS 63 T	1500 x 4200	6140
XS 86 D	1800 x 4800	6270
XS 86 T	1800 x 4800	8370
XS 108 D	1800 x 6000	8890
XS 108 T	1800 x 6000	10500
XS 126 D	2100 x 6000	10300
XS 126 T	2100 x 6000	13800
XS 144 D	2400 x 6000	9850
XS 144 T	2400 x 6000	16000

Sandvik's circular motion screens are the product of an over thirty years of continuous development of state-of-the-art simulation

All critical components have been field-tested with various applications. The results have been subject to careful analysis and compared with our customers' experience and requirements.

Sandvik screens have shown themselves to be extremely reliable, economic, easy to use and suitable for most applications.



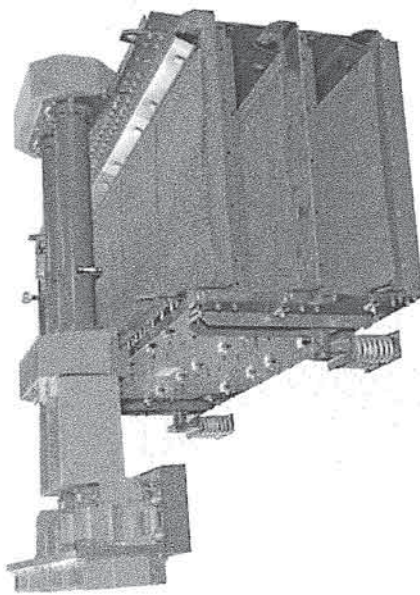
CLASSIFICATION SCREEN MSO

Model	Dimensions width x length mm	Type S, 1-d		Type D, 2-d		Type T, 3-d	
		Weight kg	Weight kg	Weight kg	Weight kg		
MSO1030	1020 x 3000	1630	2200	2780	-	-	
MSO1230	1220 x 3000	1720	2400	2900	3920	-	
MSO1240	1220 x 4000	2320	2900	3530	4510	-	
MSO1540	1520 x 4000	2620	3145	4020	5140	-	
MSO1550	1520 x 5000	3890	4780	6860	7520	-	
MSO1850	1820 x 5000	4375	6860	7660	8280	-	
MSO1860	1820 x 6000	4800	8830	11550	-	-	
MSO2160	2120 x 6000	5410	10200	-	-	-	
MSO2460	2420 x 6000	-	-	-	-	-	
MSO2470	2420 x 7000	-	-	-	-	-	

All dimensions are inside dimensions.
NOTE: Heavy duty mining version available.



Sandvik Linear motion screens



LF

LF-series horizontal screens, for accurate secondary screening and final sizing, as well as for scalping ahead of cone crushers in mining applications

LF LINEAR MOTION SCREENS

The LF screens have numerous advantages. Among them are: maintenance friendliness, high capacity and compact design.

The horizontal LF screen series has been purpose-designed for classification screening duties as well as for scalping ahead of a cone crusher in mining applications. These screens are available with 1, 2 or 3 decks but also with half decks as an option.

LF is an excellent choice where the height is limited by surrounding facilities, for the screening of small and short fractions and when heavy material is loaded on the screen.

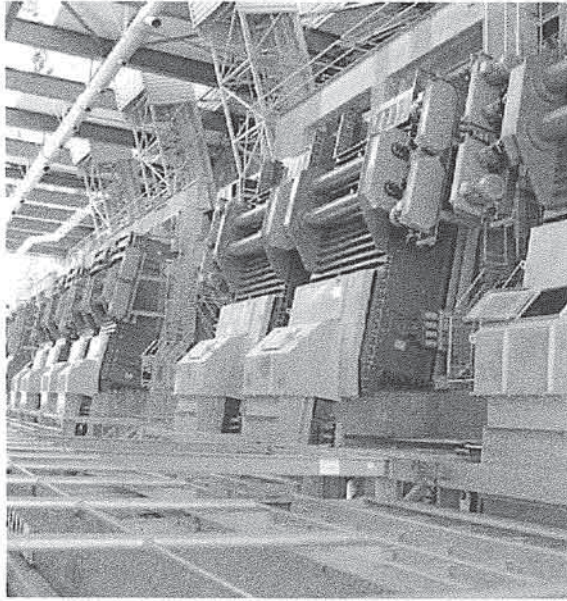
The linear or elliptical stroke improves the screening. LF screens have a maximum feed size up to 300 mm and a separation range from 100-1 mm.

ADJUSTABILITY

The screen performance can easily be modified according to existing conditions by adjusting the following factors: screen angle (i.e. adjustable spring seats), stroke angle (i.e. moveable vibrating mechanism), stroke length, rotation speed (i.e. transmission timing belt pulley) and the shape of the stroke (i.e. from "thin" ellipse to linear).

MINING VERSION

The LF screens have been successfully used in heavy mining applications. Apart from all standard delivery components, the mining version includes among others: discharge/feed box decks and sides with replaceable rubber liners, wear guard heavy duty deck protection, thicker rubber liner at the bottom of the feed box, etc.



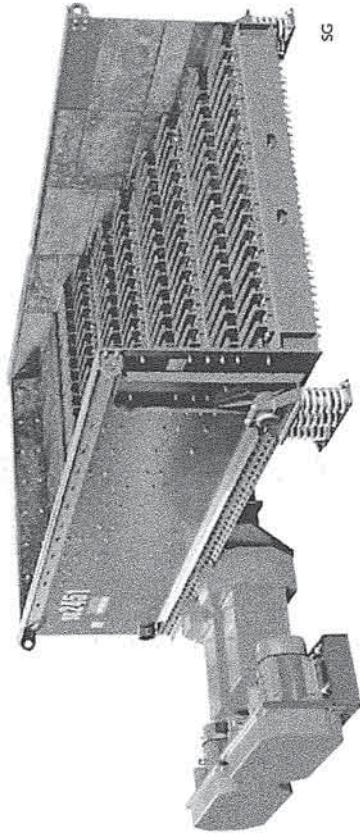
LINEAR MOTION SCREEN

Model	Dimensions width x length mm	Type S, 1-d Weight kg	Type D, 2-d Weight kg	Type T, 3-d Weight kg
LF1030	1020 x 3000	1990	2450	3040
LF1230	1220 x 3000	2130	2770	-
LF1240	1220 x 4000	2645	3530	4250
LF1540	1520 x 4000	2890	3880	4680
LF1550	1520 x 5000	3770	4350	6000
LF1850	1820 x 5000	4220	5160	7275
LF1860	1820 x 6000	4700	6680	10100
LF160	2120 x 6000	5150	7460	11810
LF2460	2420 x 6000	6580	11000	13340
LF2470	2420 x 7000	7280	12200	15650
LF2770	2720 x 7000	-	14350	-
LF3070	3020 x 7000	-	15430	-
Mining versions				
LF2442	2420x4200	-	10660	-
LF2460	2420x6000	-	12620	-
LF3060	3020x6000	13790	18750	-

All dimensions are inside dimensions.



Sandvik Grizzly screens



Robust grizzly screens for tough primary screening of blasted rock, ripped rock or gravel with a high fines content, as well as designed for heavy duty scalping, with the main purpose of removing fines from the feed before primary crushing

SG-H GRIZZLY SCREEN

The SG-H circular motion screens are recommended for installation between a primary feeder and a primary crusher.

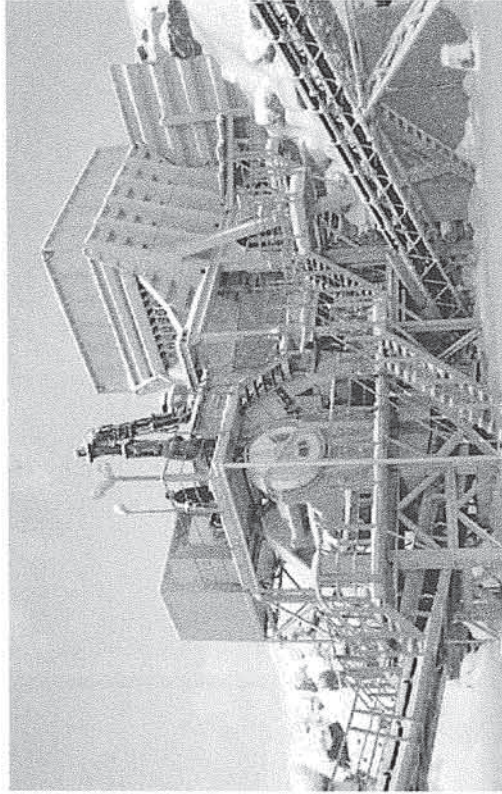
Typical feed material is blasted rock, ripped rock or gravel with high fines content, often containing difficult wet natural fines or clay. These screens have a single grizzly or plate type of scalping deck with the option of a second deck with woven wire. SG-H screens immediately after a primary feeder give more effective scalping than a primary feeder with a built-in grizzly. The stroke and speed of the screen remain constant while the feed rate is adjusted by varying the feeder speed providing efficient separation at all times.

SG GRIZZLY SCREENS

The SG linear motion screens have been designed specifically for heavy scalping duties with the main purpose of removing fines from the feed before primary crushing. In conjunction with a facility for bypassing fines ahead of the crusher, SG screens can be combined with reciprocating table feeders when heavy dump loads and high capacities are required.

All SG screens have their vibrating mechanism mounted under the feed pan. The double shaft mechanism generates an elliptical stroke, which consequently means better feeding as well as a sustained material speed on the screen. The screens are available with 2, 3 and 4 grizzly steps for the single deck models, depending on the

size of the screen. The double deck models are equipped with three grizzly steps on the top deck and wire or rubber media on the bottom deck. The drive unit incorporates two motors with cardan shafts, meaning that neither gearbox nor gearwheels are necessary - the mechanism is self-synchronizing. The components of the mechanism are mainly the same as for the LF and MSO screens. SG has a maximum feed size of up to 500 mm and a separation of up to 2.50 mm.



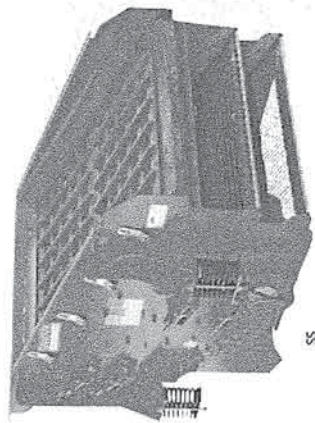
SG AND SG-H GRIZZLY SCREEN

Model	Dimensions (width x length) mm	Type S, 1-d Weight kg	Type D, 2-d Weight kg
SG1231	1220 x 3000	3500	—
SG1242	1220 x 3900	—	5000
SG1531	1520 x 3000	4000	—
SG1831	1820 x 3000	5200	—
SG1541	1520 x 3900	5000	—
SG1542	1520 x 3900	—	6200
SG1841	1820 x 3900	6000	—
SG1842	1820 x 3900	—	7900
SG2141	2120 x 3900	7500	—
SG1851	1820 x 4800	8500	—
SG2151	2120 x 4800	9300	—
SG2451	2420 x 4800	10500	—
Mining versions			
SG1241H	1200 x 3600	4330	—
SG1242H	1200 x 3600	4600	—
SG1541H	1500 x 4000	8850	—
SG1542H	1500 x 4000	9410	—

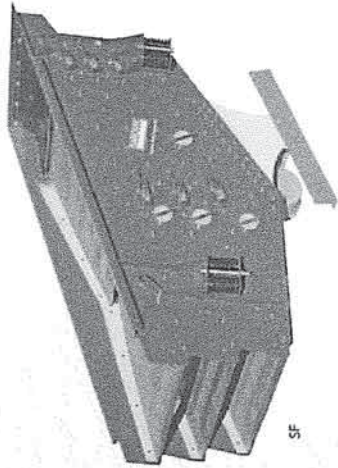
All dimensions are inside dimensions.



Sandvik Free-fall screens



SS



SF

Compact, high-capacity screens with steeply inclined decks and a linear throw: SS models for scalping after crushers and for closed-circuit screening, SF models also for final sizing

The free-fall screening principle enables quick removal of large amounts of fines, using steeply inclined decks and effective linear stroke almost perpendicular to the deck. The free-fall screening principle has unique accuracy characteristics. Indeed, since the velocity of oversize particles is quite high, each particle has a limited number of chances to pass a slot.

SS FREE-FALL SCREEN

The main advantage of the SS screens is their ability to handle large loads of material despite their modest size. This screen is often used instead of a slot sizer for removal of natural fines before crushers, for separation of material for different crushing stages and for final products of natural

gravel (scalping, closed circuit screening and final product screening of gravel). Suitable screening media are rubber, wire or plate elements for the top deck, and wire mesh at the lower deck(s).

The heavy-duty version SS-H is normally used after larger crushers, giving a maximum feed size of over 150 mm.

SF FREE-FALL SCREEN

SF screens share some of the same basic design principles of the SS screen. The SF screen incorporates two different screening sections on each deck. This provides a free-fall action in the first section and a more accurate stratification in the second section. The result is a combination

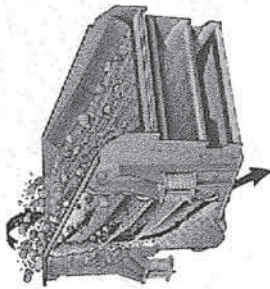
of the high capacity associated with free-fall screening and the good separation accuracy known from horizontal screening. Another positive side effect is the compactness of the machine.

Offered in three sizes, SF screens combine quick fines removal and accurate sizing, making possible much shorter construction of the screen than with a conventional screen, but with the same width throughput capacity and screening accuracy. This figure will be even greater with evaluation of a complete station, due to its light-weight design, consequently giving extremely low dynamic loads to the structure.



The free-fall screening principle ensures a free flow of material through all the decks. SS free-fall screens can be of much shorter construction and more compact than conventional screens.

Free-fall screening ensures that each stone can pass the screen early on. The cloth is always exposed to new material, without creating a bed of material.

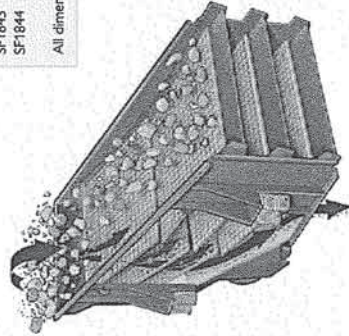


SF screens use free-fall screening without a bed on the first part of each deck, but combine it with stratification screening with a bed on the final part.

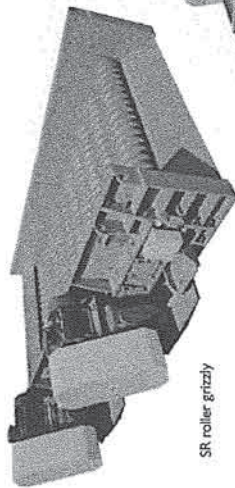
Therefore, SF screens combine quick fines removal and accurate sizing, making possible much shorter construction of the screen than with a conventional screen, but with the same width throughput capacity and screening accuracy.

Model	Dimensions, mm width x length	Weight kg
SS1012	1020 x 1330	1000
SS1013H	1020 x 1460	1300
SS1223	1240 x 2435	1600
SS1233H	1240 x 2500	1750
SS1433	1430 x 2990	2700
SS1633H	1618 x 2920	4450
SS1823	1818 x 2645	3800
SS1833	1818 x 2645	3800
SF1443	1400 x 3540	3200
SF1843	1800 x 4290	5700
SF1844	1800 x 4287	6500

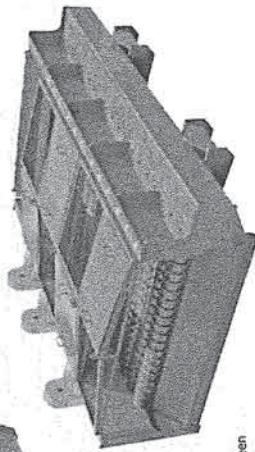
All dimensions are inside dimensions.



Sandvik Roller screens



SR roller grizzly



SR roller screen

Compact, non-vibrating roller grizzlies and screens for non-abrasive materials such as coal and limestone, excellent tolerance of wet and sticky materials

SR ROLLER GRIZZLY

The roller grizzly has been designed for scalping and screening duties of low abrasive materials with an abrasion index (AI) below 0,03, such as limestone and coal. The roller grizzly is compact and its ability to handle high capacities and moist material has been proven in many applications. It is available for both primary and secondary duties, depending on the maximum feed size.

In order to achieve the best possible screening results it is important to spread the feed along the entire width of the screen. The drop height of the material should be as low as possible.

SR ROLLER SCREENS

Roller screens have been primarily designed for coal, lignite and limestone screening. These screens are superior to vibrating equipment and minimize blinding when the material is sticky and exhibits high moisture content. No vibration is transferred to the support structure and the compact size and high capacity range make these screens highly competitive.

The roller screen with casted discs and spacers has been built for ROM (run of mine) coal screening. The roller screen with steel tube rollers is best used for secondary applications, for instance when screening washed coal. The roller screen with elliptical rollers is suited for 4-20 mm screening, such as screening in one dimension only.

ROLLER SCREEN CRUSHER

The roller screen crusher has been especially designed to remove impurities of washed coal, as well as to crush down existing coal lumps to acceptable sizes in coal-fired power plants. The roller screen crusher comes complete with dust encapsulation, pre-screen, two crusher drums and after-screen. A pre-crusher might be necessary to put on top of the pre-screen if many lumps are present, for instance with frozen coal. The crusher drums have a releasing mechanism to enable wood pieces, stones and other impurities to be rejected. The sensitivity of the release mechanism is adjustable.



Model	Dimensions, mm width x length	Weight kg
SR ROLLER GRIZZLY		
SR1221	1200 x 2000	7200
SR1521	1500 x 2000	7900
SR1821	1800 x 2000	8600
SR2121	2100 x 2000	9300
SR2421	2400 x 2000	10000
SR1541	1500 x 4000	14500
SR1841	1800 x 4000	15500
SR2141	2100 x 4000	16500
SR2441	2400 x 4000	18500
SR1861	1800 x 6000	24500
SR2161	2100 x 6000	26500
SR2461	2400 x 6000	28500

Model	Dimensions, mm width x length	Weight kg
SR ROLLER SCREEN		
SR1234	1200 x 2500	5200
SR1534	1500 x 2500	5600
SR2144	2100 x 4000	8000
SR2454	2400 x 5000	10000
SR2464	2400 x 6000	13000
SR2474	2400 x 7000	16000
SR1035	1000 x 2500	4000
SR1535	1500 x 3000	4200
SR2045	2000 x 4000	7500
SR2065	2000 x 6000	11200
SR1238	1200 x 2500	3200
SR1538	1500 x 3000	4400
SR2048	2000 x 4000	7200
SR2068	2000 x 6000	11000
SR2478	2400 x 6500	13700

Model	Dimensions, mm width x length	Weight kg
ROLLER SCREEN CRUSHER		
SR1039	1000 x 2500	8000 / 9100
SR1539	1500 x 3000	9600 / 11500
SR1549	1500 x 4000	10950 / 12400
SR2049	2000 x 4000	11700 / 13500
SR2069	2000 x 6000	14900 / 16700

All dimensions are inside dimensions.



Sandvik Screening Media Selection Guide

Screening duty	Max feed size (mm)	Separation	Application	Dewatering	Deck design	Panel type	Material	Aperture	Most common thickness (mm)	Fastening	Accessories
Modular rubber screening media	20 - 150	10 - 63	Dry	No	Special	Modular	Rubber	Moulded and punched	8, 11, 15, 20, 25, 30, 35 and 45	Snap-on	Side liner and side liner spacer
Modular and-blinding screening media	10 - 50	2 - 16	Dry / and-blinding	No	Special	Modular	Soft rubber	Punched	2.5, 3.5, 5.5, 8, 11 and 15	Snap-on	Side liner and side liner spacer
Modular PU screening media	10 - 100	1 - 31.5	Wet / dry	Yes	Special	Modular	Polyurethane	Moulded	Hole size dependent	Snap-on	Side liner and side liner spacer
Tensioned and-blinding PU screening media	20 - 50	2 - 16	Dry / and-blinding	No	Cambered	Tensioned	Soft Polyurethane	Punched	2.5, 3.5, 5.5, 7, 10, 12, 15, 20, 25, 30, 35, 40 and 50	Cross- or length tensioned	Centre hold down and Capping
Tensioned rubber screening media	20 - 150	5.6 - 63	Dry	No	Cambered	Tensioned	Rubber	Punched	5.5 and 8	Cross- or length tensioned	Centre hold down and Capping
Tensioned PU screening media	10 - 100	1 - 45	Wet / dry	Yes	Cambered	Tensioned	Polyurethane	Moulded	Hole size dependent	Cross- or length tensioned	Centre hold down and Capping
Pre-tensioned rubber screening media	30-250	16 - 90	Dry	No	Cambered	Pre-tensioned	Rubber	Punched	15, 20, 25, 30, 35, 40, 50 and 60	Clamp down	Side hold down and Capping
Pre-tensioned PU screening media	10 - 100	1 - 45	Wet / dry	Yes	Cambered	Pre-tensioned	Polyurethane	Moulded	Hole size dependent	Clamp down	Side hold down and Capping
Flat self-supporting rubber screening media	150 - 300	45 - 120	Dry	No	Flat	Self supporting	Rubber	Moulded and punched	40, 50, 60 and 70	Clamp down	Side hold down and Capping
Self-supporting rubber screening media with siddbars	75 - 400	45 - 120	Dry	No	Flat	Self supporting	Rubber	Moulded	55+20, 70+50 and 70+60	Clamp down	Side hold down and Capping
Special screening media	10 - 50	2 - 25.4	Wet / dry / and-blinding	No	Special	Special	Polyurethane	Punched	2, 3, 4, 5, 6, 7, 8, and 9	Wedge depending on screen design or bolted	Wedge



SANDVIK MINING AND CONSTRUCTION AB TEL: +46 40 46 80 00 FAX: +46 40 46 89 98
www.sandvik.com

If your application falls outside the limits specified above, please contact your Sandvik Mining & Construction representative.

Sandvik is a global industrial group with advanced products and world-leading positions in selected areas – tools for metal cutting, machinery and tools for rock excavation, stainless materials, special alloys, metallic and ceramic resistance materials, as well as process systems. The Group had at the end of 2007 about 47,000 employees and representation in 130 countries, with annual sales of more than SEK 86,000 M.

Sandvik Mining and Construction is a business area within the Sandvik Group and a leading global supplier of machinery, cemented-carbide tools, service and technical solutions for the excavation of rock and minerals in the mining and construction industries. Annual sales 2007 amounted to about SEK 33,100 M, with approximately 15,200 employees.



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www.sandvik.com

DESCRIPTION SYNTHETIQUE DES CRIBLES (TRADUCTION EN FRANCAIS)

✓ Crible à mouvements circulaires

Les cribles primaires XS sont des cribles à mouvements circulaires inclinés avec deux ou trois ponts et peuvent être munis d'un treillis métallique, d'un équipement en polyuréthane et en caoutchouc ou d'une plaque d'acier sur le pont supérieur. Les cribles primaires ont été conçus pour cribler immédiatement les matériaux après une opération de broyage primaire, permettant une taille d'alimentation maximale de 400 mm.

✓ Cribles vibrants

Les cribles vibrants SG ont été conçus avec pour objectif principal d'enlever les fractions fines de l'alimentation avant le broyage primaire.

SG assure une taille d'alimentation maximale de 500 mm et une séparation maximale de 250 mm

✓ Cribles à mouvements linéaires

Les cribles à mouvements linéaires ont des nombreux avantages, dont une maintenance aisée, un haut rendement et une structure compacte.

La série de cribles LF a été conçue aussi bien pour trier les différentes fractions de matériaux que pour être placée en complément avant l'action d'un broyeur à cône. Ces cribles sont disponibles avec 1, 2 ou 3 ponts.

Les cribles LF ont une taille d'alimentation maximale de 300 mm et une gamme de séparation de 100-1 mm.

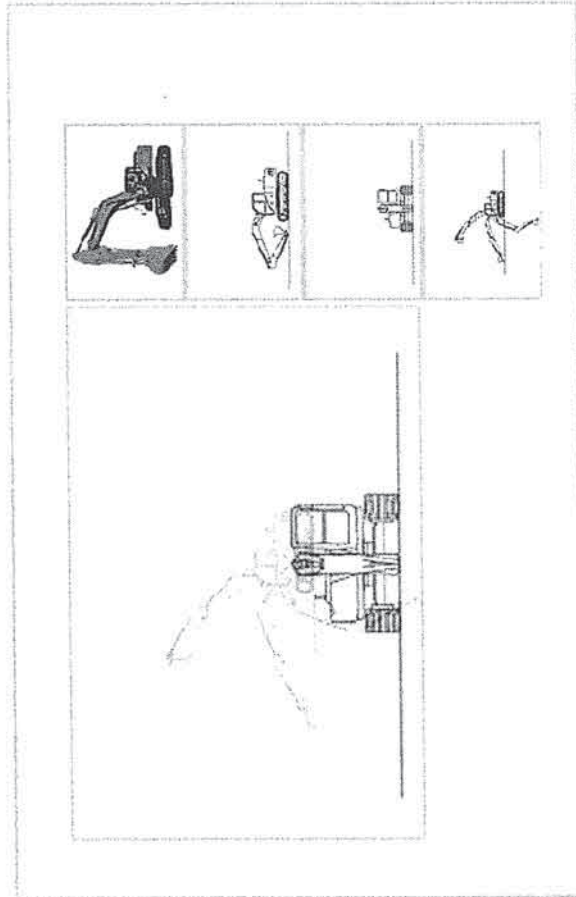
ANNEXE 2 - Pièce 6

Fiches techniques des engins d'extraction (Pelles hydrauliques, Tombereaux, Chargeurs)

ZX 350 LC-3, Hitachi

HITACHI

Modèle de base avec pelle rétro standard



Hitachi ZX 350 LC-3 - Équipement spécifique

Règlage de sillon

Haut.cond. ajust.

Climatisation

Témoins surcharge

Excavateur à transbordement

Lame niveleuse

Première année: 2006

Dernière année: 2012

Hitachi ZX 350 LC-3 - Fiches techniques

Poids en service 34,5 t

Fabricant du moteur Isuzu

Type de moteur AH-6HK1XYSA-01

Dimensions des outils (Lxlxh) 11,13x3,19x3,16 m

Puissance du moteur 202 kW

Capacité du godet 2,32 m³

Largeur des tuiles 600 mm

wagonnet LC

Flèche MB

volume utile 7,79 l

Tours-min. 1500 min-1

Portée 11,1 m

Prof. de dragage 7,38 m

force d'extraction 239 kN

Largeur d' godet -

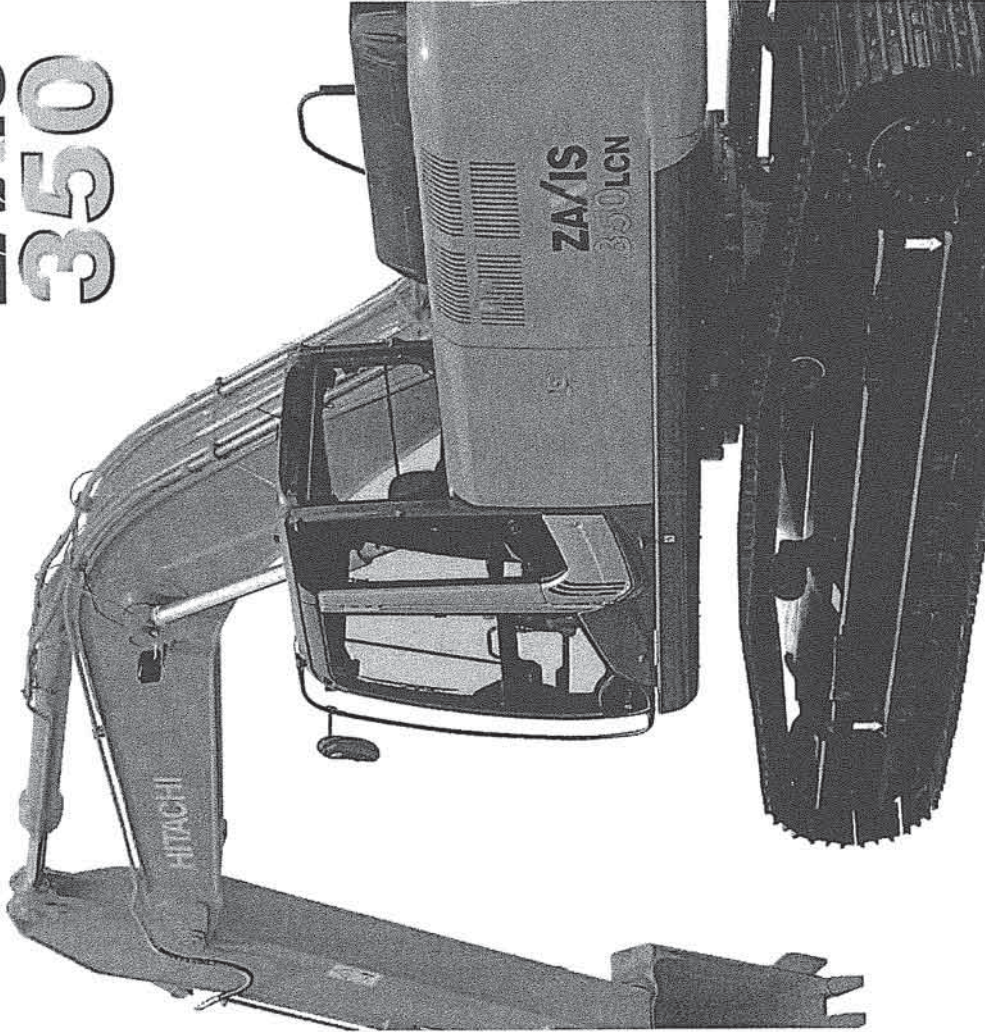
ZAXIS 350

The ZAXIS-3 series are a new generation of excavators designed to provide more efficient power, productivity and improved operator comfort. By listening carefully to the wishes of the end-user, HITACHI not only understands your business, but also provides the reliable solutions you've been looking for.

The Power to Perform

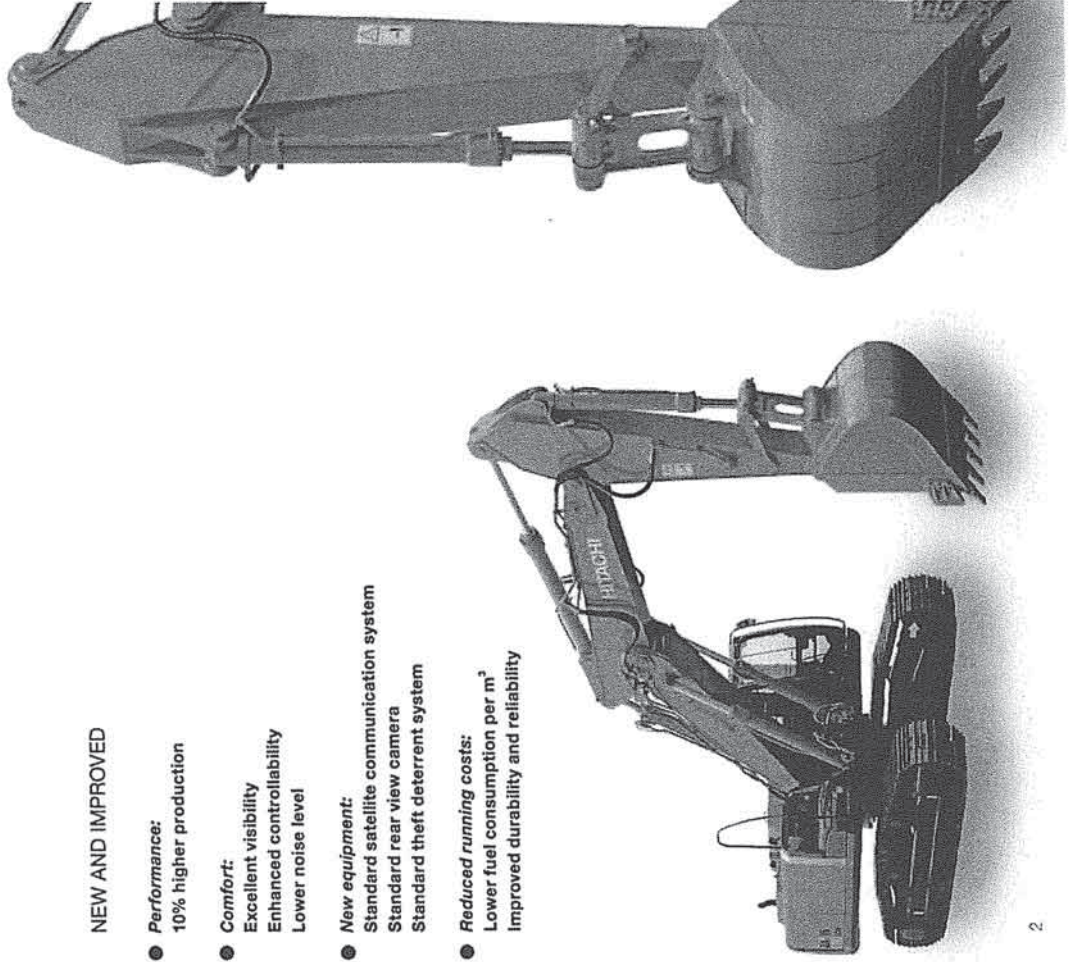
NEW AND IMPROVED

- **Performance:**
10% higher production
- **Comfort:**
Excellent visibility
Enhanced controllability
Lower noise level
- **New equipment:**
Standard satellite communication system
Standard rear view camera
Standard theft deterrent system
- **Reduced running costs:**
Lower fuel consumption per m³
Improved durability and reliability



HYDRAULIC EXCAVATOR

- Model Code : ZX350LC-3 / ZX350LCN-3
- Engine Rated Power : 202 kW (271 HP) 32 600 - 36 200 kg
- Operating Weight : ZX350LC-3 32 600 - 36 100 kg
ZX350LCN-3
- Backhoe Bucket : SAE / PCSA Heaped: 1.03 - 1.84 m³
CECE Heaped: 0.93 - 1.59 m³



Productivity

New E-mode
New hydraulic system HIOS III
Hydraulic boosting system
Enhanced boom circulation system
New electronic controlled diesel engine
Page 4-5

Operator comfort

High visibility inside cab
Short stroke levers
Wide foot space
Comfort designed seat
Improved controllability and operator comfort
Page 6-7

Multi function monitor

Maintenance support
Attachment support system
Rear view camera
Theft deterrent system
Fuel consumption monitoring
Page 8-9

Durability and reliability

Strengthened X beam
Strengthened undercarriage
Improved idler brackets
Strengthened front attachment
Page 10-11

Maintenance

Conveniently located inspection points
Parallel arrangement of the cooling pack
Page 12-13

Safety measures

CRES II cab
Engine shut-off switch
Pilot control shut-off lever
Cab right bars
Page 14

Environment measures

Array of low noise mechanisms
Ecological design
Page 15

Parts & Service

Parts centre
Service
Page 16

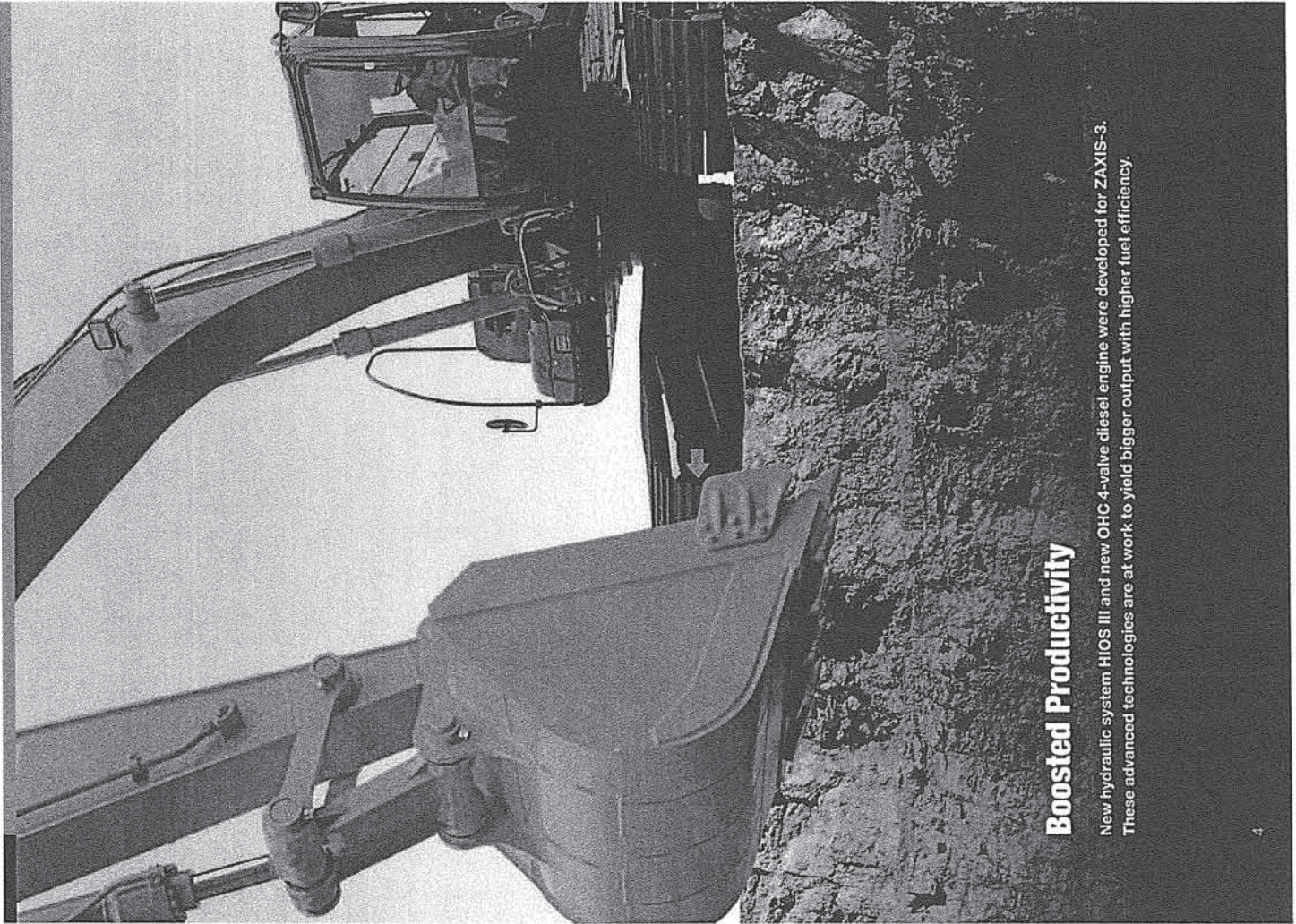
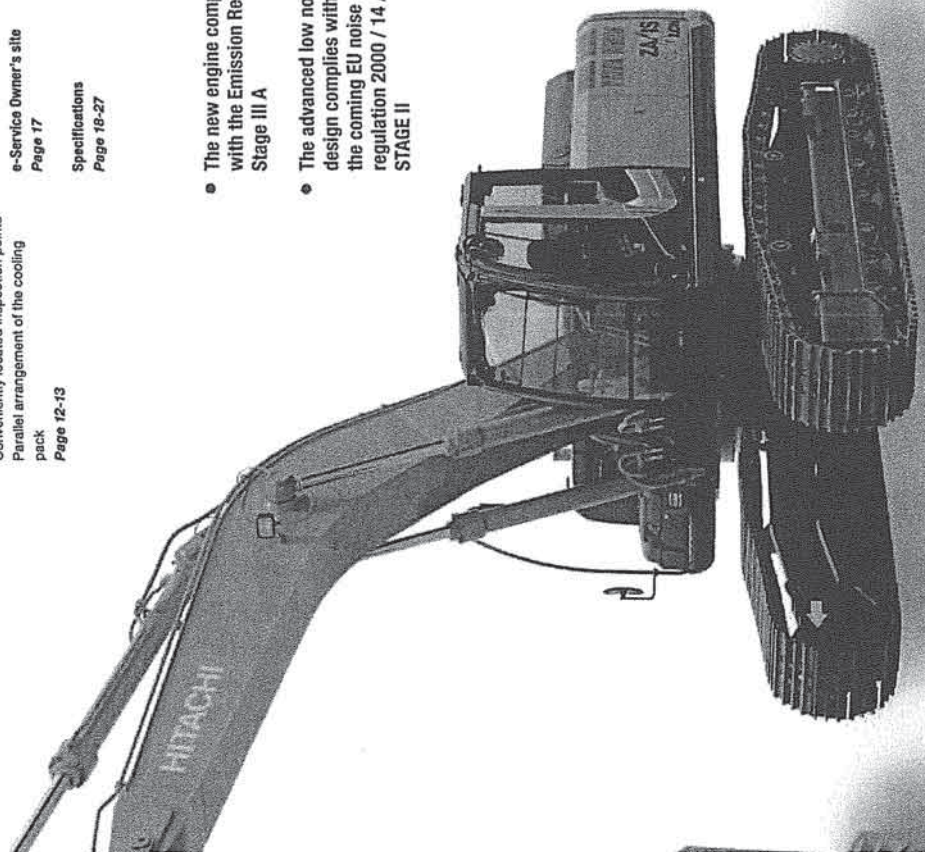
e-Service Owner's site

Page 17

Specifications

Page 18-27

- The new engine complies with the Emission Regulations Stage III A
- The advanced low noise design complies with the coming EU noise regulation 2000 / 14 / EC, STAGE II



Boosted Productivity

New hydraulic system HIOS III and new OHC 4-valve diesel engine were developed for ZAXIS-3. These advanced technologies are at work to yield bigger output with higher fuel efficiency.

More production, less fuel consumption

Increased Production

A combination of the hydraulic system (HIOS^{III}) and new OHC^{**} 4-valve engine allows the efficient use of hydraulic pressure to increase speeds of actuators and boost production with higher fuel efficiency. The productivity is increased with 10% in comparison to previous model ZAXIS-1.

^{*}Human & Intelligent Operation System

^{**}OverHead Camshaft

Efficient hydraulic control - HIOS III

ZAXIS-1 adapted HIOS II hydraulic system that is suitable for fine controllability by the operators. Continuously HITACHI developed new advanced hydraulic technology HIOS III for ZAXIS-3. In addition to the fine controllability this new system increases the efficiency of hydraulic circuit and increases speed of actuators.

New E-mode

The new E mode, H/P mode and P mode can be selected to suit job needs. The new E mode can save fuel consumption by up to 10% compared to the previous P mode, while yielding similar production.

Increase in Swing Torque and Traction Force

Swing torque and traction force are increased significantly.

-Swing torque 10% UP

-Traction force 18% UP

Sophisticated Travel Control;

At climbing or steering, when the machine needs more traction force, the engine speed automatically increases which makes the machine faster.

Enhanced Boom Recirculation System

In combined operation of boom lower and arm, pressure oil from boom cylinder bottom side is delivered to boom cylinder rod side, assisted by boom weight, for boom lowering. At the same time, pressure oil from the pump is delivered to the arm cylinder for arm movement.

This mechanism allows an increase of speed in combined operation of 15%.

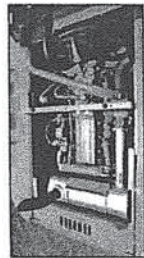
The Hydraulic Boosting System

In arm roll-in and boom-rise operation, excess pressure oil is delivered from boom cylinder rod side to arm cylinder bottom side to increase flow rate giving 20% higher arm roll-in speed. Excess pressure oil from boom cylinder rod side is delivered to arm cylinder bottom side through a regenerative valve to increase flow rate for productive operation.

Development concept of new engine

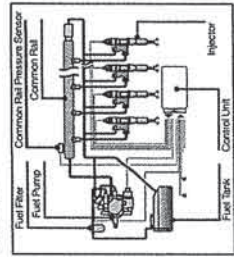
OHC 4-Valve Engine

The new OHC 4-valve diesel engine is developed and built to comply with the rigorous Emission Regulations enforced in 2006 in EU. This new engine contributes to environmental preservation. At the same time it realizes high durability and low fuel consumption by adopting the latest advanced engine technology.



Common Rail Type Fuel Injection System

Electronic control common rail type fuel injection system drives an integrated fuel pump at an ultrahigh pressure to distribute fuel to each injector per cylinder through a common rail. This enables optimum combustion to generate big horsepower, and reduce PM^{*} (diesel plume) and fuel consumption.

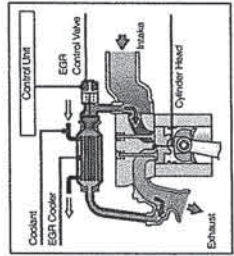


Cooled EGR** System

Exhaust gas is partially mixed with intake air to lower combustion temperature for reducing NOx and fuel consumption. What's more, the EGR cooler cools down exhaust gas to increase air concentration for complete combustion, reducing PM^{*} (diesel plume).

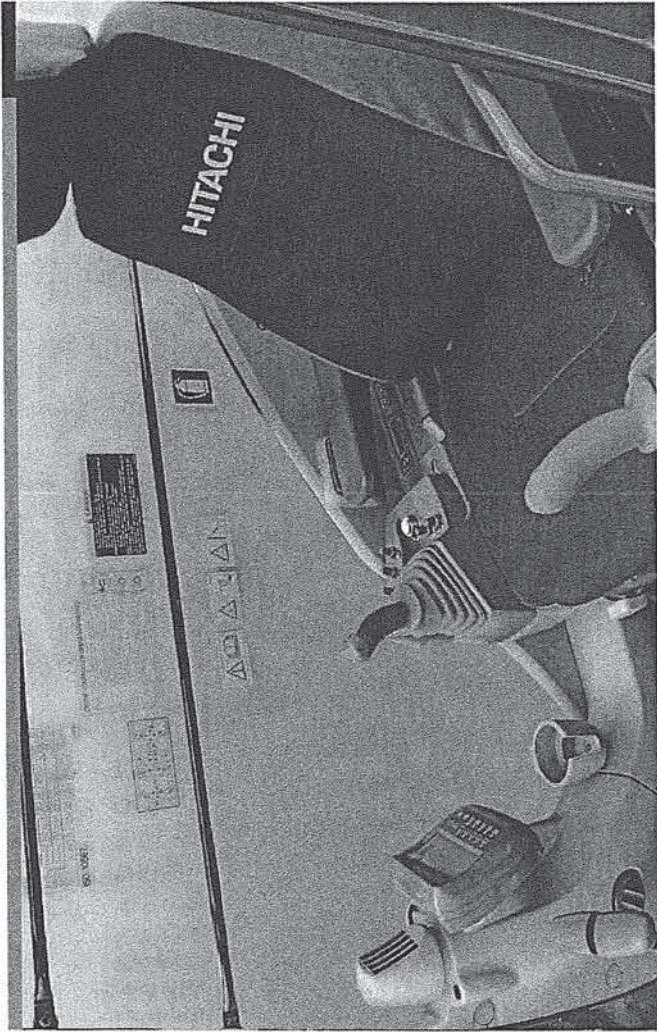
^{*}Particulate Matter

^{**}Exhaust Gas Recirculation

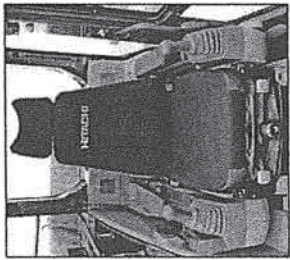
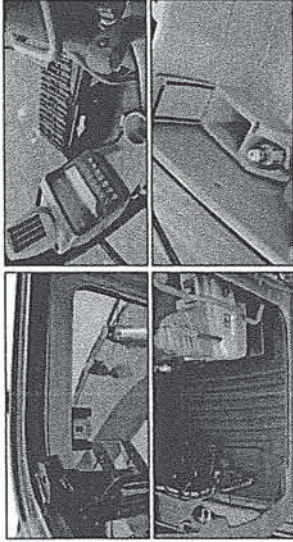


A New Standard in Operator Comfort

The operator's seat of the ZAXIS-3 series gives the operator an excellent view of the jobsite. On the widescreen colour LCD monitor the operator can see what is behind the machine. Ample legroom, short stroke levers and a large seat ensure optimum working conditions for the operator during long hours.



The ZAXIS-3 series cab has been redesigned to meet demands of European customers. From the operator's seat the operator has an excellent view of the job site. On the widescreen colour LCD monitor the operator can see machine conditions and with the rear view camera, what is behind the machine. Ample legroom, short stroke levers and a suspension seat with heating ensure optimum working conditions. The seat features horizontal, vertical and weight adjustments and has a backrest contoured for comfort, with a HITACHI logo.



Wide adjustable armrests and a retractable seat belt are included. Short stroke levers mean fingertip control of hydraulics and allow for continuous operation with less fatigue. Three switches on the lever (optional) can be set to operate attachments other than buckets. The cab is pressurized to keep out dust. Noise and vibrations are kept to a minimum due to the elastic mounts, filled with silicone oil, the cab rests on.

Visibility is improved especially for the right downward view. A large overhead window allows natural light to enter the cab. Sliding windows on the front and side enable direct communication between operator and other workers. Foot space has increased and travel pedals have been redesigned for easier operation. A flat floor allows for easy cleaning. Ergonomic controls and switches, fully automatic air conditioner and a radio complete the package.

Embedded Information Technology

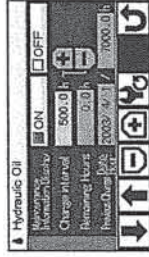
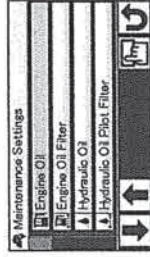
The ZAXIS-3 series is equipped with a widescreen colour LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals, select work modes, monitor fuel consumption, and connect to the rear view camera. A theft deterrent system and multi-language selection is also available.

Multi function monitor



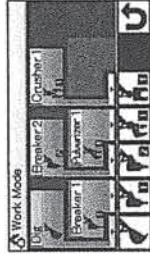
The color LCD monitor, located in the cab, indicates coolant temperature, fuel level, and maintenance data. It also allows one-touch adjustment of the attachment. The display can also be adjusted to day or night shift.

Maintenance support



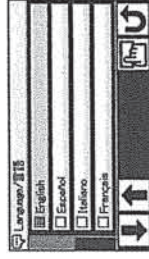
Replacement timing of hydraulic oil and fuel filters is alerted to the operator through the LCD monitor according to the schedule preset by the user each time when turning the key switch. The scheduled maintenance can prevent the failure of the machine.

Attachment support system (work mode selector)



When replacing the attachment, oil flow adjustment can automatically be done by one touch on the work mode selection display on the LCD monitor. Minor adjustments of oil flow is possible if necessary.

Multilanguage selection



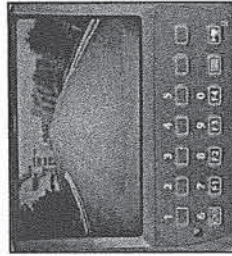
The monitor enables you to select 12 European languages.

A Solid Base for a Long Life

HITACHI's technology is built on a wealth of experience and know-how from limestone sites and quarries around the world. The undercarriage of the ZAXIS 350 has become much stronger. Improved construction and enlarged box sections, a track undercover plate that protects the center joint and hydraulic hoses make this machine more durable.

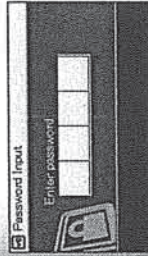


Rear view camera



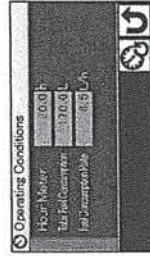
The widescreen color LCD, teamed up with the rear view camera on the counterweight, gives the operator unobstructed rearward viewing. The rear view camera automatically works when traveling, and can also be manually turned on with a select switch on the monitor.

Theft deterrent system



The electronic immobiliser requires the entry of an encryption code to the multifunctional monitor each time when starting the engine to prevent theft and vandalism.

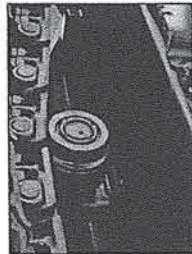
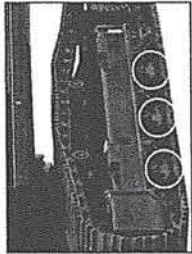
Fuel consumption monitoring



Fuel consumption per operating hour is computed, and the result is displayed on the LCD monitor. This information suggests refuelling timing, and guides energy-saving operation and efficient job management.

Simplified Maintenance

The ZAXIS-3 series meet customer demands for simplified maintenance. Regular maintenance is the key for keeping equipment in top condition, which can help to prevent costly downtime. In addition, a regular serviced machine has higher residual value. There are many service features to be found on the ZAXIS-3 series.

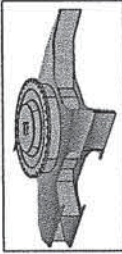


Upper and lower rollers and upper roller brackets are increased in size for higher durability. Track links are thickened and reshaped for higher durability and rigidity. Three track guards are provided standard.

This effectively protects track links from disengagement during steering. Side frame height is increased by approx. 13%.

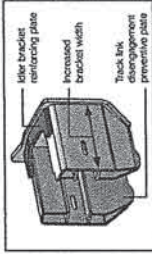
Strengthened X-beam

The X-beam is strengthened by the improved construction and enlarged box sections. The section is increased in strength up to 45% (maximum). Top and bottom plates of the X-beam use monolithic plates, instead of conventional welded four plates. This eliminates welding to strengthen the X-beam.



Improved idler brackets

The idler bracket reinforcing plate is thickened greatly for higher durability to prevent the opening of the idler bracket. The track link disengagement preventive plate, located just behind the idler bracket, is thickened for higher durability, and reshaped by extending its stopped end to prevent the disengagement of track links.

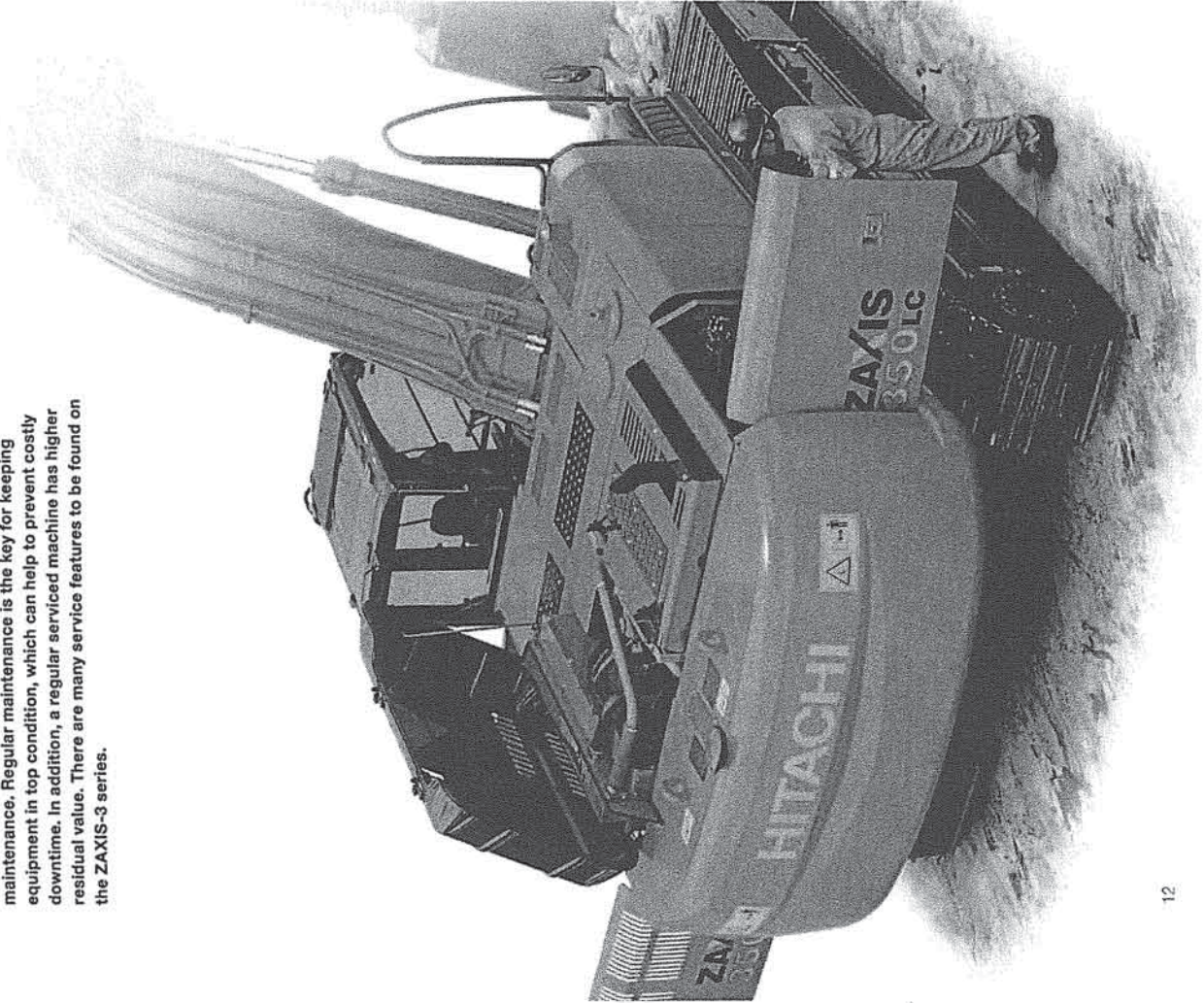
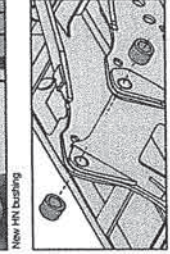
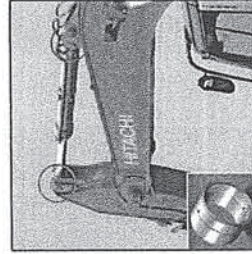


Strengthened front attachment

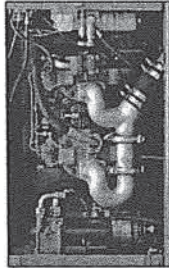
The boom top bracket is strengthened by using high-tensile steel. At arm-bucket joint, the arm top is hardened with WC thermal spraying (Tungsten-Carbide) for greater wear resistance at its contact surface with bucket, reducing jerking. Reinforced resin thrust plates designed to reduce noise and resist wear.

The new HN bushings, containing "solid molybdenum-based lubricant", are utilized at the boom-arm joint and arm cylinder mounting area for better lubrication and higher durability. (At other joints, conventional HN bushings are also utilized.)

The boom foot is strengthened with bushing. This improvement increases the durability and reliable under heavy-duty operation.



Conveniently located inspection points

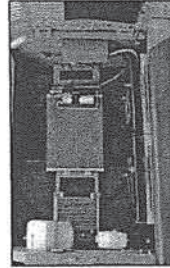


Wide doors give access, from ground level, to the fuel filter, water separator and engine oil filter. A large handrail, steps and anti-skid plates lead to the engine cover. The engine oil pan is fitted with a drain coupler. When draining, an associated drain hose is connected to the drain coupler. The drain coupler is reliable, avoiding oil leakage and vandalism.

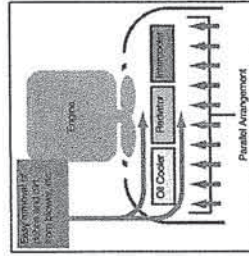


The fresh air filter for the air conditioner is relocated to cab door side from conventional location behind the operator seat. This allows easy cleaning and replacement of the fresh air filter, like the air circulation filter inside the cab.

Parallel arrangement of the cooling pack



The oil cooler, radiator and intercooler are laid out in a parallel arrangement, instead of the conventional in-line arrangement. This parallel arrangement is significantly easier to clean around the engine. The air conditioner condenser can be opened for easy cleaning of the condenser and the radiator located behind.



Extended oil and filter change intervals

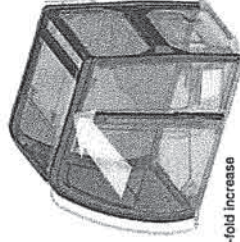
Front Pin Lubricating Intervals and Consumables Replacement		NEW ZAXIS 350
Lubricant	Bucket	250
	Boom Foot	500
	Front	500
Consumables	Engine Oil	500
	Engine Oil Filter	500
	Hydraulic Oil	5 000
	Hydraulic Oil Filter	1 000
	Fuel Filter	500

The oil and filter change intervals have been extended considerably, reducing maintenance time and expenses. Engine oil consumption is lower, and engine oil change is necessary every 500 hours.

Safety Features

Ensuring the safety of the operator and other workers on the jobsite is an important concern for HITACHI. That is why the ZAXIS-3 series has a number of safety features including a new reinforced cab and shut-off mechanisms for engine and pilot controls.

CRES II cab



The CRES II cab is designed to help with "just in case" protection for the operator. Safety in case of tipping is improved. The cab top, for instance, can withstand about 4 times conventional load when side load is applied to the cab top until its deformation reaches 200 mm.

Withstanding load : 4-fold increase

Additional features

Cab right bars



Evacuation hammer



Engine shut-off switch



Pilot control shut-off lever



OPG top guard, level II



Retractable seat belt



Other features include a retractable seatbelt, evacuation hammer and emergency engine shut-off switch. A shut-off lever for pilot control helps to prevent unintentional movements. In addition a Falling Object Protective Structure (OPG top guard, level II) guard is optionally available. For the cab windows there is a choice of laminated or tempered glass.

Environmental Features

HITACHI takes its responsibility when it comes to the environment. Our production facilities have ISO 14001 certification. The HITACHI machine is lead free and has a low-noise design, therefore HITACHI customers get one of the most environmentally considerate hydraulic excavators available today.

A cleaner machine

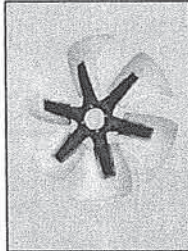
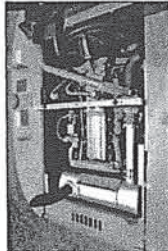
The ZAXIS-3 series is equipped with a clean but powerful engine to comply with Stage III A. An engine emission regulations effective in the European Union from 2006. Reduced particulate matter (PM) output and lower nitrogen oxide (NOx) levels.

A quieter machine

A number of features make this machine quieter. First, isochronous control of the engine speed means a restriction of engine speed during no-load and light-duty operation to suppress sound. A fan with curved blades reduces air resistance and air flow noise. Third, a time-tested muffler suppresses engine noise significantly and reduces emissions.

A recyclable machine

Over 97% of the ZAXIS-3 series can be recycled. All resin parts are marked to facilitate recycling. The machine is completely lead-free. The radiator and oil cooler are made from aluminium and all wires are lead-less. In addition, biodegradable hydraulic oil is available for jobsites where special environmental care is required.



Parts & Service

Over the years, we have gained experience in one of the most competitive service markets in the world - Japan. Using our know-how in dealing directly with customers, we have created a worldwide support system that is highly capable.

Parts

HITACHI only offers genuine high quality parts. We guarantee that these parts have high performance and long life. We manage around 1 000 000 types of parts all around the world. They are designed and built to be the best match for your HITACHI equipment. HITACHI has a global parts distribution network that makes sure you get what you need

as quickly as possible. We have more than 150 dealers worldwide who provide the closest support for your needs. In most cases, your dealer will have the replacement part that you require. If a dealer does not have a certain part, he can order it from our fully-stocked parts depots located across the world. These distribution centres are all con-

Service

Our goal is to "keep customer equipment at a maximum performance level". To fulfil this goal, we have set more than 150 dealers all over the world. They have highly trained technicians, and provide a number of support programs. HITACHI provides a unique extended warranty program called HITACHI Extended Life Program, or HELP.

ected by an online system that gives them access to shared information on stocks, such as the number and type of available parts. The depots, which in turn are stocked by a parts centre in Japan, minimize delivery time and enable you to get your parts as efficiently and quickly as possible.

If you would like more information regarding parts and/or service, please ask your nearest HITACHI dealer. Not all programs and/or services are available in every market or region.

Remote fleet management with e-Service Owner's Site

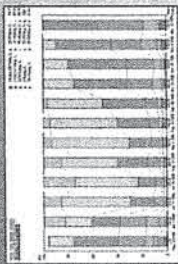
Reduce maintenance effort and costs for your machine fleet with e-Service Owner's Site; latest machine information of each of your machines available on-line, in your office.



e-Service Owner's Site features

Operation

Remote access to all relevant machine operation information such as daily operating hours and machine fuel level as well as historically cumulated temperatures and pressures.



Maintenance

For each machine, maintenance history as well as recommended maintenance due is displayed in one view, allowing for accurate and efficient fleet maintenance management.



Location

In addition to any general GPS function, GIS (Geographical Information System) will not only show the geographical position of each machine with immediate serial number identification, it will also allow for obfuscated multiple machine searches using specific operational information as search criteria.



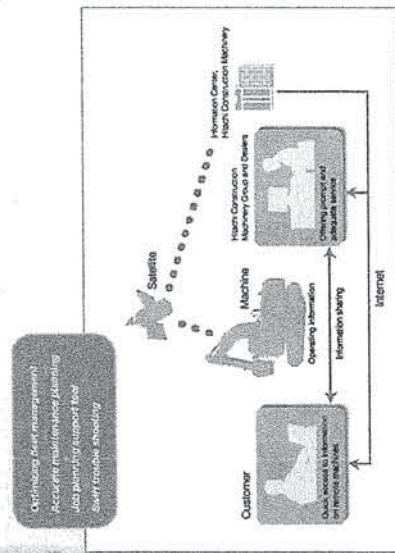
Check and monitor each of your machines from your office

Enhanced service support from your local dealer

Actual geographical location of each of your machines

e-Service Owner's Site is an on-line fleet management tool offered by HCME to each of its customers. It will present all operational information and location of your machines on a PC in your office, giving you an up-to-date overview of your machines, allowing for full fleet control. Each machine will regularly send its operational data to a satellite and from there, via a ground station to a Hitachi server. The data collected in the server will then be processed and directed to each customer around the world. Your machine information will be available through a secure internet connection for you and your dealer. This communication chain is operational 24h a day, each day of the year. It will support your job planning, help you maintain your machine and allow for enhanced service and trouble shooting support by your local dealer, all directly contributing to reduce downtime and increase the cost performance of your fleet.

All new ZAXIS-3 and ZW machines supplied by HCME will have a satellite communication unit installed as standard*, meaning each owner can directly enjoy the benefits of e-Service Owner's Site. Your local dealer will be able to give you access to e-Service Owner's Site.



* (1) Satellite communication may be possible by the local regulatory standards (including safety standards) and legal requirements of the particular country where you wish to use it. Please contact HITACHI dealer for details.
 (2) Satellite communication basically allows for worldwide coverage. Contact your local dealer for the latest situation on actual satellite communication coverage.
 (3) Transmission of the satellite signal is bidirectional in any way, satellite communication may not be possible.

EQUIPMENT

ENGINE

Model	Isuzu AH-6HK1X
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	6
Rated power	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
ISO 9249, net	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
IEC 80/1289, net	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
SAE J1349, net	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
Maximum torque	1 090 N.m (110 kgm) at 1 500 min ⁻¹ (rpm)
Piston displacement	7.790 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 160 Ah

HYDRAULIC SYSTEM

- Work mode selector
- Digging mode / Attachment mode
- Engine speed sensing system
- Main pumps 2 variable displacement axial piston pumps
- Maximum oil flow 2 x 288 U/min
- Pilot pump 1 gear pump
- Maximum oil flow 34 U/min

Hydraulic Motors

- Travel 2 variable displacement axial piston motors
- Swing 1 axial piston motor

Relief Valve Settings

- Implement circuit 34.3 MPa (650 kgf/cm²)
- Swing circuit 32.4 MPa (630 kgf/cm²)
- Travel circuit 34.3 MPa (650 kgf/cm²)
- Pilot circuit 3.9 MPa (40 kgf/cm²)
- Power boost 36.3 MPa (670 kgf/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter
Boom	2	145 mm	100 mm
Arm	1	170 mm	115 mm
Bucket (BEH)	1 (1)	140 mm (145)	95 mm (95)
Positioning	1	170 mm	110 mm

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

- Pilot controls, HITACHI's original shockless valve. 2
- Implement levers 2
- Travel levers with pedals 2

UPPERSTRUCTURE

Revolving Frame
Welded sturdy box construction, using heavy-gauge steel plates for rig-gears. D-section frame for resistance to deformation.

Swing Device
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.
Swing speed 10.7 min⁻¹ (rpm)

Operator's Cab
Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat with armrests, adjustable with or without control levers.
* International Standardization Organization

UNDERCARRIAGE

Tracks
Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.
Track shoes with triple grousers made of induction-hardened rolled alloy. Flat and triangular shoes are also available. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

- Upper rollers 2
- Lower rollers 8
- Track shoes 48
- Track guards 3

Travel Devices

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.
Automatic transmission system: High-Low.

- Travel speeds High : 0 to 5.0 km/h
Low : 0 to 3.2 km/h
- Maximum traction force 288 kN (29 200 kgf)
- Gradeability 35° (70%) continuous

WEIGHTS AND GROUND PRESSURE

ZAXIS 350LC WITH MONOBLOCK BOOM:
Equipped with 6.40 m monoblock boom, 3.20 m arm and 1.40 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	33 900 kg	63 kPa (0.64 kg/cm ²)
	700 mm	33 700 kg	54 kPa (0.55 kg/cm ²)
	800 mm	34 100 kg	48 kPa (0.49 kg/cm ²)
	900 mm	34 400 kg	43 kPa (0.44 kg/cm ²)

ZAXIS 350LC WITH 5.78 M BEH TYPE MONOBLOCK BOOM:

Equipped with 5.78 m monoblock boom, 2.11 m arm and 1.50 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	33 400 kg	63 kPa (0.64 kg/cm ²)
	700 mm	34 000 kg	55 kPa (0.56 kg/cm ²)
	800 mm	34 400 kg	48 kPa (0.49 kg/cm ²)
	900 mm	34 800 kg	43 kPa (0.44 kg/cm ²)

ZAXIS 350LCN WITH MONOBLOCK BOOM:

Equipped with 6.40 m monoblock boom, 3.20 m arm and 1.40 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	33 200 kg	63 kPa (0.63 kg/cm ²)
	700 mm	33 600 kg	54 kPa (0.55 kg/cm ²)
	800 mm	34 000 kg	48 kPa (0.49 kg/cm ²)
	900 mm	34 400 kg	43 kPa (0.44 kg/cm ²)

ZAXIS 350LCN WITH 5.78 M BEH TYPE MONOBLOCK BOOM:

Equipped with 5.78 m monoblock boom, 2.11 m arm and 1.50 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	33 600 kg	63 kPa (0.64 kg/cm ²)
	700 mm	33 900 kg	54 kPa (0.55 kg/cm ²)
	800 mm	34 300 kg	48 kPa (0.49 kg/cm ²)
	900 mm	34 700 kg	43 kPa (0.44 kg/cm ²)

ZAXIS 350LC WITH 2-PIECE BOOM:

Equipped with 2-piece boom, 3.20 m arm and 1.40 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	34 200 kg	64 kPa (0.65 kg/cm ²)
	700 mm	34 600 kg	55 kPa (0.57 kg/cm ²)
	800 mm	35 000 kg	49 kPa (0.50 kg/cm ²)
	900 mm	35 400 kg	44 kPa (0.45 kg/cm ²)

ZAXIS 350LCN WITH 2-PIECE BOOM:

Equipped with 2-piece boom, 3.20 m arm and 1.40 m² bucket (SAE/PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	34 200 kg	64 kPa (0.65 kg/cm ²)
	700 mm	34 600 kg	56 kPa (0.57 kg/cm ²)
	800 mm	34 900 kg	49 kPa (0.50 kg/cm ²)
	900 mm	35 300 kg	44 kPa (0.45 kg/cm ²)

Weights of the basic machines (including 7 400 kg counterweight and triple grouser shoes, excluding front-end attachment, fuel, hydraulic oil, engine oil and coolant etc.) are:
 ZAXIS 350LC 25 500 kg with 600 mm shoes
 ZAXIS 350LCN 25 400 kg with 600 mm shoes

SERVICE REFILL CAPACITIES

Fuel tank 630.0 L
Engine coolant 32.0 L
Engine oil 41.0 L
Swing device 17.0 L
Travel device (each side) 9.2 L
Hydraulic system 374.0 L
Hydraulic oil tank 180.0 L

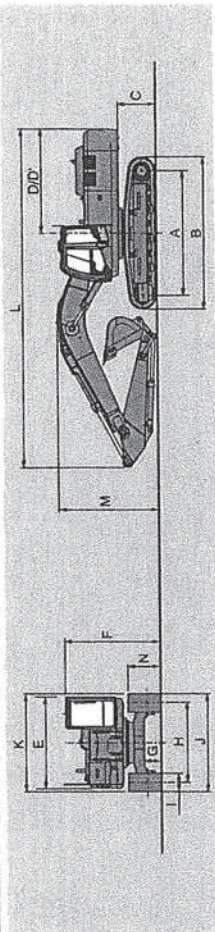
BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 6.40 m monoblock boom, 2-piece boom and 2.33 m, 2.67 m and 3.20 m arms are available.
 Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

BUCKETS

Capacity SAE heaped	Capacity CECE heaped	Width without side cutters	Weight
1.03 m ³	0.83 m ³	1 000 mm	845 kg
1.30 m ³	1.15 m ³	1 200 mm	965 kg
1.56 m ³	1.37 m ³	1 400 mm	1 060 kg
1.84 m ³	1.59 m ³	1 600 mm	1 190 kg

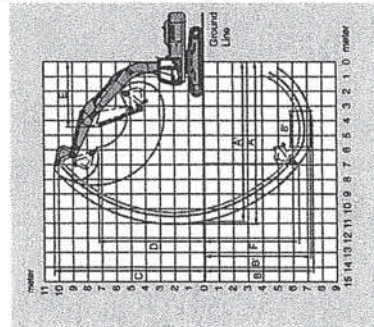
DIMENSIONS : MONOBLOCK BOOM



	ZAXIS 350LC	ZAXIS 350LCN
A Distance between lumbars	4 050	4 050
B Undercarriage length	4 950	4 950
C Counterweight length	1 180	1 180
D Rear-end swing radius	3 380	3 380
E Rear-end length	3 370	3 370
F Overall width of upperstructure	2 990	2 990
G Overall height of cab	3 160	3 160
H Min. ground clearance	500	500
I Track gauge	2 590	2 400
J Track shoe width	6 600	6 600
K Undercarriage width	3 190	3 000
L Overall width	3 190	3 000
M Overall length	11 170	11 170
N With 2.33 m arm	11 130	11 130
O With 2.67 m arm	11 000	11 000
P With 3.20 m arm	11 090	11 090
Q Overall length 5.78 m BEH boom with 2.11 m arm	10 780	10 780
R Overall height of boom	3 510	3 510
S With 2.33 m arm	3 470	3 470
T With 2.67 m arm	3 270	3 270
U With 3.20 m arm	3 600	3 600
V With 4.00 m arm	3 710	3 710
W Overall height 5.78 m BEH boom with 2.11 m arm	1 070	1 070
X Track height with triple grouser shoes		
Y Excluding track shoe kg		
Z G: Triple grouser shoe		

WORKING RANGES

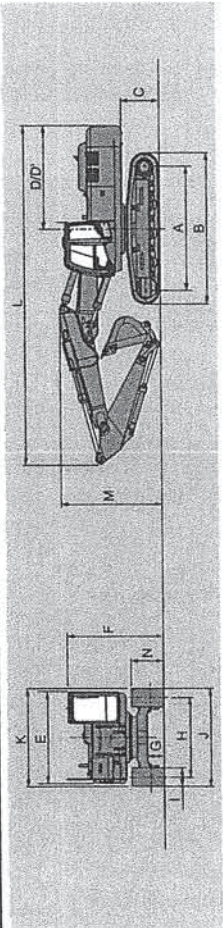
Unit: mm	ZAXIS 350LC / ZAXIS 350LCN		ZAXIS 350LC / ZAXIS 350LCN	
	6.40 m Monoblock boom	5.78 m BEH	6.40 m Monoblock boom	5.78 m BEH
Arm length	2 330	2 320	2 670	2 110
A Max. digging reach	10 310	10 570	11 100	9 430
A' Max. digging reach (on ground)	10 090	10 360	10 890	9 180
B Max. digging depth	6 500	6 840	7 380	5 870
B' Max. digging depth (8° level)	6 300	6 640	7 210	5 440
C Max. cutting height	9 990	9 990	10 360	9 390
D Max. dumping height	6 900	6 940	7 240	6 330
E Min. swing radius	4 460	4 460	4 460	4 070
F Max. vertical wall	5 330	5 510	6 420	4 500
G Max. digging force** ISO	23 600 kN	23 600 kN	23 600 kN	25 100 kN
G' Max. digging force** SAE : PCSA	20 700 kN	20 700 kN	20 700 kN	21 800 kN
H Min. swing radius	2 330	2 320	2 670	2 110
I Max. crowd force** ISO	23 900 kN	23 900 kN	23 900 kN	25 100 kN
I' Max. crowd force** SAE : PCSA	21 100 kN	21 100 kN	21 100 kN	22 200 kN
J Max. crowd force** ISO	24 400 kN	24 400 kN	24 400 kN	26 100 kN
J' Max. crowd force** SAE : PCSA	21 100 kN	21 100 kN	21 100 kN	22 200 kN
K Max. crowd force** ISO	22 100 kN	22 100 kN	22 100 kN	23 200 kN
K' Max. crowd force** SAE : PCSA	19 700 kN	19 700 kN	19 700 kN	20 800 kN



Excluding track shoe kg ** At power boost

ZAXIS 350

DIMENSIONS : 2-PIECE BOOM



	ZAXIS 350LC	ZAXIS 350LCN
A Distance between ladders	4 050	4 050
B Undercarriage length	4 950	4 950
C Counterweight clearance	1 160	1 160
D Rear-end swing radius	3 390	3 390
E Rear-end length	3 370	3 370
F Overall width of upperstructure	2 990	2 990
G Overall height of cab	3 160	3 160
H Min. ground clearance	500	500
I Track gauge	2 590	2 400
J Track shoe width	G 600	G 600
K Undercarriage width	3 190	3 000
L Overall width	3 190	3 000
M Overall length	11 150	11 150
N Overall height of boom	With 2,33 m arm 11 110 With 3,20 m arm 11 070	11 110 11 070
O Overall height of boom	3 980	3 390
P Overall height of boom	With 2,33 m arm 3 370 With 3,20 m arm 3 310	3 370 3 310
Q Track height with triple grouser shoes	1 070	1 070

* Excluding track shoe lug G: Triple grouser shoe

WORKING RANGES

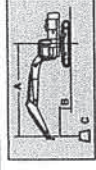
Arm length	ZAXIS 350LC / ZAXIS 350LCN	
	2,33 m	3,20 m
A Max. digging reach	10 300	10 680
A' Max. digging reach (on ground)	10 170	10 470
B Max. digging depth	6 040	6 390
B' Max. digging depth (B' level)	5 930	6 250
C Max. cutting height	11 870	12 060
D Max. dumping height	8 550	8 750
E Min. swing radius	3 250	3 120
F Max. vertical wall	4 820	5 090
Bucket digging force** ISO	234 kN (23 900 kgf)	234 kN (23 900 kgf)
Bucket digging force** SAE : PCSA	207 kN (21 100 kgf)	207 kN (21 100 kgf)
Arm crowd force** ISO	239 kN (24 400 kgf)	211 kN (21 600 kgf)
Arm crowd force** SAE : PCSA	221 kN (22 600 kgf)	197 kN (20 100 kgf)

Excluding track shoe lug ** At power boost

LIFTING CAPACITIES

Metric measure

- Ratings are based on ISO 10697.
- Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
- The load point is the center-line of the bucket pivot mounting pin on the arm.
- * Indicates load limited by hydraulic capacity.
- 0 m = Ground.



Conditions	Load radius						At max. reach
	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	9.0 m	
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70
Boom 6.40 m Arm 2.67 m Shoe 600 mm	19 520	15 820	12 010	9 520	7 620	6 820	9 640 6 320 7 70

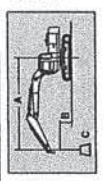
ZAXIS 350LC 5.78 M BEH TYPE MONO BLOCK BOOM

Conditions	Load radius						At max. reach
	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	9.0 m	
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30
Boom 5.78 m Arm 2.11 m Shoe 600 mm	14 200	11 241	8 333	6 221	4 842	4 124	7 200 5 440 7 30

ZAXIS 350

Metric measure

- Notes: 1. Ratings are based on ISO 10567.
 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the centre-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.



Conditions	Load point height	Load radius					At max. reach
		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	
Boom 6.0 m Arm 2.33 m Shoe 600 mm	6.0 m	10 400	11 640	12 600	13 640	14 400	9 600
	4.5 m	11 520	12 600	13 560	14 560	15 360	10 080
	3.0 m	13 400	14 560	15 400	16 320	17 040	11 200
	1.5 m	13 100	14 240	15 040	15 840	16 480	10 960
	0	11 900	12 800	13 560	14 320	14 880	9 920
	-1.5 m	11 040	11 840	12 560	13 280	13 840	9 120
	-3.0 m	10 000	10 720	11 360	11 920	12 400	8 320
	-4.5 m	9 000	9 600	10 080	10 560	11 040	7 520
Boom 6.0 m Arm 2.07 m Shoe 600 mm	6.0 m	11 100	12 240	13 040	13 840	14 480	9 600
	4.5 m	12 240	13 280	14 080	14 880	15 440	10 240
	3.0 m	14 160	15 200	15 920	16 640	17 120	11 200
	1.5 m	13 840	14 880	15 520	16 160	16 640	10 880
	0	12 600	13 520	14 240	14 880	15 360	9 920
	-1.5 m	11 520	12 320	12 960	13 520	13 920	9 120
	-3.0 m	10 400	11 120	11 680	12 160	12 560	8 320
	-4.5 m	9 360	10 000	10 560	11 040	11 440	7 520
Boom 6.0 m Arm 2.07 m Shoe 600 mm	6.0 m	10 400	11 520	12 320	13 040	13 600	8 960
	4.5 m	11 520	12 560	13 280	13 920	14 400	9 600
	3.0 m	13 440	14 480	15 040	15 600	16 000	10 560
	1.5 m	13 120	14 160	14 720	15 200	15 520	10 240
	0	11 920	12 800	13 440	14 000	14 320	9 280
	-1.5 m	11 040	11 840	12 480	13 040	13 440	8 480
	-3.0 m	10 000	10 720	11 280	11 840	12 240	7 680
	-4.5 m	9 000	9 600	10 080	10 560	10 960	6 880

Conditions	Load point height	Load radius					At max. reach
		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	
Boom 5.78 m Arm 2.11 m Shoe 600 mm	6.0 m	10 200	11 280	12 000	12 720	13 200	8 320
	4.5 m	11 280	12 360	13 080	13 800	14 280	8 960
	3.0 m	13 200	14 280	14 960	15 680	16 160	9 920
	1.5 m	12 960	14 040	14 720	15 440	15 840	9 600
	0	11 840	12 800	13 440	14 000	14 320	8 640
	-1.5 m	10 960	11 840	12 480	13 040	13 440	7 840
	-3.0 m	10 000	10 720	11 280	11 840	12 240	7 040
	-4.5 m	9 000	9 600	10 080	10 560	10 960	6 240

LIFTING CAPACITIES

Metric measure

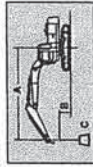
- Notes: 1. Ratings are based on ISO 10567.
 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the centre-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.



Conditions	Load point height	Load radius					At max. reach
		3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	
3-Piece Boom Arm 2.33 m Shoe 600 mm	6.0 m	12 440	13 520	14 240	14 960	15 440	9 600
	4.5 m	13 520	14 600	15 320	16 040	16 520	10 240
	3.0 m	15 440	16 520	17 240	17 960	18 440	11 200
	1.5 m	15 120	16 200	16 920	17 640	18 120	10 880
	0	13 920	14 800	15 440	16 000	16 320	9 920
	-1.5 m	12 800	13 600	14 240	14 800	15 120	9 120
	-3.0 m	11 680	12 400	12 960	13 520	13 840	8 320
	-4.5 m	10 640	11 280	11 840	12 320	12 640	7 520
3-Piece Boom Arm 2.07 m Shoe 600 mm	6.0 m	13 160	14 240	14 960	15 680	16 160	10 240
	4.5 m	14 240	15 320	16 040	16 760	17 240	10 880
	3.0 m	16 160	17 240	17 960	18 680	19 160	11 840
	1.5 m	15 840	16 920	17 640	18 360	18 760	11 520
	0	14 640	15 520	16 160	16 720	17 040	10 560
	-1.5 m	13 520	14 320	14 960	15 520	15 840	9 760
	-3.0 m	12 400	13 120	13 680	14 240	14 560	8 960
	-4.5 m	11 360	12 000	12 560	13 040	13 360	8 160
2-Piece Boom Arm 2.07 m Shoe 600 mm	6.0 m	11 680	12 760	13 480	14 200	14 680	8 960
	4.5 m	12 760	13 840	14 560	15 280	15 760	9 600
	3.0 m	14 680	15 760	16 480	17 200	17 680	10 560
	1.5 m	14 360	15 440	16 160	16 880	17 280	10 240
	0	13 160	14 040	14 680	15 240	15 560	9 280
	-1.5 m	12 040	12 840	13 480	14 040	14 360	8 480
	-3.0 m	11 000	11 720	12 280	12 840	13 160	7 680
	-4.5 m	10 000	10 720	11 280	11 840	12 240	6 880

Metric measure

- Notes: 1. Ratings are based on ISO 10667.
- 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
- 3. The load point is the centre-line of the bucket pivot mounting pin on the arm.
- 4. *Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.



ZAXIS 350LCN 2-PIECE BOOM

Unit: kg

Conditions	Load radius												At max. reach				
	3.0m			4.5m			6.0m			7.5m			9.0m			meter	meter
2-Piece Boom Arm 2.35 m Shoe 600 mm	9.0 m	12 160	12 160	11 070	11 070	11 070	11 070	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290
	7.5 m	12 130	12 130	11 060	11 060	11 060	11 060	9 280	9 280	9 280	9 280	9 280	9 280	9 280	9 280	9 280	9 280
	6.0 m	13 000	13 000	11 510	11 510	11 510	11 510	9 870	9 870	9 870	9 870	9 870	9 870	9 870	9 870	9 870	9 870
	4.5 m	19 220	19 220	17 510	17 510	17 510	17 510	13 460	13 460	13 460	13 460	13 460	13 460	13 460	13 460	13 460	13 460
	3.0 m	24 740	24 740	22 420	22 420	22 420	22 420	19 110	19 110	19 110	19 110	19 110	19 110	19 110	19 110	19 110	19 110
	1.5 m	30 000	30 000	27 620	27 620	27 620	27 620	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300
	0	30 000	30 000	27 620	27 620	27 620	27 620	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300	24 300
	-1.5 m	29 850	29 850	27 470	27 470	27 470	27 470	24 150	24 150	24 150	24 150	24 150	24 150	24 150	24 150	24 150	24 150
	-3.0 m	27 030	27 030	24 650	24 650	24 650	24 650	21 330	21 330	21 330	21 330	21 330	21 330	21 330	21 330	21 330	21 330
	9.0 m	11 070	11 070	11 070	11 070	11 070	11 070	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290	9 290
	7.5 m	11 540	11 540	11 540	11 540	11 540	11 540	9 760	9 760	9 760	9 760	9 760	9 760	9 760	9 760	9 760	9 760
	6.0 m	14 890	14 890	12 750	12 750	12 750	12 750	9 930	9 930	9 930	9 930	9 930	9 930	9 930	9 930	9 930	9 930
	4.5 m	21 730	21 730	16 330	16 330	16 330	16 330	11 030	11 030	11 030	11 030	11 030	11 030	11 030	11 030	11 030	11 030
	3.0 m	24 570	24 570	18 980	18 980	18 980	18 980	12 870	12 870	12 870	12 870	12 870	12 870	12 870	12 870	12 870	12 870
	1.5 m	27 650	27 650	23 020	23 020	23 020	23 020	19 780	19 780	19 780	19 780	19 780	19 780	19 780	19 780	19 780	19 780
	0	30 270	30 270	27 100	27 100	27 100	27 100	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600
	-1.5 m	30 270	30 270	27 100	27 100	27 100	27 100	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600	23 600
	-3.0 m	28 090	28 090	24 920	24 920	24 920	24 920	21 750	21 750	21 750	21 750	21 750	21 750	21 750	21 750	21 750	21 750
	-4.5 m	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970	18 970
	9.0 m	9 110	9 110	9 110	9 110	9 110	9 110	7 820	7 820	7 820	7 820	7 820	7 820	7 820	7 820	7 820	7 820
	7.5 m	9 310	9 310	9 310	9 310	9 310	9 310	7 850	7 850	7 850	7 850	7 850	7 850	7 850	7 850	7 850	7 850
	6.0 m	11 660	11 660	10 500	10 500	10 500	10 500	9 900	9 900	9 900	9 900	9 900	9 900	9 900	9 900	9 900	9 900
	4.5 m	23 490	23 490	14 430	14 430	14 430	14 430	13 650	13 650	13 650	13 650	13 650	13 650	13 650	13 650	13 650	13 650
	3.0 m	24 350	24 350	18 690	18 690	18 690	18 690	15 900	15 900	15 900	15 900	15 900	15 900	15 900	15 900	15 900	15 900
	1.5 m	26 540	26 540	23 070	23 070	23 070	23 070	20 100	20 100	20 100	20 100	20 100	20 100	20 100	20 100	20 100	20 100
	0	29 260	29 260	25 000	25 000	25 000	25 000	21 800	21 800	21 800	21 800	21 800	21 800	21 800	21 800	21 800	21 800
	-1.5 m	30 540	30 540	26 280	26 280	26 280	26 280	23 000	23 000	23 000	23 000	23 000	23 000	23 000	23 000	23 000	23 000
	-3.0 m	29 200	29 200	25 100	25 100	25 100	25 100	21 900	21 900	21 900	21 900	21 900	21 900	21 900	21 900	21 900	21 900
	-4.5 m	23 730	23 730	21 740	21 740	21 740	21 740	19 400	19 400	19 400	19 400	19 400	19 400	19 400	19 400	19 400	19 400

Standard equipment may vary by country, so please consult your HITACHI dealer for details.

STANDARD EQUIPMENT

- ENGINE**
 - HP mode control
 - E mode control
 - 50 A alternator
 - Dry-type air filter with evacuator valve (with air filter restriction indicator)
 - Cartridge-type engine oil filter
 - Cartridge-type fuel double filters
 - Air cleaner double filters
 - Radiator, oil cooler and intercooler with dust protective net
 - Radiator reserve tank
 - Fan guard
 - Isolation-mounted engine
 - Auto-ids system
 - Fuel cooler
 - Electrical fuel feed pump
 - Engine oil drain coupler
- HYDRAULIC SYSTEM**
 - Work mode selector
 - Power boost
 - Auto power lift
 - Suction filter
 - Full-flow filter
 - Pilot filter
 - Swing dampener valve
- CAB**
 - CHES II (Center pillar reinforced structure) cab
 - OPG top guard fitted (Level I) (ISO10262) compliant cab
 - All-weather sound suppressed steel cab
 - Equipped with reinforced, tinted (green color) glass windows
 - 4 fluid-filled elastic mounts
 - Front windows on upper, lower and left side can be opened
 - Infrared windshield wipers
 - Front window washer
 - Adjustable reclining seat with adjustable armrests
 - Footrest
 - Electric double horn
 - AM-FM radio with digital clock
 - Seat belt
 - Drink holder
 - Cigarette lighter
 - Ashtray
 - Storage box
 - Glove compartment
 - Fire extinguisher bracket
 - Floor mat
 - Short wrist control levers
 - Pilot control shut-off lever
 - Engine stop knob
 - Auto control air conditioner
 - Transparent roof with slide curtain
 - Mechanical suspension seat with heater
- MULTI FUNCTION MONITOR**
 - Display of meters: water temperature, hour, fuel rate, clock
 - Other displays: work mode, auto-ids, glow, rearview monitor, operating conditions, etc
 - Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
 - Alarm buzzers: overheat, engine oil pressure, overload
- LIGHTS**
 - 2 working lights
- UPPER STRUCTURE**
 - Undercover
 - 7 400 kg counterweight
 - Fuel level float
 - Electric fuel refilling pump with auto stop
 - Rearview camera
 - 160 Ah batteries
 - Hydraulic oil level gauge
 - Tool box
 - Utility space
 - Rearview mirror (right & left side)
 - Swing parking brake
- MISCELLANEOUS**
 - Standard tool kit
 - Lockable machine covers
 - Lockable fuel refilling cap
 - Shock-resistant tapes, plates and handrails
 - Travel direction mark on track frame
 - Onboard information controller
- UNDERCARRIAGE**
 - Travel parking brake
 - Travel motor covers
 - 3 track guards (each side) and hydraulic track adjuster
 - Bolt-on sprocket
 - Upper rollers
 - Reinforced track links with pin seals
 - 4 tie down hooks
- FRONT ATTACHMENTS**
 - HN bushing
 - WC (tungsten-carbide) thermal scraping
 - Reinforced resin thrust plate
 - Flanged pin
 - Castled bucket link, A
 - Centralized lubrication system
 - Dirt seal on all bucket pins

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your HITACHI dealer for details.

CAB

- Laminated round glass window
- FOPS guard
- Air suspension seat with heater
- Rain guard
- Sun visor
- 12 V power source

LIGHTS

- Additional cab roof front lights
- Additional cab roof rear lights
- Rotating lamp
- Additional boom light with cover

UNDERCARRIAGE

- Track undercover

ATTACHMENTS

- Hammer and crusher piping
- Parts for hammer and crusher
- 2 pump combined flow assist piping
- Additional pump (30 L/min)
- Pilot accumulator
- High mesh full flow filter with restriction indicator
- Welded bucket link-A

OTHERS

- Hose rupture valve
- Overload warning device
- Pre-cleaner
- 8,200 kg heavy counterweight
- Biodegradable oil
- Lower cover

Designed to increase ventilation



Tropical cover

Designed for use in the Tropics (severely hot climate), with extra wide opening for more heat dissipation, thus reducing sound suppression. The machine fitted with this cover cannot pass EU Noise Regulation 2000/14/EC, STAGE II, not permitting the use of the CE mark

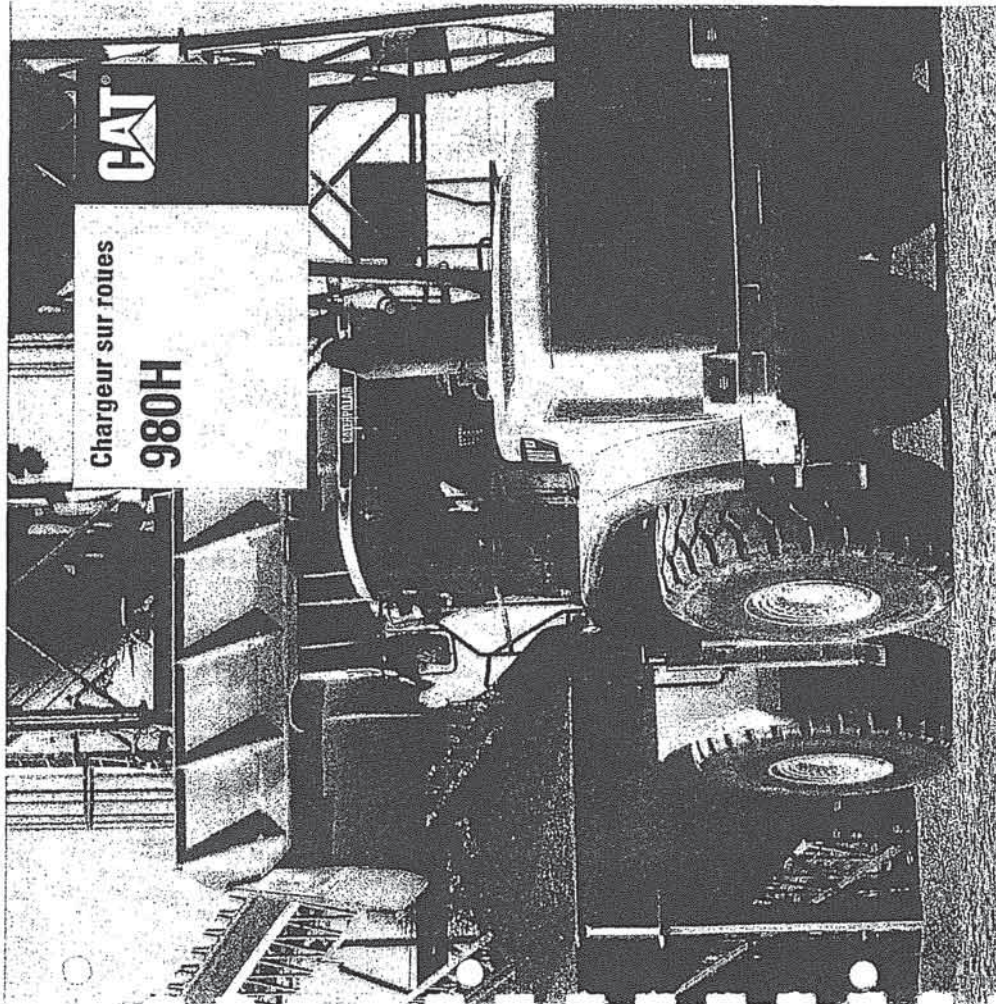


These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in colour and features. Before use, read and understand the Operator's Manual for proper operation.

Prior to operating this machine, including satellite communication system, in a country other than the country of its intended use, it may be necessary to make modifications to the machine to ensure it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not report or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

Hitachi Construction Machinery
www.hitachi.com

KS-EN002EUS



Chargeur sur roues 980H

La nouvelle norme pour les chargeurs sur roues intermédiaires.

Fiabilité

- Technologies éprouvées
- Un service après-vente sur lequel on peut compter
- Disponibilité inégalée des pièces
- Programme de rénovation des plus complets
- Offre de services exceptionnelle P. 4

Facilité d'entretien

- Entretien quotidien simple et facile
- Immobilisation minimale pour l'entretien
- Détection des problèmes avant qu'ils ne surviennent
- Appui total à la clientèle P. 16

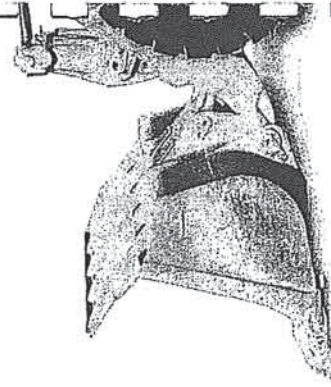
Durabilité

- Structures conçues pour durer
- Transmission à planétaires éprouvée
- Moteur C15 avec technologie ACERT™
- Systèmes intégrés P. 5

Productivité

- Niveau uniforme de puissance
- Caractéristiques de série et en option destinées à augmenter la productivité P. 8

Performances tangibles dans les tâches les plus exigeantes. Confort et efficacité exceptionnels pour le conducteur grâce à une cabine de premier ordre. Électronique et hydraulique révolutionnaires au service de commandes exigeant peu d'efforts. Productivité accrue à des coûts d'exploitation moindres.



Moteur

Modèle de moteur	C15 ACERT™ de Cat
Puissance brute selon SAE J1995	293 kW 393 hp
Puissance nette selon ISO 8249	250 kW 349 hp
• Moteur Caterpillar doté de la technologie ACERT – Conforme aux normes Tier 3 de l'EPA (niveau III de l'Union européenne)	

Godets

Capacité des godets	3,8-6,1 m ³ 5,0-8,0 y ³
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Poids

Poids en ordre de marche	30 519 kg 67 294 lb
• Pour godet normal de 5,7 m ³ (7,5 y ³) à lame de coupe boudonnée	

Caractéristiques de fonctionnement

Charge d'équilibre statique, brayage maxi	19 486 kg 42 889 lb
• Pour godet normal de 5,7 m ³ (7,5 y ³) à lame de coupe boudonnée	

Fiabilité

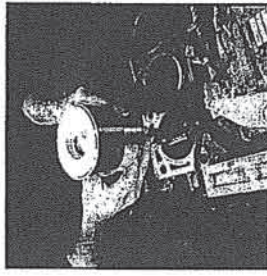
Le chargeur intermédiaire 980H de Cat® - prêt à travailler n'importe quand, en toute saison.

- Une technologie éprouvée qui démontre sa fiabilité dès le premier jour
- Conception et fabrication Cat de systèmes qui fonctionnent ensemble comme un tout
- Temps productif optimal grâce à l'appui du meilleur réseau de concessionnaires de l'industrie
- Disponibilité sans égale des pièces Cat authentiques
- Offre de services exceptionnelle du concessionnaire Cat sur votre lieu de travail ou dans ses ateliers

Technologie éprouvée. Le 980H de Cat est construit sur la plate-forme du légendaire 980. Un grand nombre des systèmes conçus et éprouvés sur le 980G Série II et les modèles antérieurs sont toujours utilisés aujourd'hui pour le 980H. La transmission powershift à planétaires, la cabine, le circuit de refroidissement séparé, le système de freinage intégré, le convertisseur de couple à stator à roue libre, les bâtis - tout contribue à la fiabilité éprouvée du 980H.



Technologie ACERT™. La technologie ACERT a fait ses preuves dans les camions routiers depuis mars 2003, et plus récemment au cours d'essais sur le terrain d'équipement de chantier. Grâce à cette technologie, les moteurs Cat répondent aux exigences de durabilité et de fiabilité sans sacrifier les économies de carburant ou la performance.



Pièces remanufacturées. Les moteurs et les principales pièces Cat sont conçus pour être remanufacturés et offrir de multiples cycles de vie. Le programme Reman de Cat est plus complet que la plupart des programmes de rénovation. De fait, les pièces sont remanufacturées à l'usine selon les spécifications d'origine avec les mises à jour nécessaires.

Des directives de réutilisation rigoureuses et un contrôle de la qualité sans égal garantissent la fiabilité et la durabilité des produits remanufacturés qui répondent à vos attentes face aux services de Caterpillar. Les produits remanufacturés sont stockés dans les centres de distribution partout dans le monde et sont prêts pour l'installation, réduisant ainsi les immobilisations au profit de la productivité et de la rentabilité.

Offre de services. Une opération d'entretien ou une réparation imprévue s'impose? Les techniciens d'intervention de Cat ont l'expérience et les outils nécessaires pour entretenir votre chargeur sur place. Les camions-ateliers sont dotés de tous les outils et équipements diagnostiques de pointe et les techniciens y conservent les dossiers de caractéristiques techniques et les schémas de chaque machine Cat. Les experts techniques à l'atelier du concessionnaire et chez Caterpillar fournissent de l'assistance à chaque technicien d'intervention.

Si la réparation sur place ne suffit pas, les ateliers des concessionnaires Cat sont entièrement équipés pour intervenir rapidement sur votre chargeur.



Service après-vente. La priorité première du concessionnaire Caterpillar® est de veiller à ce que votre chargeur soit en bon état de marche quand vous en avez besoin. Le réseau mondial entier dès 206 concessionnaires Cat appartenant à des propriétaires indépendants est le meilleur au monde dans la distribution de pièces et d'équipement. Ils sont là au moment et à l'endroit où vous en avez besoin.

Disponibilité des pièces. Caterpillar offre une palette sans égale de services personnalisés pour votre chargeur sur roues. Grâce aux 23 centres de distribution implantés dans 11 pays, la plupart des pièces peuvent être livrées en 24 heures.

Toutes les pièces fournies par Caterpillar sont fabriquées selon les spécifications du matériel d'origine. Des kits de modernisation sont disponibles pour actualiser les machines à la technologie actuelle. Les pièces Classic™ de Cat pour machines anciennes sont faites spécialement selon les spécifications de Cat à un coût inférieur.

Toutes les pièces servant à réparer votre machine - batteries, joints, filtres, liquides, hydrauliques, pièces de moteur - sont conçues et fabriquées pour fonctionner ensemble de façon efficace et rentable en tant que système.

Polyvalence

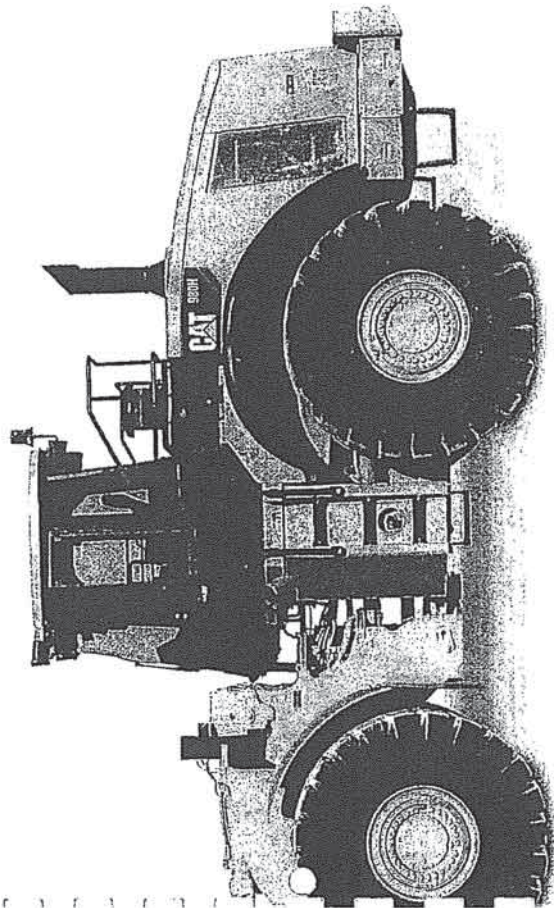
- Personnalisez le 980H pour votre activité
- Grande variété d'outils de travail Cat®
- Versions de machine pour applications spécialisées. P. 10

Confort de conduite

- Cabine silencieuse et conforme
- Entrée et sortie aisées
- Excellente visibilité
- Effort réduit du conducteur
- Poste de conduite confortable. P. 12

Coûts d'exploitation

- Rendement énergétique éprouvé
- Entretien simple et pratique
- Disponibilité exceptionnelle des pièces
- Excellente valeur de revente
- Financement adapté à votre activité. P. 14



Durabilité

La durabilité est intégrée, non pas surajoutée.

- Structures robustes et durables
- Pièces principales conçues et fabriquées pour offrir de longues heures d'utilisation et pour être réparées afin de procurer une durée de service supplémentaire
- Moteur C15 avec technologie ACERT maintenant la performance, l'efficacité et la durabilité du moteur tout en réduisant les émissions
- Capot plus robuste à levage et abaissement plus rapides
- Échelle principale intégrée dans le côté de la machine pour protéger les marches contre l'accumulation de débris



Structures. Le 980H conserve les mêmes structures de base que le 980G Série II. Le châssis arrière entièrement saisonné absorbe les chocs et les forces de torsion tout en supportant la ligne d'arbre afin de maintenir un alignement rigide des vitesses. Le châssis est soudé par robot à plus de 90 pour cent, ce qui assure une pénétration profonde des soudures et confère un maximum de durabilité et de résistance à la fatigue.

Le châssis avant constitue un support de montage solide pour l'essieu avant, les bras de levage et les vérins d'inclinaison. L'affil-chargeur mécanisé à quatre plaques résiste aux chocs et aux contraintes de chargement.

Les bras de levage sont en acier plein, offrent une résistance supérieure, une excellente hauteur de vidage et portés tout en maintenant la visibilité sur le godet. Le tube transversal en acier moulé est traité thermiquement pour assurer une résistance maximale aux forces de torsion et aux chocs. La timonerie en Z produit des forces d'arrachage exceptionnelles et un bon angle de redressement du godet garantissant des chargements plus complets et une meilleure retenue du matériau.

La conception à articulation à pivots espacés du 980H réduit les contraintes imposées à l'axe d'articulation et aux roulements à galets, pour une longue durée de service.

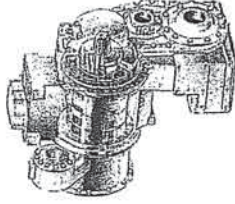


Nouveau capot. Un nouveau capot à été conçu pour le 980H. Avec sa double épaisseur, le nouveau capot offre une meilleure durabilité tout en maintenant la visibilité du sol. Le capot renforcé résiste mieux au vent et à l'accumulation de boue. Le système d'isolement a également été amélioré. Des vérins de levage jumelés à actionnement électrohydraulique réduisent considérablement le temps de levage et d'abaissement.

- Programmes de service après-vente.**
Les concessionnaires Caterpillar vous appuient avec une variété de programmes, depuis le financement d'un achat jusqu'au service après-vente complet.
- Achat/location à court ou long terme
 - Assurance Caterpillar
 - Options d'investissement
 - Formation sur le matériel Cat
 - Contrats d'assistance client
 - Services S-O-S™

Achat ou location à court ou long terme?
Votre concessionnaire Cat peut vous aider à décider des meilleures options d'acquisition pour votre entreprise. Il peut vous aider à calculer les coûts d'exploitation et la façon dont les options de financement offertes peuvent contribuer à votre résultat financier.

Nouvelle échelle. L'échelle du 980H est intégrée dans le côté de la machine. Les marches antioctroyantes sont protégées contre l'accumulation de débris. Une inclinaison de cinq degrés facilite l'entrée et la sortie de la cabine.



Transmission powershift. Le 980H est équipé d'une transmission qui a fait ses preuves depuis plus de 40 ans. Et l'ajout du système de commande électronique de la pression d'embrayage (ECPFC) confère à la transmission un nouveau niveau de durabilité.

L'ECPFC module individuellement l'engagement des embrayages pour adoucir les changements de vitesse et de sens de marche et procurer une plus longue durée de service des pièces que la transmission du 980G Série II.

Productivité

Déplacez davantage de matériau.

- Caractéristiques de la transmission qui optimisent les performances de la machine
- Moteur maintenant un niveau uniforme de productivité
- Caractéristiques de série et en option qui augmentent la productivité

Autoshift. Choix entre le mode de changement de vitesse manuel ou automatique dans la cabine. Cette caractéristique flexible augmente l'efficacité du conducteur et optimise la performance de la machine.

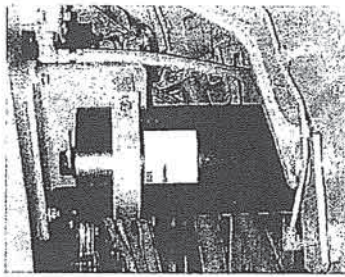
Commande d'autoshift variable (VSC). Appareil la grille de vitesses de la transmission aux exigences des applications de la machine. La commande d'autoshift variable améliore la qualité des passages de vitesses et l'efficacité énergétique dans certaines applications en permettant à la transmission de passer les vitesses à des valeurs de régime moteur inférieures.

Système de gestion du ralenti moteur (EGMS). Quatre réglages de la commande de ralenti contribuent à optimiser le rendement énergétique et permettent de gérer avec souplesse les régimes de ralenti en fonction des exigences de l'application.

Le mode veille prolongée permet au régime de ralenti de baisser au bout d'une durée prédéterminée afin de réduire la consommation de carburant, le niveau sonore et les émissions.

Le mode travail permet de réguler avec souplesse les régimes de ralenti du moteur. Le mode réchauffement est conçu pour que la machine reste toujours chaude par temps froid.

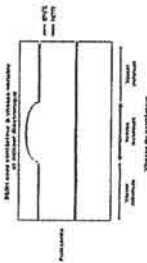
Le mode basse tension empêche la décharge de la batterie résultant de charges électriques élevées des accessoires.



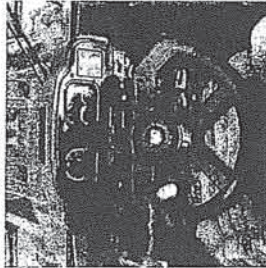
Commande antitangage. La commande antitangage en option adoucit les déplacements et améliore la performance et la retenue de la charge en déplacement sur terrain accidenté. Le conducteur peut rouler à des vitesses plus élevées en toute confiance en chargement-transport, diminuant ainsi les temps de cycle et augmentant la productivité.

Système de pesée de la charge utile. Des balances conçues spécialement pour les machines Cat et intégrées dans les bras de levage passent dans la foulée le matériau entré dans le godet. Le chargement des camions est ainsi plus précis et plus renuable. Comme le chargement des camions est optimal du premier coup, les cycles sont plus rapides, l'efficacité à la balance est accrue et la productivité est supérieure.

Le système de pesée de la charge utile est disponible comme option installée en usine. Une imprimante est également disponible pour l'impression des relevés de pesée et de divers rapports.

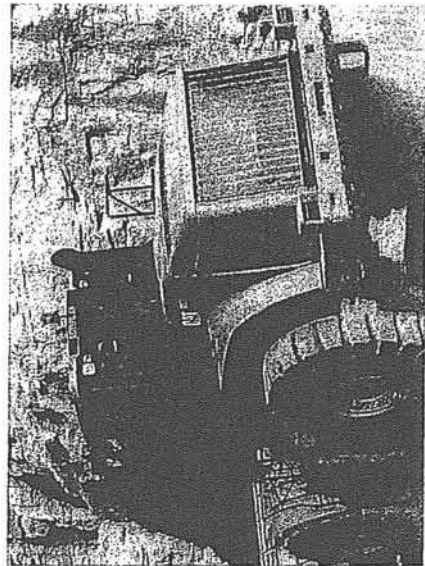


Puissance nette constante. Le moteur compense automatiquement les charges parasites, comme le ventilateur et le élimateur, afin de maintenir un niveau uniforme de productivité.



Volant avec commandes de transmission intégrées. Le volant avec commandes de transmission intégrées réduit les mouvements de braquage d'un facteur de 14 comparé à une direction classique.

Un volant de direction classique nécessite en effet deux à trois tours de 360° pour obtenir un braquage complet du chargeur, alors qu'il suffit de tourner le volant avec commandes de transmission intégrées de ±70° avec seulement 26 N (6 lb) de pression de direction pour obtenir un braquage complet – réduisant ainsi la fatigue du conducteur.



Systèmes intégrés. La centrale de surveillance Cuernillar (CMS) supervise les principaux systèmes machine et alerte le conducteur s'il lui précède à une intervention d'entretien. Trois niveaux d'avertissement permettent au conducteur d'évaluer plus précisément la situation. Le CMS est lié au moteur, à la transmission, à l'hydraulique et aux freins – la mise en communication de tous les principaux systèmes permet au chargeur de travailler en tant que système entièrement intégré – de la tûmentation au moteur.

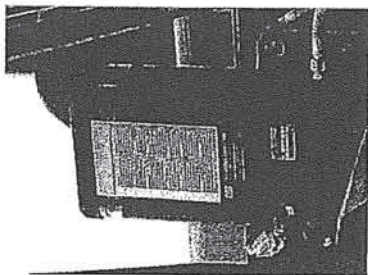


Moteur. La technologie ACERT allie des systèmes éprouvés à de nouvelles technologies innovatrices pour cheminer précisément le carburant dans la chambre de combustion. Elle préfère la performance, l'efficacité et la durabilité du moteur tout en réduisant énormément les émissions.

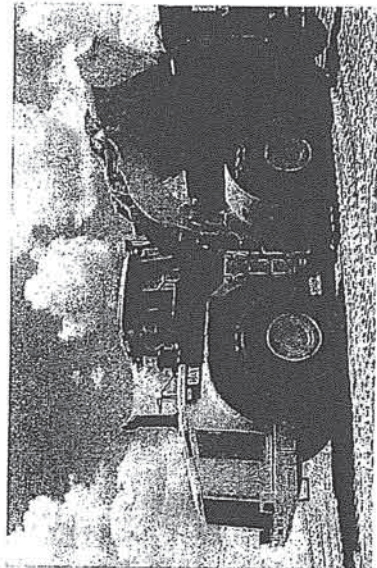
Le moteur C15 utilisé dans le 980H possède une solide réputation de fiabilité, de durabilité et de densité de puissance, autant dans le matériel de chantier que dans les camions routiers. En fait, la fiabilité qu'il a démontrée au cours de millions de kilomètres sur la route lui ont valu le prix de fiabilité pour le client. La conception robuste du C15 a nécessité très peu de modifications pour recevoir les pressions de cylindre supérieures associées à la technologie ACERT.

Bien que la technologie ACERT soit nouvelle, beaucoup de ses constituants sont les mêmes que ceux utilisés dans des moteurs antérieurs. Les commandes électroniques sont les corveaux de la technologie ACERT. D'abord introduites au début des années 90, les commandes électroniques perfectionnées utilisées dans les moteurs Cat ont un historique reconnu de performance et de fiabilité.

Le moteur C15 est équipé du circuit de carburant à injecteurs-pompes électroniques actionnés mécaniquement (MEUI) de Cat. Le circuit de carburant MEUI de Cat est un circuit de carburant très évolué dont la fiabilité et la durabilité ont été éprouvées sur le terrain.



Autolubrification. Le système d'autolubrification Caterpillar en option assure une lubrification automatique et précise des axes et des bagues pendant le fonctionnement du chargeur. La lubrification automatique accroît la productivité puisqu'elle réduit le temps consacré à l'entretien et les immobilisations dues aux réparations imprévues, causées par un graissage insuffisant.



Système Aurodig. A l'appréciation des conducteurs expérimentés autant que des novices, le système Aurodig offert en option permet d'automatiser le chargement. Les conducteurs obtiennent à tout coup de pleines charges sans toucher les commandes.

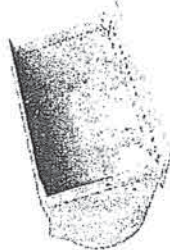
Polyvalence

Équipez un 980H en fonction de votre activité.

- Une variété de godets et d'autres outils de travail pour de nombreuses applications différentes font du 980H un chargeur sur roues très polyvalent
- Beaucoup d'options peuvent être commandées installées d'usine afin de personnaliser le 980H pour votre activité
- Des versions de machine spéciales peuvent être fournies par l'usine pour les applications d'agrégats, de forçage, de rebuts, d'aciérie et de déchets
- Une version haute portée est disponible pour les besoins de hauteur de vidage spéciale

Outils de travail et coupleurs express. Caterpillar et ses concessionnaires offrent une variété de godets, d'outils de travail et d'applications.

Coupleurs express. Les coupleurs express confèrent aux chargeurs sur pneus une polyvalence sans pareille. Les godets et les outils de travail se changent en quelques secondes, depuis la cabine, pour une productivité maximale.



Godets normaux. Les godets normaux procurent une bonne performance générale pour la mise en tas, la reprise, le creusage et le chargement de matériaux en place. On peut utiliser un godet normal extra-robuste pour les applications plus abrasives.

Godets de manutention. Le godet de manutention à fond plat, sert à transporter les matériaux en tas; tels les agrégats et autres matériaux faciles à charger qui n'exigent qu'une force d'arrachage modérée.



Outils d'attaque du sol (BET). Caterpillar offre plusieurs outils d'attaque du sol pour les godets du 980H. Un adaptateur de coin moulé est intégré à la structure des godets, permettant l'ajout d'une dent à l'extrémité du coin pour ralentir l'usure du fond du godet.

Il existe aussi des lames à boulonner réversibles (BOCE) et une lame de coupe en demi-pointe à boulonner compatibles avec les godets du 980H.

Les pointes du système de la Série K™ De Cat sont plus faciles à installer et restent bien en place. La pose ou la dépose n'exige aucun outil spécial.

Versions spéciales. Une application spécialisée nécessite un chargeur sur roues spécialisé... et produitif ! Le 980H est offert dans une grande variété de versions.

Godets à roche. Les godets à roche sont conçus pour le chargement avant ou le chargement de matériaux en place dans les mines et les carrières. Le godet à roche à lame droite procure une force d'arrachage plus élevée et une hauteur de vidage accrue. Le godet à roche à lame en V tronqué offre une meilleure pénétration.

Godets pour déchets. Les godets pour déchets sont conçus pour durer longtemps malgré la rigueur des applications liées au traitement des ordures. Le godet grande capacité est bien adapté au chargement, au triage et aux autres travaux en station de transfert.

Godets pour charbon. Les godets pour charbon maximisent la productivité dans les applications de chargement et de mise en tas du charbon et d'autres matériaux de même densité.

Godets extra-robustes pour carrières. Le godet extra-robuste pour carrière sert là où les chocs sont nombreux et violents et où les matériaux sont très abrasifs.

Godets pour copeaux et pour nettoyage. Les godets pour copeaux et pour nettoyage conviennent aux applications de foresterie et de sciérie.

Fourches. Fourches à grumes, pour sciérie et à palettes sont offertes pour les applications de foresterie et de manutention de matériaux.

Outils de travail spécialisés. D'autres outils de travail spécialisés, tels que des bris de manutention et les charmes de déneigement, sont disponibles pour le 980H. Consulter le concessionnaire Caterpillar local pour obtenir des renseignements sur l'application et la disponibilité.

Confort de conduite

Le confort et la fonctionnalité augmentent l'efficacité.

- Un niveau acoustique de 76 dB(A) dans la cabine assure un fonctionnement silencieux et réduit la fatigue pendant les longues journées de travail.
- Les vibrations sont atténuées pour améliorer le confort de conduite.
- Des portes sur les deux côtés de la machine facilitent l'entrée et la sortie.
- Excellente visibilité – avant et arrière – grâce à la vitre plate sans effet de distorsion, aux essuie-glaces à lave-glace intégré, aux gouttières du toit qui orientent la pluie vers les montants du cadre ROPS plutôt que vers les vitres et au porte-bâ-foix de toit qui élimine les reflets des yeux du conducteur.
- Commandes et contacteurs centralisés, faciles à atteindre, avec symboles graphiques clairs pour des manoeuvres plus intuitives.
- Siège Comfort de Cat assurant une assise solide et durable pour les conducteurs de toute taille.
- Volant avec commandes de transmission intégrées réduisant de façon significative l'effort requis par le conducteur.

Pression acoustique. Le niveau de pression acoustique du 980H a été réduit de 4 dB(A) – à 76 dB(A) – soit une amélioration de 30 pour cent par rapport au 980G Série II, l'amélioration du niveau acoustique a été rendue possible par l'ajout d'isolation au niveau des portes, des panneaux avant et arrière et du plancher de la cabine. La pressurisation de la cabine a été améliorée, ce qui contribue également au niveau acoustique inférieur. En outre, un équipement d'atténuation sonore en option permet de réduire le niveau acoustique extérieur à 107 dB(A) et le niveau de pression acoustique intérieur à 72 dB(A).

Applications d'agrégats. Vous cherchez à augmenter la productivité de votre carrière? Deux ensembles sont offerts pour le 980H afin d'augmenter ce résultat. L'ensemble de chargeur de carrière offre le godet normal de 6,1 m³ (8 yd³).

L'ensemble de chargeur de carrière bonifié offre le summum en matière d'options de productivité et de fonctionnalité à une valeur exceptionnelle. L'autorotation, le système Autodig, le système de pesée de la charge utile et le système anti-tangage réduisent la fatigue du conducteur et font de votre chargeur sur roues le chargeur de carrière le plus productif sur le marché.

Forestier. La version machine forestière équipe le 980H d'une transmission pour service intensif, de véctis d'inclinaison surdimensionnés et d'un contre-poids de 2041 kg (4500 lb) qui confère la robustesse et la durabilité requises pour être productif dans cette application dure. On peut ajouter des fourches à grumes et pour sciante et des godets pour copeaux et pour nettoyage afin d'équiper le 980H pour les applications forestières.

Chargeur industriel. Des protections extérieures robustes et des caractéristiques spéciales conçues spécifiquement pour les applications industrielles, telles que la manutention de déchets et de rebuts, permettent au 980H de résister aux conditions les plus dures. Des outils de travail spécialement conçus pour ces applications peuvent être ajoutés à la machine.

Applications d'acier. La version pour acier comporte la protection supplémentaire nécessaire pour prolonger la durée de service de la machine et en réduire les coûts d'exploitation dans cet environnement très dur. Cette version inclut des protections en acier pour les pièces essentielles, une transmission pour service intensif, des supports de moteur et de transmission extra-robustes, des flexibles hydrauliques protégés, un montage isolé de la batterie, l'arrêt à distance du moteur, le déblocage à distance du frein de stationnement, la neutralisation de la transmission, une échelle en câble d'acier, un couvercle d'arbre de direction par volant avec commandes de

transmission intégrées, un pare-brise moulé sur joint permettant un remplacement rapide, des garde-boue avant étroits en acier, du liquide hydraulique EcoSafe FR-46 (en option) et la plate-forme élévatrice avant (en option). Des godets pour haïser sont également offerts. **Versions haute portée.** Une version haute portée est disponible pour les applications exigeant une hauteur de vidage supérieure. Tous les godets du 980H se montent aisément sur les versions standard que haute portée.

Entrée et sortie. Une échelle intégrée dotée de marches antidérapantes réduit au minimum l'accumulation de débris. L'échelle est inclinée de 5° vers l'avant pour faciliter l'entrée et la sortie.

Les plates-formes sont larges pour permettre de se déplacer en toute sécurité vers l'avant et l'arrière de la machine. La porte principale de la cabine pivote sur 180° et se verrouille en position ouverte pour des déplacements sans danger vers l'arrière de la machine.



Visibilité. La visibilité à l'avant et à l'arrière de la machine est excellente sur le 980H. La vitre plate sans effet de distorsion se prolonge jusqu'au plancher de la cabine, offrant ainsi une excellente visibilité sur le godet. Les essuie-glaces avant et arrière assurent la propreté des fenêtres en toutes circonstances. Le toit est creusé de gouttières qui orientent la pluie vers les coins pour que les fenêtres restent propres. Un porte-bâ-foix sur les quatre faces protège le conducteur des reflets.

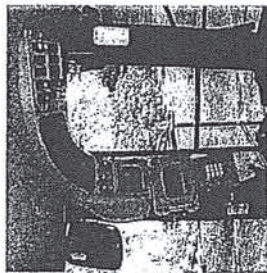
Un ensemble de nettoyage de pare-brise en option comporte des marches supplémentaires et des mains courantes qui facilitent l'accès pour nettoyer les vitres.

Une caméra de rétrovision offerte en option permet de surveiller de plus près les mouvements à l'arrière du chargeur sur roues.

Coûts d'exploitation

Le 980H de Cat - une valeur sûre pour votre entreprise.

- Davantage de travail pour votre argent grâce au rendement énergétique éprouvé de Cat.
- L'entretien quotidien simplifié grâce aux regards de niveau, à l'entretien à hauteur d'homme, à l'accès facile au moteur, aux raccords de vidange écologiques et aux batteries sans entretien augmente le temps productif de la machine.
- La disponibilité exceptionnelle des pièces réduit les immobilisations.
- Excellente valeur de revente grâce à la qualité authentique de Cat, au service remarquable des concessionnaires et aux programmes d'après-vente intégrés.
- Les services financiers de Caterpillar et les concessionnaires Cat comprennent votre activité et offrent des programmes de financement et d'assurance obligés pour rehausser la valeur de votre acquisition.



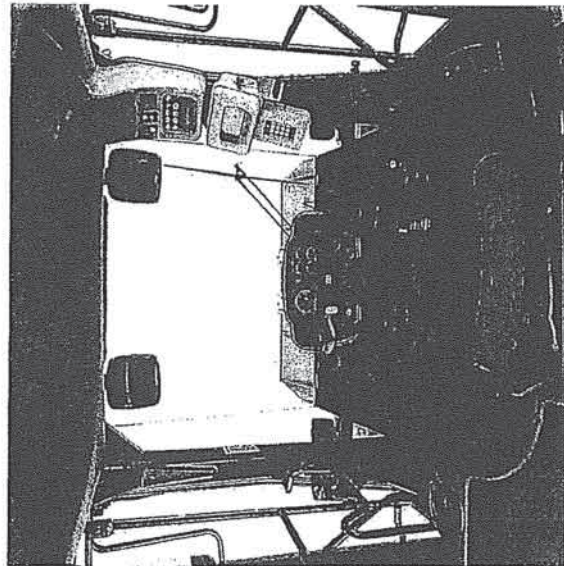
Commandes. Le principal panneau de commandes du 980H est fixé haut sur le montant droit du cadre ROPS : tout est à portée de main du conducteur et rien n'entrave la vue sur le sol. Les interrupteurs comportent des symboles graphiques clairs qui en facilitent la compréhension et l'utilisation.

L'empilement judicieux des commutateurs et commandes contribue à améliorer l'efficacité et la productivité et réduit au minimum la fatigue du conducteur.

Sièges. Le siège Comfort de la série C-500 de Cat est robuste et durable et compte 6 réglages pour conducteurs de toute taille. L'assise monopiece moulée empêche tout objet de faire saillie sous les coussins.

Le siège est doté d'un support lombaire avec confort maximal comme ceux des automobiles. L'accoudoir droit, auquel sont intégrées les commandes d'accessoires, se règle pour rendre la conduite confortable et pratique.

Un siège chauffant est disponible en option pour améliorer le confort par temps froid.



Simplicité d'utilisation. Le volant avec commandes de transmission intégrées est un circuit à détection de charge qui établit une liaison entre le volant de direction et l'angle du bâti pour régler l'orientation avec précision. La vitesse de braquage de la machine dépend alors directement de la position du volant de direction. Il faut moins de 28 N (6 lb) d'effort sur le volant de direction, peu importe les conditions. Il suffit en effet de tourner le volant de $\pm 70^\circ$ pour obtenir un braquage complet, contre deux à trois tours de 360° avec un volant de direction classique.

Le volant de la version avec commandes de transmission intégrées comporte le commutateur marche avant/poinçonnage/marche arrière et le bouton de montée en vitesse/rétrogradation; le conducteur peut donc garder la main gauche sur le volant de direction en tout temps tout en passant les vitesses. Les commandes d'accessoires sont intégrées à l'accoudoir de droite et se déplacent donc avec le conducteur.



Technologie ACERT pour économiser en carburant. Les essais de Caterpillar montrent qu'avec un moteur Cat doté de la technologie ACERT, l'économie de carburant est de 3 à 5 % supérieure à celle que permettent les technologies concurrentes. Cette économie est reliée directement à la combustion complète du carburant, et ce, grâce à l'intégration de la commande électronique qui surveille l'état de la machine, du système de régulation du volume d'air d'admission et du système d'injection qui dose très précisément le carburant, en fonction des besoins.



Économie de carburant. Avec le 980H, la puissance et les points de changement de vitesse peuvent être adaptés de façon à correspondre aux exigences de l'application, ce qui améliore l'économie de carburant. Caterpillar permet aux conducteurs de choisir entre deux réglages de puissance via le cadran de la commande d'autoshift variable (VSC). Lorsque le cadran est placé sur le mode standard (1), les conducteurs obtiennent une puissance nette constante de 349 hp et les changements de vitesse se produisent à des régimes supérieurs. Dans le mode intermédiaire (2), les conducteurs bénéficient d'une puissance nette constante de 319 hp et la transmission passe les vitesses à des régimes inférieurs. Dans le mode économie (3), le régime moteur auquel les changements de vitesse s'effectuent est encore réduit alors que la puissance nette constante demeure à 319 hp.

- Entretien. Un bon entretien du chargeur sur roues aide à maîtriser les dépenses et à réduire les coûts d'exploitation. Mettant à profit les caractéristiques clés du 980G Série II et en ajoutant quelques-unes qui lui sont propres, le 980H offre une facilité d'entretien inégalée.
 - Regards de niveau bien protégés et très visibles.
 - Points d'entretien à hauteur d'homme.
 - Accès facile au compartiment moteur.
 - Raccords de vidange écologiques permettant une vidange simple et propre des liquides.
 - Indicateurs d'usure des freins simplifiant l'inspection.
 - Batteries sans entretien.
 - Intervalles prolongés de vidange d'huile et de changement du filtre à huile.
 - Grille pivotant vers l'extérieur pour un accès facile et un écoulement d'air plus efficace.
- Disponibilité des pièces.** Caterpillar offre une palette sans égale de services personnalisés pour votre chargeur sur roues. Grâce aux 23 centres de distribution implantés dans 11 pays, la plupart des pièces peuvent être livrées en 24 heures. L'accès facile aux pièces réduit les temps d'arrêt passés à attendre la livraison de pièces - et permet à votre chargeur sur roues d'être plus productif.

Facilité d'entretien

La facilité d'entretien augmente la productivité.

- Entretien quotidien facilité par les regards de niveau et les points d'entretien à hauteur d'homme
- L'entretien est simplifié grâce aux indicateurs d'usure des freins, aux orifices de prélèvement groupés et aux pièces faciles à remplacer
- Systèmes de surveillance et programmes d'analyse pouvant détecter des problèmes avant qu'ils ne surviennent

Entretien quotidien. Les regards de niveau et les points d'entretien à hauteur d'homme simplifient et facilitent l'entretien quotidien. Il y a des regards de niveau pour l'huile de transmission, l'huile hydraulique et le liquide de refroidissement du radiateur. Tous sont facilement visibles et éliminent le risque de contamination résultant de l'ouverture quotidienne des réservoirs.

L'accès à hauteur d'homme aux points d'entretien réduit le temps de mise en route journalier, permet que l'entretien journalier sera effectué et réduit la fatigue du conducteur puisqu'il n'a plus besoin de grimper sur la machine pour procéder aux vérifications quotidiennes.

Les graisseurs des points de lubrification du châssis avant et du châssis arrière se trouvent dans la zone avant de l'articulation. Les conduites de graissage à distance convergent vers deux rampes de graisseurs judicieusement regroupés sur le côté gauche de la machine. Les joints universels sont graissés à vie.

Les batteries ne nécessitent aucun entretien et sont faciles d'accès dans des coffres de batterie coulissants vers l'extérieur sur les deux côtés de la machine.

Valeur de revente. La qualité de l'équipement est un facteur primordial du maintien de la valeur de revente. Cat fournit un équipement de qualité, mais aussi des produits et un service après-vente qui garantissent la fiabilité et la durabilité de votre machine. Le niveau élevé d'expertise du service d'entretien du concessionnaire Cat garantit que les réparations sont effectuées correctement avec des pièces Caterpillar authentiques.

Les contrats d'assistance client peuvent vous aider à contrôler le coût de possession de la machine. Les programmes de service après-vente, comme l'analyse S-O-S des liquides, surveillent l'état de la machine pour assurer un temps productif et une disponibilité plus uniformes. L'authentique qualité Cat, un état connu de la machine et un historique d'entretien documenté contribuent tous à la valeur de revente élevée du matériel Cat.



Financement. Qu'il s'agisse d'un achat ou d'une location à court ou long terme, Cat Financial dispose d'un plan d'acquisition convenant à votre activité. L'avantage de travailler avec Cat Financial pour régler le financement de votre machine est que Cat comprend votre activité.

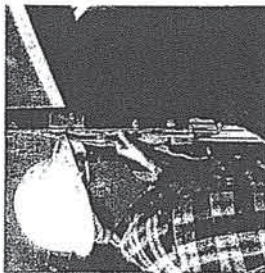
Indicateurs d'usure des freins. Un orifice sur l'essieu contient un indicateur visuel pour déterminer l'usure des freins. Un technicien peut facilement mesurer et surveiller l'usure des freins d'un coup d'œil.

Raccords de vidange écologiques. La vidange simple et propre de l'huile moteur, de l'huile de transmission et de l'huile hydraulique est de série sur le 980H grâce aux raccords de vidange écologiques. Le raccord de vidange écologique de l'essieu est offert en option.



Prélèvement d'échantillons de liquides S-O-S. Les robinets de prélèvement d'huile accélèrent le prélèvement des huiles du moteur, de la transmission et de l'hydraulique à des fins d'analyse S-O-S. Des orifices de prélèvement pour la direction, la transmission et les freins sont regroupés dans des compartiments d'entretien verrouillables derrière la cabine. Le programme S-O-S permet de détecter des problèmes avant qu'ils ne surviennent et de programmer l'entretien selon un échéancier plus pratique.

Autolubrification. Le système de lubrification automatique Caterpillar réduit le temps d'entretien et les immobilisations amenant des réparations imprévues causées par des graissages inadéquats. La lubrification précise des axes et des bagues aux intervalles indiqués ralentit l'usure des pièces et réduit la contamination du sol due au graissage excessif.



Refroidissement. Les faisceaux du radiateur modulaire de la prochaine génération (NGMR) sont de conception modulaire, permettant le remplacement d'un faisceau individuel sans déposer le radiateur entier — ce qui réduit les coûts de réparation et les temps d'arrêt. Un regard de niveau situé sur le réservoir d'expansion permet de vérifier rapidement les besoins d'entretien. La grille ondulée et ajourée pivote vers l'extérieur pour faciliter l'accès aux faisceaux de refroidissement.

Le condenseur de climatisation pleine largeur et les faisceaux du refroidisseur d'huile pivotent également vers l'extérieur sur 45° pour faciliter le nettoyage de la face arrière du radiateur. Les puncheux articulés de chaque côté de la structure portante du radiateur facilitent le nettoyage de la face avant du radiateur et des faisceaux ATAC.

Cabine. Le poste de conduite entier peut être enlevé en 45 minutes environ et il est facile à remettre en place. Il suffit de débrancher quatre faisceaux de câblage, deux conduites de chauffage, l'arbre d'entraînement de la direction et de retirer deux vis du distributeur de freins — il n'y a aucun fil à couper. La dépose du climabreur s'effectue au moyen des raccords à débranchement rapide, il n'y a donc aucune perte de réfrigérant.

Un ensemble de nettoyage de pare-brise en option comprend deux marches pour le bâti avant et deux mains courantes supplémentaires. Cet ensemble en option donne accès à la totalité du pare-brise avant.



Appui total à la clientèle. Les techniciens d'intervention de Cat ont l'expérience et les outils nécessaires pour entretenir votre chargeur sur place. Les camions-outils sont dotés de tous les outils et équipements diagnostiques de pointe et les techniciens y conservent les dossiers de caractéristiques techniques et les schémas de chaque machine Cat. Les experts techniques à l'atelier du concessionnaire et chez Caterpillar fournissent de l'assistance à chaque technicien d'intervention.

Si la réparation sur place ne suffit pas, les ateliers des concessionnaires Cat sont entièrement équipés pour intervenir rapidement sur votre chargeur.



Centrale de surveillance Caterpillar. Confiez la surveillance de votre machine à la centrale de surveillance Caterpillar. La surveillance continue des circuits essentiels garantit que vous serez averti des problèmes avant qu'ils ne deviennent graves. Trois niveaux d'avertissement — allant de l'avertissement visuel à l'avertissement visuel/sonore — sont fournis au conducteur, selon la gravité de la situation.

Moteur

Modèle de moteur	C15 ACERT™ de Cat®
Puissance brute selon SAE J1995	293 kW 393 hp
Puissance nette selon ISO 9249	260 kW 349 hp
Puissance nette selon SAE J1349	260 kW 349 hp
Puissance nette selon 80/1269/CEE	263 kW 353 hp
Couple maxi (net) à 1200 tr/min	1619 N·m 1244 pi·lb
Alésage	137 mm 5,4 po
Course	171,5 mm 6,75 po
Cylindrée	15,2 l 928 po³

- Moteur Caterpillar avec technologie ACERT — Conforme aux normes Tier 3 de l'EPA/Niveau III de l'Union européenne
- Ces puissances sont établies à 1800 tr/min dans les conditions spécifiées par la norme indiquée.
- Le niveau de puissance nette annoncé est la puissance disponible quand le moteur est équipé d'un alternateur, d'un filtre à air, d'un silencieux et d'un entraînement hydraulique de ventilateur à vitesse variable fonctionnant à vitesse maximale.

Poids

Poids en ordre de marche	30 519 kg 67 294 lb
• Pour godet normal de 5,7 m³ (7,5 y³) à lame de coupe boulonnée	

Godets

Capacité des godets	3,8-6,1 m³ 5,0-8,0 y³
Capacité maxi des godets	6,1 m³ 8 y³

Caractéristiques de fonctionnement

Charge d'équilibre statique, braquage maxi	19 456 kg 42 989 lb
Force d'arrachage	169 kN 44 775 lb
• Pour godet normal de 5,7 m³ (7,5 y³) à lame de coupe boulonnée	

Transmission

Marche avant 1	8,8 km/h 4,1 mi/h
Marche avant 2	11,8 km/h 7,3 mi/h
Marche avant 3	20,7 km/h 12,9 mi/h
Marche avant 4	35,3 km/h 22,6 mi/h
Marche arrière 1	7,6 km/h 4,7 mi/h
Marche arrière 2	13,5 km/h 8,4 mi/h
Marche arrière 3	23,6 km/h 14,7 mi/h
Marche arrière 4	41,5 km/h 25,8 mi/h
• Vitesses de translation maximum (avec pneus 28,5-29).	

Circuit hydraulique

Circuit de godet/outil de travail	464 l/min 123 gal/min
Débit de la pompe	
Circuit de godet/outil de travail	20 700 kPa 3000 psi
Tarage du clapet de décharge	
Relèvement	6 secondes
Temps de cycle hydraulique	2,1 secondes
Vidage	3,4 secondes
Temps de cycle hydraulique — Abaissement, à vide, libre	11,5 secondes
Durée totale	
Circuit pilote — Débit de la pompe	464 l/min 122,56 gal/min
• Débit de la pompe à engrenages du circuit d'équipement (standard) à 2100 tr/min et 6900 kPa (1000 psi).	

Freins

Freins	Conformes aux normes suivantes.
• DSHA, SAE J1473 OCT90 et ISO 3450-1996.	

Essieux

Avant	Fixe
Arrière	Oscillant de ±13°
Dénivellement maximum pour une seule roue	550 mm 21,7 po

Pneus

Pneus Vaste choix, selon l'utilisation de la machine.

- Au choix :
29.5R25, L2
29.5R25, L3
29.5R25, L3 (STL2+)
29.5R25, L3 (STL3)
29.5R25, L3 (VSDL)
29.5R25, L3 (VMTT)
29.5-25, L3
29.5-25, L4
29.5-25, L5

• **NOTA :** Dans certaines applications (telles chargement-transport), la capacité productive du chargeur risque de dépasser la capacité des pneus (donnée par l'indice t-km/h ou t-m/h). Caterpillar vous conseille par conséquent de consulter le fournisseur et d'évaluer tous les facteurs avant de choisir les pneus.

Cabine

ROPS/FOPS Conforme aux normes SAE et ISO.

- Cabine et cadre de protection en cas de retournement (ROPS) Caterpillar sont de série en Amérique du Nord et en Europe.
- Cadre ROPS conforme aux normes SAE J1040 APR88 et ISO 3471:1994.
- Cadre de protection contre la chute d'objets (FOPS) conforme aux normes SAE J231-JAN81 et ISO 3448:1992 niveau II.
- Le niveau de pression acoustique mesuré avec vitres et portes closes suivant les méthodes spécifiées par la norme ISO 6394:1998 est de 76 dB(A) dans la cabine proposée par Caterpillar, correctement montée et entretenue.
- Le port de protections auditives peut s'avérer nécessaire pour les longues périodes de travail dans un poste ouvert ou dans une cabine qui n'est pas en parfait état ou dont les portes/vitres sont ouvertes, ou dans un milieu bruyant.
- Le niveau de pression acoustique, mesuré suivant les méthodes et conditions d'essai statique spécifiées par la norme ISO 6395:1998, est de 112 dB(A) pour une machine de série.

Conteneurs

Réservoir de carburant - Standard	470 l	127 gal
Circuit de refroidissement	83 l	22 gal
Cartier moteur	64 l	17 gal
Transmission	62 l	16 gal
Différentiels et réducteurs - Avant	87 l	23 gal
Différentiels et réducteurs - Arrière	87 l	23 gal
Circuit hydraulique (avec réservoir)	250 l	66 gal
Réservoir hydraulique	125 l	33 gal

Caractéristiques de fonctionnement

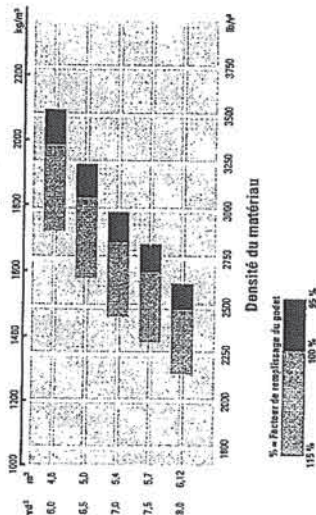
	Machine standard avec godets normaux							
	Dents	Dents et segments	Lames à bouffonner	Dents soulés à fleur avec pointes	Dents	Dents et segments	Lames à bouffonner	Lames à bouffonner
Capacité nominale des godets (S)	m ³ 4,2	4,5	4,6	5,4	4,7	4,9	5,0	5,0
	y ³ 5,5	5,75	6,0	7,0	6,0	6,25	6,5	6,5
Capacité à ras (S)	m ³ 3,66	3,81	3,87	4,61	4,03	4,19	4,25	4,25
	y ³ 4,78	4,98	5,06	6,03	5,27	5,48	5,56	5,56
Largeur (S)	mm 3533	3533	3447	3513	3533	3533	3447	3447
	p/po 117"	117"	114"	116"	117"	117"	114"	114"
Hauteur de déversement au levage maxi et vidage à 45° (S)	mm 3305	3305	3458	3138	3229	3229	3385	3385
	p/po 10'10"	10'10"	11'4"	10'4"	10'7"	10'7"	11'1"	11'1"
Portée au levage maxi et vidage à 45° (S)	mm 1554	1554	1407	1739	1601	1601	1457	1457
	p/po 5'1"	5'1"	4'7"	5'8"	5'3"	5'3"	4'9"	4'9"
Portée avec bras de levage et godet à l'horizontale (S)	mm 3000	3000	2790	3260	3090	3090	2880	2880
	p/po 9'10"	9'10"	9'2"	10'8"	10'2"	10'2"	9'5"	9'5"
Profondeur de creusage (S)	mm 90	125	125	91	90	125	125	125
	po 3,5	4,9	4,9	3,6	3,5	4,9	4,9	4,9
Longueur hors tout (S)	mm 9480	9480	9248	9700	9570	9570	9338	9338
	p/po 31'1"	31'1"	30'4"	31'10"	31'5"	31'5"	30'8"	30'8"
Hauteur hors tout, godet au levage maxi (S)	mm 6141	6141	6141	6216	6217	6217	6217	6217
	p/po 20'2"	20'2"	20'2"	20'5"	20'5"	20'5"	20'5"	20'5"
Nombre de brequage, godet en position de transport (S)	mm 15 925	15 925	15 716	16 006	15 972	15 972	15 762	15 762
	p/po 52'3"	52'3"	51'7"	52'6"	52'5"	52'5"	51'9"	51'9"
Charge d'équilibre statique, bâti en ligne*	kg 22 767	22 310	22 341	22 174	22 417	22 063	22 093	22 093
	lb 50 201	49 194	49 262	48 894	49 429	48 649	48 715	48 715
Charge d'équilibre statique, brequage maxi à 37°	kg 20 380	20 034	20 069	19 742	20 439	19 801	19 836	19 836
	lb 44 938	44 175	44 252	43 531	45 068	43 661	43 738	43 738
Force d'arrachage** (S)	kN 273	251	252	227	252	233	234	234
	lb 61 425	56 475	56 700	51 075	56 700	52 425	52 650	52 650
Poids en ordre de marche* (S)	kg 30 156	30 334	30 261	30 351	30 253	30 432	30 359	30 359
	lb 66 494	66 886	66 726	66 924	66 708	67 103	66 942	66 942

* Charge limite d'équilibre statique et poids en ordre de marche calculés sur la base d'une machine standard équipée de pneus 29.5-R25 (L-3) de Michelin, avec plein de carburant, liquides de refroidissement, lubrifiants et conducteur.

** Mesuré à 102 mm (4,0 po) derrière la pointe de la lame de coupe, la charnière du godet servant de point d'articulation conformément à la norme SAE J722C.

(S) Caractéristiques et mesures conformes à toutes les normes applicables et recommandées par la Society of Automotive Engineers, y compris les normes SAE J722C sur les caractéristiques nominales des chargeurs.

Guide de sélection des godets



Caractéristiques de fonctionnement

	Normal, extra-robuste				Maintenance de matériaux				Godet à roche			
	Dents	Dents et segments	Lames à bûloinner	Dents	Dents	Dents et segments	Lames à bûloinner	Dents	Dents et segments	Dents	Dents et segments	Dents et segments
Capacité nominale des godets (\$)	m ³	5,4	5,6	5,7	5,5	5,7	5,9	4,2	4,5	4,5	4,5	4,5
	v ³	7,0	7,25	7,5	7,25	7,5	7,75	5,49	5,89	5,89	5,89	5,89
Capacité à ras (\$)	m ³	4,68	4,85	4,92	4,7	4,8	5,0	3,53	3,73	3,73	3,73	3,73
	v ³	6,12	6,34	6,44	6,15	6,28	6,54	4,88	4,88	4,88	4,88	4,88
Largeur (\$)	mm	3533	3533	3447	3533	3533	3447	3504	3504	3504	3504	3504
	pi/po	117"	117"	114"	117"	117"	114"	116"	116"	116"	116"	116"
Hauteur de déversement au	mm	3142	3142	3296	2943	2943	3110	3183	3183	3183	3184	3184
levage maxi et vidage à 45° (\$)	pi/po	104"	104"	107"	98"	98"	102"	105"	105"	105"	105"	105"
Portée au levage maxi	mm	1693	1693	1547	1610	1610	1478	1792	1792	1792	1792	1792
et vidage à 45° (\$)	pi/po	57"	57"	51"	53"	53"	47"	51"	51"	51"	51"	51"
Portée avec bras de levage	mm	3220	3220	3009	3320	3320	3109	3258	3258	3258	3258	3258
et godet à l'horizontale (\$)	pi/po	107"	107"	91"	107"	107"	102"	108"	108"	108"	108"	108"
Profondeur de creusage (\$)	mm	78	118	118	111	191	151	90	125	125	125	125
	po	3,1	4,6	4,6	4,4	7,5	5,9	3,5	4,9	4,9	4,9	4,9
Longueur hors tout (\$)	mm	9691	9691	9461	9816	9816	9586	9725	9725	9725	9725	9725
	pi/po	311"	311"	310"	322"	322"	315"	311"	311"	311"	311"	311"
Hauteur hors tout, godet au	mm	6287	6287	6287	6382	6382	6382	6383	6383	6383	6383	6383
levage maxi (\$)	pi/po	208"	208"	208"	208"	208"	208"	208"	208"	208"	208"	208"
Diamètre de braqueage, godet en	mm	16 033	16 033	15 823	16 111	16 111	15 901	16 023	16 023	16 023	16 023	16 023
position de transport (\$)	pi/po	527"	527"	511"	521"	521"	527"	527"	527"	527"	527"	527"
Charge d'équilibre statique,	kg	21 299	20 951	21 098	20 960	20 612	20 648	21 939	21 345	21 345	21 602	21 602
brâti en ligne*	lb	46 964	46 197	46 521	46 217	45 449	45 529	48 375	47 066	47 066	47 632	47 632
Charge d'équilibre statique,	kg	19 031	18 700	18 852	18 733	18 416	18 458	19 669	19 094	19 094	19 332	19 332
braqueage maxi à 37°	lb	41 963	41 234	41 569	41 306	40 607	40 700	43 370	42 102	42 102	42 627	42 627
Force d'arrachage** (\$)	kN	225	209	210	207	182	194	223	205	205	205	205
	lb	50 625	47 025	47 250	46 575	40 950	43 650	50 175	46 125	46 125	46 125	46 125
Poids en ordre de marche* (\$)	kg	31 154	31 330	31 148	30 868	31 044	30 953	30 494	30 776	30 776	30 745	30 745
	lb	68 695	69 083	68 681	68 064	68 452	68 251	67 239	67 861	67 861	67 793	67 793

* Charge limite d'équilibre statique et poids en ordre de marche calculés sur la base d'une machine standard équipée de pneus 29.5-R25 L-3 de Michelin, avec plein de carburant, liquide de refroidissement, lubrifiants et conducteur.

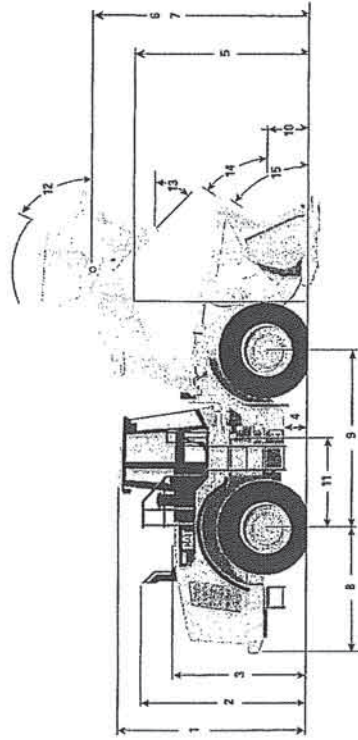
** Mesurée à 102 mm (4,0 po) derrière la pointe de la lame de coupe, la charnière du godet servant de point d'articulation conformément à la norme SAE J732C.

(\$) Caractéristiques et mesures conformes à toutes les normes applicables et recommandées par la Society of Automotive Engineers, Y compris les normes SAE J732C sur les caractéristiques nominales des chargeurs.

Machine standard avec godets normaux											
	Dents	Dents et segments	Lames à bûloinner	Dents	Dents et segments	Lames à bûloinner	Dents	Dents et segments	Lames à bûloinner	Dents et segments	Dents et segments
Capacité nominale des godets (\$)	m ³	5,0	5,4	5,7	5,73	6,0	6,12	6,0	6,12	6,0	6,12
	v ³	6,5	7,0	7,25	7,5	7,75	8,0	7,5	8,0	7,5	8,0
Capacité à ras (\$)	m ³	4,38	4,61	4,68	4,85	5,1	5,2	4,85	5,1	4,85	5,2
	v ³	5,73	5,95	6,03	6,12	6,34	6,8	6,34	6,67	6,67	6,8
Largeur (\$)	mm	3533	3447	3533	3447	3533	3447	3533	3447	3533	3447
	pi/po	117"	117"	117"	114"	117"	114"	117"	114"	117"	114"
Hauteur de déversement au	mm	3165	3322	3124	3272	3075	3238	3075	3238	3075	3238
levage maxi et vidage à 45° (\$)	pi/po	105"	107"	103"	109"	101"	107"	101"	107"	101"	107"
Portée au levage maxi	mm	1647	1647	1505	1534	1729	1594	1729	1594	1729	1594
et vidage à 45° (\$)	pi/po	55"	55"	41"	50"	58"	53"	58"	53"	58"	53"
Portée avec bras de levage	mm	3170	2960	3220	3010	3292	3083	3292	3083	3292	3083
et godet à l'horizontale (\$)	pi/po	105"	99"	107"	91"	101"	101"	101"	101"	101"	101"
Profondeur de creusage (\$)	mm	90	125	125	125	99	125	125	125	125	125
	po	3,5	4,9	4,9	4,9	3,9	4,9	4,9	4,9	4,9	4,9
Longueur hors tout (\$)	mm	9650	9418	9700	9468	9778	9540	9778	9540	9778	9540
	pi/po	318"	301"	310"	311"	321"	314"	321"	314"	321"	314"
Hauteur hors tout, godet au	mm	6287	6287	6360	6360	6451	6451	6451	6451	6451	6451
levage maxi (\$)	pi/po	208"	208"	201"	201"	212"	212"	212"	212"	212"	212"
Diamètre de braqueage, godet en	mm	16 015	16 015	15 803	16 041	16 087	15 868	16 087	15 868	16 087	15 868
position de transport (\$)	pi/po	527"	527"	511"	528"	529"	521"	529"	521"	529"	521"
Charge d'équilibre statique,	kg	22 201	21 846	22 052	21 711	23 328	22 971	22 939	22 971	22 939	22 971
brâti en ligne*	lb	48 933	48 175	48 625	47 873	51 438	50 581	50 581	50 651	50 581	50 651
Charge d'équilibre statique,	kg	19 933	19 598	19 634	19 467	20 860	20 532	20 493	20 532	20 493	20 532
braqueage maxi à 37°	lb	43 952	43 214	43 293	42 925	45 996	45 187	45 187	45 273	45 187	45 273
Force d'arrachage** (\$)	kN	236	219	220	212	213	198	198	199	198	199
	lb	53 100	49 275	49 500	47 475	47 700	44 550	44 550	44 775	44 550	44 775
Poids en ordre de marche* (\$)	kg	30 343	30 522	30 448	30 519	31 287	31 462	31 462	31 370	31 462	31 370
	lb	66 906	67 301	67 138	67 458	68 988	69 374	68 988	69 171	68 988	69 171

Dimensions

Toutes les dimensions sont approximatives.



1	Hauteur au sommet du cadre ROPS	3785 mm	12'4"	8	De l'axe de l'essieu arrière au bord du contrepois	2493 mm	8'2"
2	Hauteur au sommet du tuyau d'échappement	3716 mm	12'2"	9	Empattement	3700 mm	12'2"
3	Hauteur au sommet du capot	2716 mm	8'11"	10	Hauteur à l'axe d'essieu à l'attelage	867 mm	2'10"
4	Garde au sol avec pneus 29.5R25 L-3 de Michelin (voir le tableau des choix de pneus)	442 mm	1'5"	11	De l'axe de redressement au levage maxi à l'angle	1850 mm	6'1"
5	Déplacement des bras de levage au levage maxi	3764 mm	12'4"	12	Angle de redressement au levage maxi	61°	
6	Hauteur à la charnière du godet	4505 mm	14'9"	13	Angle de vidage au levage maxi	47°	
7	Hauteur de levage en option	4726 mm	15'6"	14	Angle de redressement en position de transport	49°	
				15	Angle de redressement au niveau du sol	41°	

Les pneus 29.5-25 procurent une voie de 2440 mm (8'0")

Pneus	Longueur bars pneus			Garde au sol			Modification des dimensions verticales			Modification du poids en ordre de marche			Modification de la charge d'inflétrie statique		
	mm	pouces		mm	pouces		mm	pouces		kg	lb		kg	lb	
29.5R25 (L-2/L-3), Goodyear	3269	128.7		463	18.2		21	0.8		-91	-200.7		129	284.4	
29.5R25 (L-3), Michelin	3227	127.0		442	17.4		0	0.0		0	0		0	0	
29.5R25 (L-3 STL2+), Continental	3264	128.5		452	17.8		10	0.4		71	156.6		509	1122.3	
29.5R25 (L-3 STL3), Continental	3254	128.5		450	17.7		8	0.3		-16	-35.3		441	972.4	
29.5R25 (L-3 VMT), Bridgestone	3211	126.4		469	18.5		27	1.1		63	205.1		-43	94.8	
29.5R25 (L-3 VSDL), Bridgestone	3202	126.1		479	18.9		37	1.5		1311	2890.8		1245	2745.2	
29.5R25 (L-5), Michelin	3231	127.2		467	18.4		25	1.0		1318	2896.2		1058	2332.9	
29.5-25 (L-3), Goodyear	3253	128.1		444	17.5		2	0.0		-297	-654.9		-206	454.2	
29.5-25 (L-4), Firestone	3194	125.7		481	18.9		39	1.5		75	165.4		-460	-1014.3	
29.5-25 (L-4), Goodyear	3284	129.3		483	19.0		41	1.6		330	727.7		411	906.3	
29.5-25 (L-5), Firestone	3197	125.9		488	19.2		46	1.8		613	1351.7		859	1894.1	
29.5-25 (L-5), Goodyear	3266	128.6		488	19.2		46	1.8		942	2077.1		943	2079.3	

	Godet à roche - Lame en V tronquée		Excro-vastue pour carrière		Déchets		Charbon	
	Lames à boullonner	Lames à boullonner	Dents et segments	Lames à boullonner	Lames à boullonner	Haute portée	Variation des caractéristiques	
Capacité nominale des godets (t)	m ³							
	4.5	4.8	4.5	10.5	8.0			
	5.89	6.28	5.89	13.73	10.46			
Capacité à ras (t)	m ³							
	3.7	4.0	3.79	9.4	7.2			
	4.84	5.23	4.96	12.29	9.42			
Largeur (t)	mm							
	3516	3670	3500	3886	3607			
	11'6"	12'0"	11'6"	12'9"	11'10"			
Hauteur de déversement au levage maxi et vidage à 45° (t)	mm							
	3351	3719	3167	2903	2933		221	
	11'0"	12'2"	10'5"	9'6"	9'7"		9"	
Portée au levage maxi et vidage à 45° (t)	mm							
	1591	1994	1821	1686	1662		2.8	
	5'3"	6'7"	6'0"	5'6"	5'5"		0,1"	
Portée avec bras de levage et godet à l'horizontale (t)	mm							
	2997	3097	3291	3402	3364		160	
	9'10"	10'2"	10'10"	11'2"	11'0"		6"	
Profondeur de creusage (t)	mm							
	125	385	117	151	146		(2)	
	4.9	15.2	4.6	5.9	5.7		(0.08)	
Longueur hors tout (t)	mm							
	9455	9035	9755	9879	9837		199	
	31'0"	29'8"	32'0"	32'5"	32'3"		8"	
Hauteur hors tout, godet au levage maxi (t)	mm							
	6377	6377	6383	6994	6526		221	
	20'11"	20'11"	20'11"	22'11"	21'5"		9"	
Diamètre de braquage, godet en position de transport (t)	mm							
	15 886	15 678	16 034	16 458	16 180		168	
	52'1"	51'5"	52'7"	54'0"	53'1"		7"	
Charge d'équilibre statique, bât en ligne* (t)	kg							
	21 349	21 349	20 658	20 805	20 574		(1774)	
	48 543	47 075	45 551	45 875	45 366		(3912)	
Charge d'équilibre statique, braquage maxi à 37° (t)	kg							
	19 728	19 094	18 413	18 398	18 398		(1620)	
	43 500	42 102	40 601	40 828	40 568		(3572)	
Force d'arrachage** (t)	kN							
	213	194	203	160	163		3.5	
	47 925	43 650	45 675	36 000	36 675		787.5	
Poids en ordre de marche* (t)	kg							
	30 565	30 830	31 389	31 599	30 975		129	
	67 396	67 980	69 213	69 676	68 300		284	

Équipement de série

L'équipement de série peut varier. Pour tout renseignement complémentaire, veuillez vous adresser au concessionnaire Caterpillar.

Équipement électrique
Avertisseur de recul
Alternateur (80 A, sans palais)
Batteries sans entretien (4), capacité de démarrage à froid de 1000 CCA
Lampes à halogène (total de 6)
Couppe-batterie principal
Démarreur électrique de grande capacité
Circuit de démarrage et de charge (24 V)
Prise de démarrage de secours
Poste de conduit
Circuit climatiseur/HVAC
Verrouillage des fonctions de godet et d'outil de travail
Cabine, pressurisée et insonorisée
Cadre ROPS/OPS, pré-équipement radio (d'ambiance) comprenant antenne, haut-parleurs, dévolteur (12 V, 10 A) et prise d'alimentation
Allume-cigares et cendrier
Crochets porte-manteau (2) avec courroies
Volant avec commandes de transmission intégrées
Commandes électrohydrauliques de godet et d'outil de travail
Chaufaferre et dégivreur
Avertisseur électrique (monté sur le volant)
Centrale de surveillance informatisée
Instruments, indicateurs :
Indicateur de rapport numérique
Température du liquide de refroidissement moteur
Niveau de carburant
Température de l'huile hydraulique
Indicateur de vitesse/compte-tours
Température de l'huile de transmission
Instruments, voyants de mise en garde :
Température de l'huile d'essieu
Sortie d'alternateur, électrique
Colmatage de filtre à air moteur
Pression d'huile moteur
Niveau et pression de carburant
Dérivation de filtre hydraulique
Niveau d'huile hydraulique
Frein de stationnement
Pression d'huile du frein de manœuvre
Pression d'huile du circuit de direction principal
Dérivation du filtre de transmission
Supports pour panier-repas et porte-gobelet
Rétroviseurs (montés à l'extérieur)
Siège Comfort Cat (revêtement tissu) à suspension pneumatique
Ceinture de sécurité à enrouleur de 51 mm (2 po) de largeur
Colonne de direction réglable, inclinable et télescopique
Basis d'essui-glace à lave-glace intégré (avant et arrière)
Essui-glace avant intermittent
Vivres coulissantes (gauche et droite)

Groupe motopropulseur
Freins à disques humidifiés, entièrement hydrauliques, sous carter étanche avec Système de freinage intégré (IBS) et indicateur d'usure
Moteur C1.5 de Cat avec technologie ACERT et A7AAAC
Ventilateur de radiateur à vitesse variable et commande hydraulique (détection de la température)
Filtre de carburant, filtre moteur et filtre à air avec éléments primaire et secondaire
Pompe d'arrosage du carburant (électrique)
Séparateur carburant
Silencieux insonorisé
Préfiltre d'admission d'air du moteur
Radiateur modulaire de la prochaine génération (NGMR)
Aide au démarrage (à l'éther)
Verrouillage du connecteur de neutralisation de la transmission
Convertisseur de couple (sator à roue libre)
Transmission power shift automatique à planétaires (4 rapports avant et 4 rapports arrière)
Commande d'autoshift variable (VSC)
Autre
Positionneur automatique de godet réglable en cabine
Contrepoids
Raccords et joints toriques axiaux Caterpillar
Pontes de visite (verrouillables)
Raccords de vidange écologiques pour l'huile moteur, l'huile de transmission et l'huile hydraulique
Garde-boue avant en acier avec bavettes/arrière avec rallonges
Blindage de chaîne cinématique et de carter
Barre d'attelage avec broche
Capot non métallique à inclinaison assistée
Flexibles XT Cat™
Refroidisseur d'huile hydraulique (pivotant vers l'extérieur)
Limiteur automatique de levage et d'inclinaison (réglable en cabine)
Timonerie en Z avec tube transversal/levier d'inclinaison monté
Robinet de prélèvement d'huile
Pré-équipement Product Link
Prises de pression à distance
Regards de niveau :
Liquide de refroidissement moteur
Niveau d'huile hydraulique
Niveau d'huile de transmission
Direction à déttection de charge
Cadenas antivandalisme
Pneumatiques, James et roues
Choisir les pneus dans la liste des équipements obligatoires.
Anigel
Liquide de refroidissement longue durée préémulsié à 50 %, protégeant jusqu'à -34 °C (-29 °F).

Chargeur sur roues 980H Caractéristiques techniques

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Options

L'équipement offert en option peut varier. Pour tout renseignement complémentaire, veuillez vous adresser au concessionnaire Caterpillar.

Système antidig pour agrégats
Alternateur 95 A
Autolubrification
Raccord de vidange écologique pour essieu
Pré-équipement de refroidisseur d'huile d'essieu
Réfroidisseur d'huile d'essieu
Godets et outils de travail
Outils d'attaque du sol pour godets – Demander les détails à un concessionnaire Cat
Caméra de rétrovision (produit de fabrication spéciale)
Pré-équipement radio CB (20 A)
Ensemble de refroidissement pour températures ambiantes élevées, 50 °C (122 °F)
Différentiels à glissement limité (avant ou arrière), NO-SPN (essieu arrière seulement)
Ventilateur, inversion automatique
Dispositif de remplissage rapide, carburant
Garde-boue étroits
Protection de vitre avant
Protection de vitre avant, forsteries
Protection de vitre avant, déchets
Réchauffeur de liquide de refroidissement moteur
Version haute portée, deux et trois distributeurs
Version hydraulique à trois distributeurs
Commande par manipulateur
Feux de sens de marche
Feux à décharge à haute intensité (HID)
Gyrophare
Système de sécurité machine
Rétroviseurs extérieurs chauffants
Rétroviseurs intérieurs
Système de pesée de la charge utile
Imprimante du système de pesée de la charge utile
Plate-forme pour le nettoyage des vitres
Préfiltre à turbine
Radio AM/FM, bande météo (lecteur de disques compacts)
Vitrage de cabine monté sur caoutchouc
Siège chauffant
Ceinture de sécurité à enrouleur de 76 mm (3 po) de largeur
Direction auxiliaire
Visière avant
Transmission pour service extrême
Versions spéciales
Chargeur de & v pour agrégats
Machine forestière
Version chargeur industriel
Version pour acide
Raccords de vidange écologiques pour essieu
Pré-équipement de refroidisseur d'huile d'essieu
Outils d'attaque du sol pour godets – Demander les détails à un concessionnaire Cat
Caméra de rétrovision (produit de fabrication spéciale)
Ensemble de refroidissement pour températures ambiantes élevées, 50 °C (122 °F)
Différentiels à glissement limité (avant ou arrière), NO-SPN (essieu arrière seulement)
Ventilateur, inversion automatique
Dispositif de remplissage rapide, carburant
Garde-boue étroits
Protection de vitre avant
Protection de vitre avant, forsteries
Protection de vitre avant, déchets
Réchauffeur de liquide de refroidissement moteur
Version haute portée, deux et trois distributeurs
Version hydraulique à trois distributeurs
Commande par manipulateur
Feux de sens de marche

Chargeur sur roues 980H Caractéristiques techniques

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Notes

Chargeur sur roues 980H

Pour en savoir plus sur les produits Cat, les promotions des concessionnaires et les solutions proposées, consultez notre site Internet à l'adresse www.cat.com.

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Matériaux et caractéristiques techniques sous réserve de modifications sans préavis.
Les machines illustrées peuvent comprendre des équipements supplémentaires.
Pour connaître les options offertes, s'adresser au concessionnaire Caterpillar.

ASH10531-01 (4-08) (Traduction 8-05)
Remplace AEN10531-05

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745C

Articulated Truck



Engine

Engine Model – U.S. EPA Tier 2/EU Stage II Emission Level Equivalent	Cat® C18 ACERT™	
Gross Power – SAE J1995	381 kW	511 hp
Net Power – ISO 14396	376 kW	504 hp

Weights

Rated Payload	41 tonnes	45.2 tons
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Body Capacities

Heaped SAE 2:1	25 m ³	32.7 yd ³
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745C Articulated Truck Key Features

- *Cat C18 ACERT engine meets Tier 2/Stage II equivalent engine emission standards*
- *Cat engine compression brake*
- *Automatic Retarder Control (ARC)*
- *Advanced Productivity Electronic Control Strategy (APECS)*
- *Enhanced Automatic Traction Control (ATC)*
- *Color Multi-Purpose Display (CMPD)*
- *New design dump body with increased capacity*
- *Hill Assist*
- *Waiting Brake*
- *Site Speed Limiting*
- *Integrated Technologies – Cat Production Measurement, Product Link™/VisionLink®*
- *High Density Power Shift (HDPS) transmission with matched OTG*
- *All axle wet brakes*
- *Wide tire option*

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The Cat 745C with a 25 m³ (32.7 yd³) 41 tonnes (45.2 tons) increased capacity offers proven reliability, durability, high productivity, superior operator comfort and lower operating costs.

With a focus on high productivity, the 745C has many updated and improved features, an all new power train and new ease of operation features including Automatic Retarder Control.

Engine

Optimized performance, proven reliability





Every Tier 2/Stage II Cat equivalent emissions standard engine with ACERT Technology is equipped with a combination of proven electronic, fuel, air and aftertreatment components. The right technologies fine-tuned for the right applications result in:

- High machine performance across a variety of applications.
- Enhanced reliability through commonality and simplicity of design.
- Maximized uptime and reduced cost with world-class support from the Cat dealer network.
- Minimized impact of Emission Systems: designed to be transparent to the operator without requiring interaction.
- Durable designs with long life to overhaul.
- Delivering better fuel economy with minimized maintenance costs while providing the same great power and response.

Advanced MEUI™-C Injector

Advanced MEUI-C injector platforms deliver increased injection pressures and more precise fuel rates. These durable injectors enhance responsiveness while controlling soot.

Innovative Air Management

Cat engines feature innovative air-management systems that optimize airflow and enhance power, efficiency and reliability.

Engine Compression Brake

The engine compression brake improves retarding response and increases retarding power for controlled descent of grades.

Transmission

Class leading transmission technology



The new Cat High Density Power Shift (HDPS) nine-speed forward two-speed reverse transmission, designed specifically for Articulated Trucks, features Advanced Productivity Electronic Control Strategy (APECS) and Electronic Clutch Pressure Control (ECPC), which deliver smooth gear changes, improved acceleration and higher productivity.

Rimpull has been increased in both forward and reverse.

Speed hold/limiting function allows the machine speed to be limited in 1 kph or 1 mph steps to conform to site speed restrictions.

Gearshifts have been significantly improved to maintain direct drive lock-up, and eliminate dropping into converter drive. Reducing the use of torque converter drive helps maintain ground speed and gradeability.

Variable shift points used based on the operating conditions, which also aid in maintaining ground speed during gear changes on grades.

Torque Converter

Larger diameter torque converter, configured for off highway applications, allows the higher engine power to be transmitted more efficiently to the lower power train.



Automatic Features

Ease of use, improved performance

Automatic Traction Control (ATC)

The ATC system successfully introduced on the B Series has been further enhanced for even better performance. Application of the inter and cross-axle differential locks is 'on-the-go' and fully automatic. The operator does not have to think about when and where to engage either diff lock. Sensors monitor the machine and wheel speeds, enabling instant response in low traction conditions. Operation is seamless and smooth, eliminating wheel slip for maximum traction and therefore productivity.

Clutches are automatically disengaged when ground conditions allow, maximizing efficiency when steering or on uneven ground.

ATC reduces tire and driveline abuse, eliminating lost efficiency caused by improper manual operation of the differential clutches, and reducing the cost of premature tire replacement.

Automatic Retarder Control (ARC)

In automatic mode, use of the retarder is much easier for the operator. As with ATC a number of machine operating aspects are monitored, and if required the engine compression brake is engaged automatically. The system can help towards eliminating engine overspeed, improving safe machine operation and reducing cycle times, yet still with the flexibility of manual control if needed.

Suspension and Braking

Performance with comfort



Front Suspension

The three-point front suspension oscillates $\pm 6^\circ$ to provide a smooth ride, allowing the operator to travel at speed over rough terrain and softening impact loads on structures and components. Large bore, low-pressure cylinders are purposely designed for tough applications and offer a soft, smooth ride.

A-Frame Construction

The front suspension uses an oscillating A-frame with a lateral tie rod to control axle sideways movement and stability.

Rear Suspension

Features a walking beam with Caterpillar designed rear suspension mounts, which have long life and provide a reliable, and stable ride for excellent load retention.

Mounting Points

Suspension mounting points are integrated into the axle housing, increasing reliability.

All Axle Enclosed Wet Brakes

Provide smoother retarding and braking, with improved holding in slippery conditions and on grades.

Hill Assist

Eliminates potential 'roll-back' on grades. If an operator stops the machine on a grade, when taking his foot off the service brake pedal the machine will automatically hold the service brakes on for a number of seconds to prevent the machine from rolling backwards.



Ride Comfort

The three-point front suspension with its oscillating axle and low-pressure ride struts, combined with the center-mounted cab, offers unrivaled levels of ride comfort for the operator in all driving conditions. The operator remains comfortable and productive throughout the day.

Operator Environment

Improved productivity with a comfortable and confident operator

Spacious Two-Person Cab

The large two-person cab, offers a comfortable working space for both the operator and a passenger. The passenger seat is fully padded with a backrest and a wide, retractable seat belt for a secure and comfortable ride. It is also positioned adjacent to the operator, giving both the operator and passenger a clear view of the instrument panel, controls and the road. The storage space behind the operator seat has been increased, and access improved. The design and layout is common across all C Series Articulated Trucks.

Air Suspension Seat

The air suspension seat provides improved operator comfort with a cushioned upper high back, adjustable damping with three settings, ride zone indicator and adjustable lumbar settings. It is fully adjustable to provide the optimal driving position.

Cab Atmosphere

The air conditioning system helps to keep you comfortable whatever environment you are operating in.

Waiting Brake

As the name implies, anywhere you are waiting you can use this feature to remove the need for repeated application of the parking brake. For example, if you are holding the machine on a grade, in a loading or dump area, select neutral and press the yellow button on the gear select cane. This will automatically apply the service brakes, without the need to apply the park brake. To disengage, put the machine in gear and the brakes are automatically released.

Ease of Operation

Designed around the operator





Control Layout

The cab is designed to make all aspects of machine operation as simple as possible. The controls and gauges are easy to read and straightforward to operate, the controls and gauges allow the operator to focus on safe machine operation while maintaining productivity.

Dashboard

The integrated wrap-around dash puts all controls within easy reach of the operator. Featuring LED illuminated rocker switches for the dash dimmer, rear wash wiper, hazard warning, work lamp, secondary steer, A/C and cigar lighter. Delivers an automotive feel with the industrial strength you would expect from Caterpillar.

Color Multi Purpose Display (CMPD)

The dash mounted display unit shows the operator various levels of performance and condition pages as well as machine warning categories. These include performance data, configuration settings, operator and machine totals, service information, various machine status parameters, machine payload Information (when fitted), and the video feed from the rearview camera.

Bluetooth™ Stereo Connectivity

Make and receive calls via Bluetooth equipped mobile.





Durability and Reliability

Proven structures and components

Front Frame

The front frame design features a large box section and wide, stiff frame beams to handle torque loads. The divergent frame design decreases stress in the hitch area and optimizes suspension geometry. The frame design makes maximum use of robotic welding for increased durability.

Rear Frame

Twin-box construction minimizes stress concentrations and provides low weight with long service life.

Suspension

The three-point oscillating axle front suspension provides unparalleled ride quality. It also protects the truck from adverse road conditions by absorbing shock loads that would reach the frame.

Articulating/Oscillating Hitch

The articulating hitch provides the truck with steering articulation, and the oscillation ensures all-wheel ground contact in rough terrain.

Hitch Construction

Field proven two-piece construction features a durable cast steel head bolted to a hard wearing forged steel tube.

Dump Body Design

The 745C has a large target area to provide consistently high load-carrying capacity. Its diverging flow design gives clean material discharge, which maximizes production and avoids the waste of carry-back.

Output Transfer Gear

Distributes drive to the tractor and trailer and includes a wet clutch differential lock for optimum traction in poor underfoot conditions.

Service Brakes

Dual-circuit, all wheel braking system. The full power hydraulic system actuates enclosed, oil immersed, multi disc, multi plate brakes with independent front and rear circuits and accumulators.

Parking Brake

Located on the center axle in an elevated position, it is spring applied and hydraulically released.

Integrated Technologies

Monitor, manage, and enhance job site operations



LINK Technologies

LINK technologies, like Product Link wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes through the online VisionLink user interface so you can make timely, fact-based decisions to maximize efficiency, improve productivity, and lower costs.

PAYLOAD Technologies

PAYLOAD technologies like Cat Production Measurement bring payload weighing to the cab to help optimize job site efficiency and productivity. Operators can view real-time load weights on the integrated display and know precisely when target is achieved, while cab-mounted external payload lights signal the loader operator when to stop loading to reduce overloading. Operators can track daily productivity from the cab, with quick access to truck payload weights, loads and cycle counts, and daily totals; or remotely via LINK technologies.

CAT CONNECT makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offers improvements in these key areas:



EQUIPMENT
MANAGEMENT

Equipment Management – increase uptime and reduce operating costs.



PRODUCTIVITY

Productivity – monitor production and manage job site efficiency.



SAFETY

Safety – enhance job site awareness to keep your people and equipment safe.



Serviceability

Maximize uptime and reduce costs

Long Service Intervals

Changes to oil change intervals, volumes and the type of oil required will help lower maintenance costs and machine downtime.

Lubrication Points

Lubrication points are grouped in the hitch area for ease of servicing. Universal joints are lubed for life, eliminating any maintenance. An Autolube system is also optional, and now includes alerts via Product Link for low grease levels.

Service Points

Mounted on the left side of the engine under the electrically raised hood:

- Engine dipstick and fill cap
- Transmission dipstick and fill cap
- Air, fuel water separator and fuel filters
- Electrically operated fuel-priming pump
- Coolant level indicator and fill cap are outside the cab

Radiator

The radiator package is located behind the cab, which provides protection from frontal impacts and offers easy access to the inlet and outlet sides of the radiator.

Extended Life Coolant

Extends the change interval and improves component life by reducing aluminum corrosion.

Electrical Service Center

Located inside the cab, this service center provides a power port, diagnostic connector and Cat Data Link connector.

Cat Data Link Connector

The Cat Data Link connector provides a plug-in using a laptop with Electronic Technician (ET) software.

Service Access

The cab tilts to the side to provide easy access underneath, which simplifies access to the transmission, drive shafts and hydraulic pumps. Machine electrical and hydraulic interfaces are located on the right side of the cab, behind a removable body panel for easy access.

Truck Transport

The suspension system eliminates the need to lower the suspension when transporting the truck, reducing maintenance and downtime.



Complete Customer Support

A commitment to your success

Selection

Make comparisons of the machines you are considering before you buy. Your Cat dealer can help.

Purchase

Consider the resale value; compare productivity and day-to-day operating costs and fuel consumption.

Operation

For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and trained staff.

Maintenance

Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S-O-SSM and Technical Analysis help you avoid unscheduled repairs.

Replacement

Repair or rebuild? Your Cat dealer can help you evaluate the costs so you can make the right choice.

Product Support

Your local Cat dealership will be with you every step of the way with its unsurpassed worldwide parts support, trained technicians and customer support agreements.

cat.com

For more complete information on Cat products, dealer services and industry solutions, visit us on the Web at www.cat.com.



Sustainability

Making sustainable progress possible

All Cat Articulated Trucks are designed to maximize efficiency and productivity while conserving natural resources.

Oil Volumes

The amount of both hydraulic and engine oil required has been lowered, reducing waste oil disposal.

Recycle Waste

The Caterpillar Design, Manufacturing, Assembly and Test Site at Peterlee in England recycle 98% of all waste produced with zero waste to landfill.

Second Life

Rebuild and reman are designed and built in to all Cat C Series Articulated Trucks. This gives machines a longer life while reducing waste and replacement costs.



Safety

Designed and built into every machine

Product Safety

Caterpillar has been and continues to be proactive in developing machines that meet or exceed safety standards. Safety is an integral part of all machines and system designs.

Safety Features

- Cab integral ROPS (Roll Over Protection System) and FOPS (Falling Object Protection System)
- Rearview camera system incorporated into the CMPD, can provide a continuous panoramic rear view or when reverse gear is selected
- The secondary and parking brake functions are spring applied and hydraulic released
- Electro-hydraulic secondary steering system automatically activates in forward/reverse or when stationary if low pressure is sensed. Can be manually selected for machine recovery purposes.
- Ground level external engine fuel cut off switch provides easy access outside of the machine
- External electrical system disconnect switch for easy access from outside of the machine
- Slip resistant walkways – punched steel plate
- 75 mm (3 in) wide seat belts for operator/trainer and passenger
- Wide angled mirrors for excellent rear visibility
- Sweeping hood design for panoramic forward visibility
- Extensive handrails
- Body raised visual indicator
- Heated mirrors (optional)
- LED-flashing beacon (optional)
- Additional mirrors
- Maximum speed limiter
- Multiple camera option
- Internal and external grab handles
- Fire extinguisher in-cab mounting point
- Fully raised body locking pin
- Reversing indicator
- Park brake switch safety lock

745C Articulated Truck Specifications

Engine

Engine Model	Cat C18 ACERT	
Gross Power – SAE J1995	381 kW	511 hp
Net Power – SAE J1349	370 kW	496 hp
Net Power – ISO 14396	376 kW	504 hp
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1,106 in ³

- The power ratings apply at rated speed of 1,700 rpm when tested under the conditions for the specified standard.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
- Net power when the fan is at maximum speed is 348 kW (467 hp) per the SAE reference conditions.
- The 745C meets Tier 2/Stage II equivalent emission standards.

No Engine De-rating Required Below	3050 m	10,000 ft
Peak Engine Torque Gross (SAE J1995)	2618 N·m	1,931 lbf-ft
Peak Engine Torque Net (SAE J1349)	2558 N·m	1,887 lbf-ft
Peak Engine Torque Speed	1,200 rpm	

Weights

Rated Payload	41 tonnes	45.2 tons
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Body Capacities

Heaped SAE 2:1	25 m ³	32.7 yd ³
Struck	18.5 m ³	24.2 yd ³
Tailgate Heaped SAE 2:1	26.5 m ³	34.7 yd ³
Tailgate Struck	19.5 m ³	25.5 yd ³

Transmission

Forward 1	6.1 km/h	3.8 mph
Forward 2	8.1 km/h	5 mph
Forward 3	11.2 km/h	7 mph
Forward 4	14.1 km/h	8.8 mph
Forward 5	18.7 km/h	11.6 mph
Forward 6	22.9 km/h	14.2 mph
Forward 7	31.5 km/h	19.6 mph
Forward 8	37.9 km/h	23.5 mph
Forward 9	54.8 km/h	34 mph
Reverse 1	6.4 km/h	4 mph
Reverse 2	14.6 km/h	9.1 mph

Sound Levels

Interior Cab	79 dB(A)
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- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT 98 is 76 dB(A), for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.

745C Articulated Truck Specifications

Operating Weights

Front Axle – Empty	19 130 kg	42,174 lb
Center Axle – Empty	6990 kg	15,410 lb
Rear Axle – Empty	6750 kg	14,881 lb
Total – Empty	32 870 kg	72,466 lb
Front Axle – Rated Load	5990 kg	13,007 lb
Center Axle – Rated Load	17 550 kg	38,691 lb
Rear Axle – Rated Load	17 550 kg	38,691 lb
Total – Rated Load	41 000 kg	90,389 lb
Front Axle – Loaded	25 030 kg	55,182 lb
Center Axle – Loaded	24 540 kg	54,101 lb
Rear Axle – Loaded	24 300 kg	53,572 lb
Total – Loaded	73 870 kg	162,855 lb

Body Plate

High strength Brinell HB450 wear resistant steel

Service Refill Capacities

Fuel Tank	550 L	145.3 gal
Cooling System	90 L	23.7 gal
Brake Cooling Tank	67 L	17.69 gal
Steering/Hoist Hydraulic System	140 L	36.9 gal
Engine Crankcase	52 L	13.7 gal
Transmission/OTG	75 L	19.8 gal
Final Drives (Each)	5 L	1.3 gal
Axles (Each)	60 L	15.8 gal

Body Hoist

Raise Time	12 Seconds
Lower Time	8 Seconds

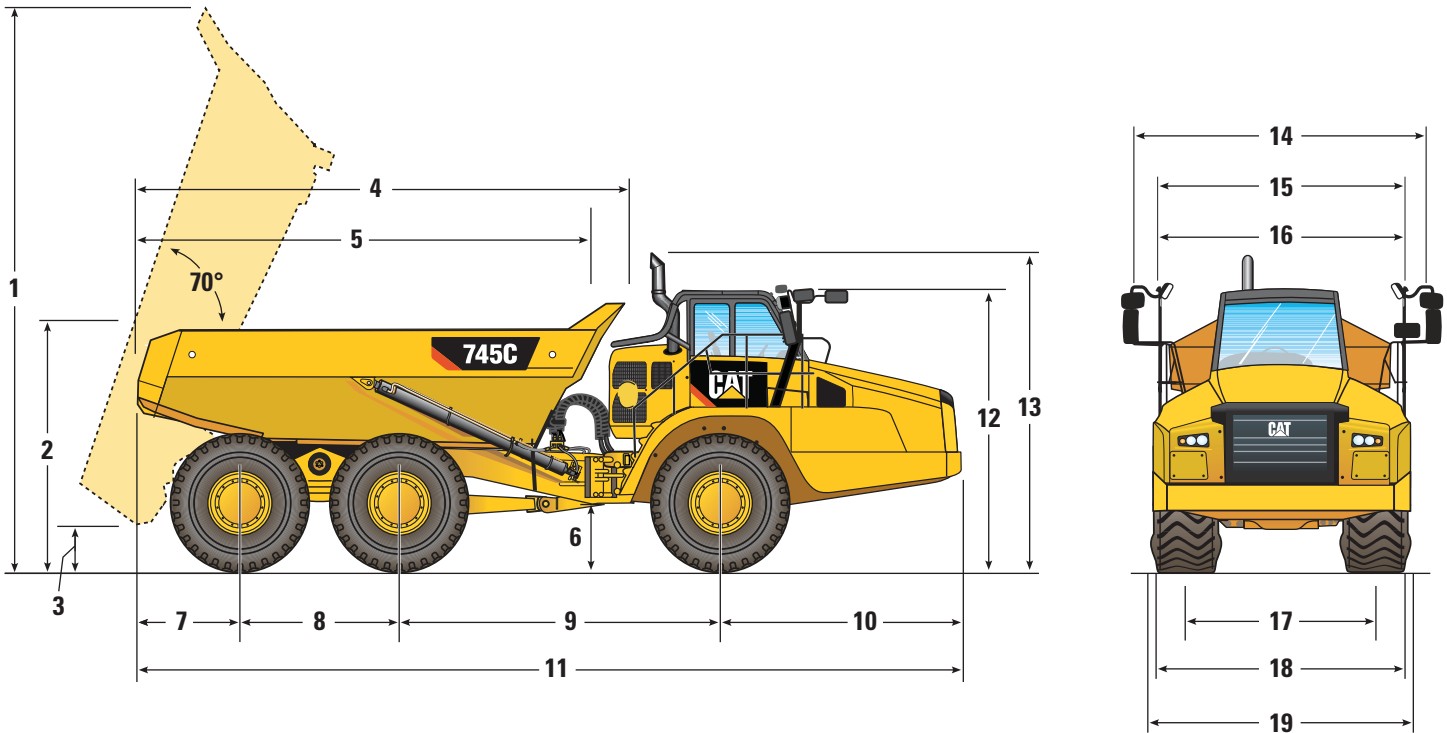
Standards

Brakes	ISO 3450 – 2011
Cab/FOPS	ISO 3449 Level II – 2005
Cab/ROPS	ISO 3471 – 2008
Steering	ISO 5010 – 2007

745C Articulated Truck Specifications

Dimensions

All dimensions are approximate.



	mm	ft/in		mm	ft/in
1	7302	22'11"	11 *	11 429	37'5"
2	3165	10'4"	**	11 555	37'10"
3	772	2'6"	12	3746	12'3"
4	6447	21'1"	13	4041	13'3"
5	5889	19'3"	14	4166	13'8"
6	579	1'10"	15 ***	3422	11'2"
7	1458	4'9"	16 ****	3774	12'4"
8	1966	6'5"	17 †	2687	8'9"
9	4590	15'0"	18 ††	3370	11'0"
10	3415	11'2"	19 †††	3530	11'6"

- * OAL
- ** OAL with Tailgate
- *** Body Width
- **** With Tailgate
- † Track Width
- †† Over Fenders
- ††† Over Tire Bulge

Unladen dimensions with 29.5R25 standard tires.

745C Articulated Truck Specifications

Turning Circle

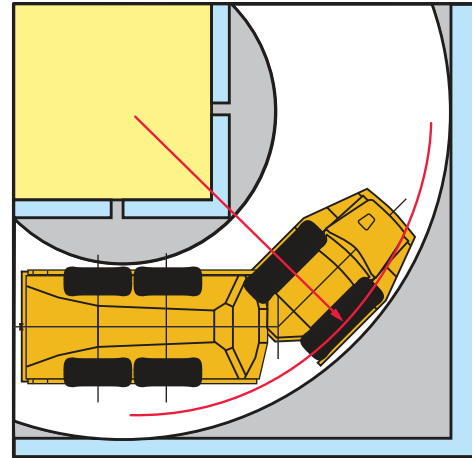
Dimensions are for machines equipped with 29.5R25 tires.

Turning dimensions

Steer Angle – left/right	45°	
SAE Turning Radius	8624 mm	340 in
Clearance Radius	9082 mm	358 in
Inside Radius	4413 mm	174 in
Aisle Width	5961 mm	235 in

Steering

Lock to Lock 4.8 seconds @ 60 rpm



Optimal Loader/Truck Pass Matching

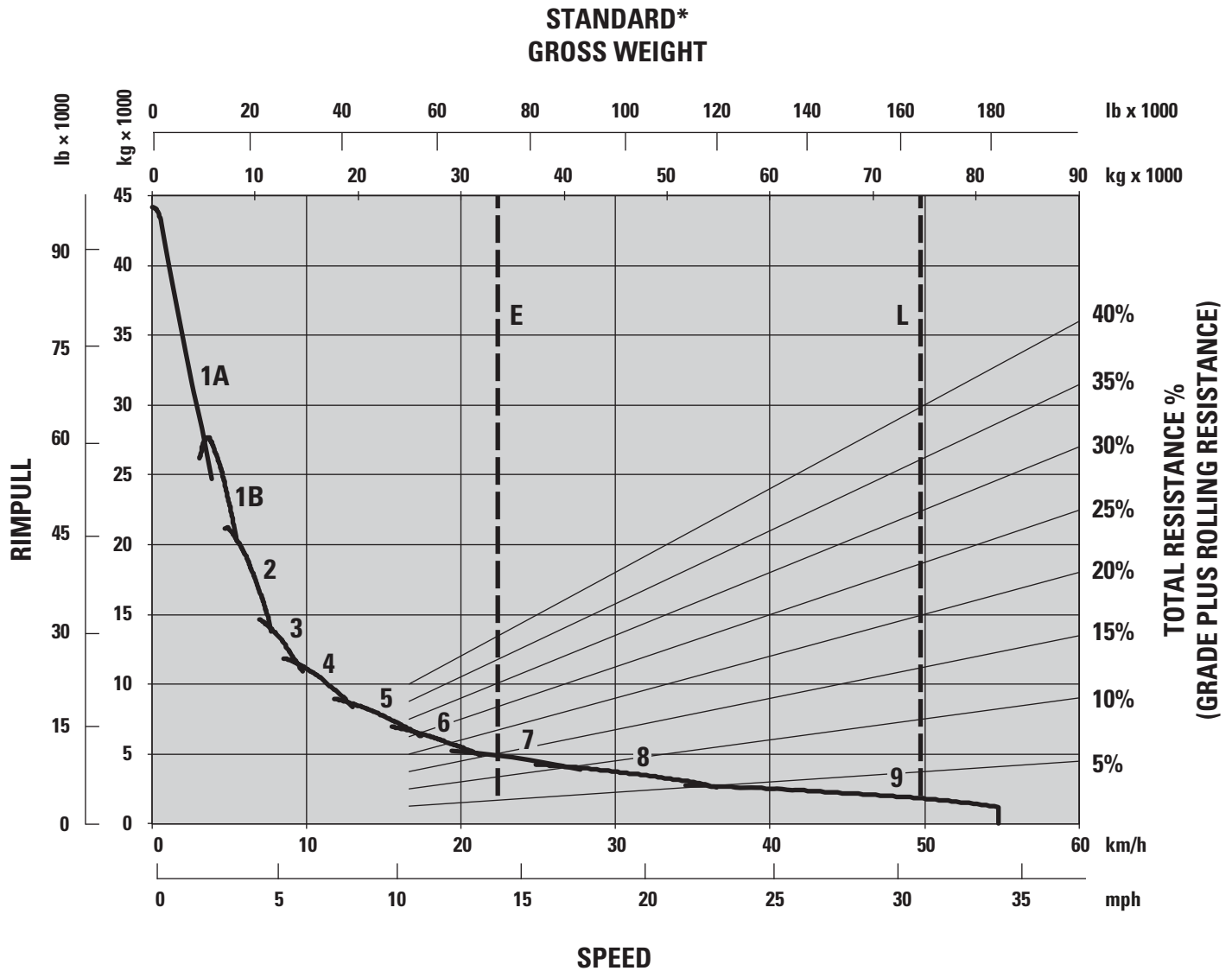
Hydraulic Excavators	390F	374F	349E	
Passes	3-4	4-5	5-6	
Wheel Loaders	988K	980M	972M	966M
Passes	4	5	5-6	6

An optimum system match gives you a major productivity advantage. The 745C is an excellent match for the Cat 390F, 374F and 349E Hydraulic Excavators; and Cat 966M, 972M, 980M and 988K Wheel Loaders. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved.

745C Articulated Truck Specifications

Gradeability/Speed/Rimpull

To determine performance, read from Gross Weight down to % Total Resistance. Total Resistance equals actual % grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Usable Rimpull depends on traction available.



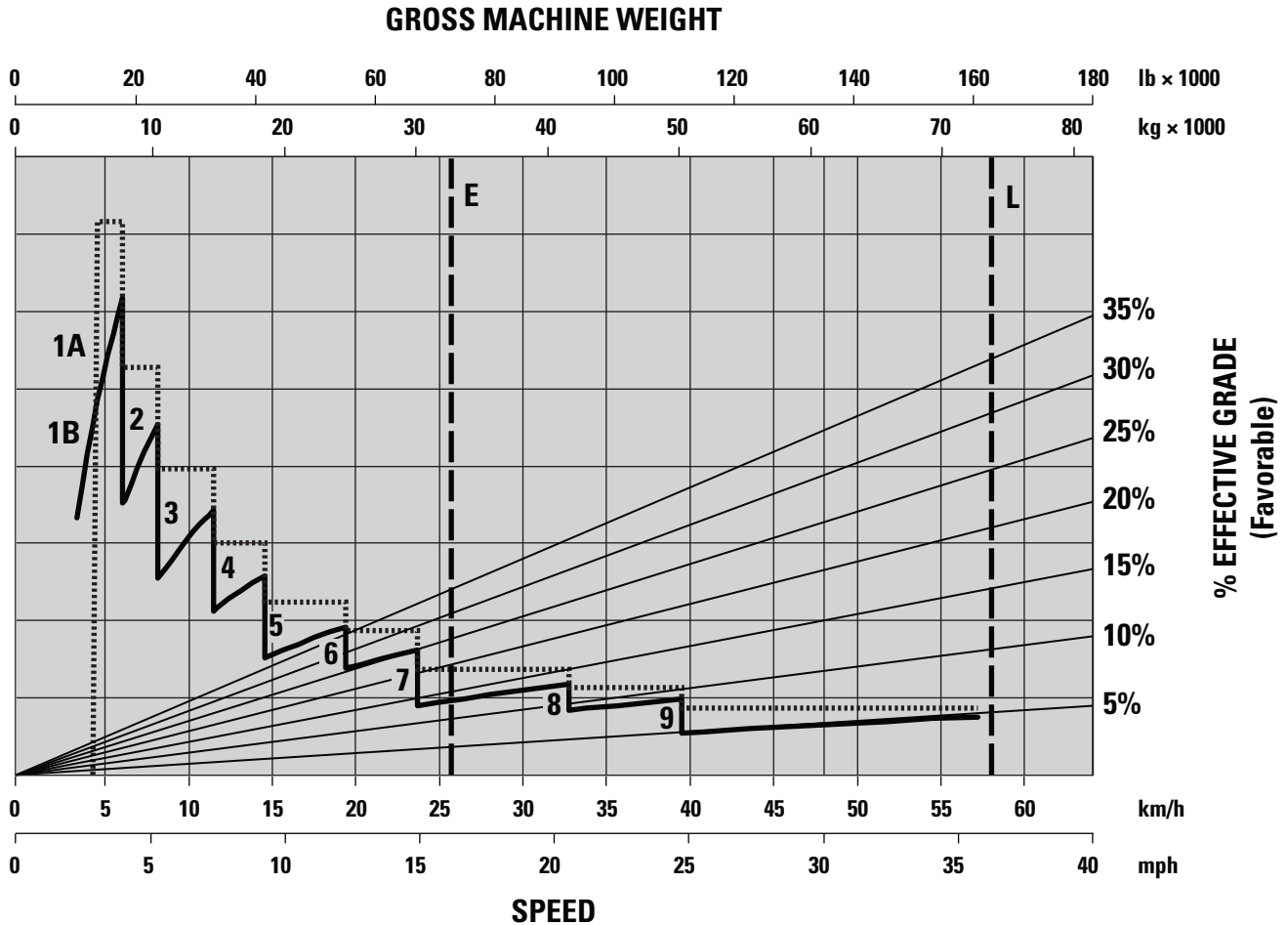
- 1A – 1st Gear (Converter Drive)
- 1B – 1st Gear (Direct Drive)
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear
- 7 – 7th Gear
- 8 – 8th Gear
- 9 – 9th Gear

- E – Empty 32 870 kg (72,466 lb)
- L – Loaded 73 870 kg (162,855 lb)
- * at sea level

745C Articulated Truck Specifications

Retarding Performance

To determine performance, read from Gross Weight down to % Effective Grade. Effective Grade equals actual % favorable grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Retarding effect on these curves represents full application of the retarder.



- 1A – 1st Gear (Converter Drive)
- 1B – 1st Gear (Direct Drive)
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear
- 7 – 7th Gear
- 8 – 8th Gear
- 9 – 9th Gear

- E – Empty 32 870 kg (72,466 lb)
- L – Loaded 73 870 kg (162,855 lb)
- * at sea level

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

- Air conditioning with R134A refrigerant
- Adjustable air vents
- Auto shift nine-speed forward and two reverse transmission
- Reverse alarm
- Cat C18 ACERT engine
- Cat rearview camera
- Color Multi-Purpose Display (CMPD) incorporating the rearview camera feed
- Differentials: standard with automatic clutched inter and cross-axle differential locks
- Dual circuit oil immersed, enclosed brakes – all wheels
- Electrical system: 24 volt, 5A 24- to 12-volt converter
- Electro hydraulic hoist control
- Glass windows: laminated and tinted-front toughened and tinted-sides and rear
- Guards: rear window, radiator, crankcase and axle
- Heater and defroster with four-speed fan
- Horn: electric
- Lights: cab interior, front, width marker, side, rear, two reversing/work light, two stop/tail lights, front and rear direction indicators
- Mirrors: Extensive arrangement for improved visibility
- Mud flaps: wheel arch and body mounted with transportation tiebacks
- Product Link: PL321 or PL522 dependent on location and licensing agreement
- Retarder: engine compression brake
- ROPS/FOPS cab, machine operation monitoring system includes:
 - Action lamp, engine oil pressure, primary steering system, left turn signal, high beam, coolant temperature, tachometer, parking brake, fuel level, right turn signal, transmission oil temperature, brake system, transmission hold, hoist control, hydraulic system, charging system, retarder, transmission fault, traction control system, check engine lamp
- Liquid Crystal Display (LCD)
 - Alert indicator, selected gear and direction, speed or auto shift, review Operation and Maintenance Manual (OMM), primary steering failure, seat belt warning, secondary steering failure, Machine Security System (MSS), secondary steering energy source engaged, hour meter and retarder active
- Seat, fully adjustable, air suspension
- Seat, padded companion/trainer
- Secondary steering – electro hydraulic
- S·O·S sampling valves
- Spill guard, front, integral part of fabricated body
- Starting receptacle, electric, remote
- Storage: cup holder, flask receptacle, under seat storage, door pocket, behind seat storage, coat hook.
- Sun visor
- Three axle, six-wheel drive
- Tilt and telescopic steering wheel
- Tires, six 29.5R25, radial
- Two seat belts, operator's retractable
- Vandalism protection: lockable caps for fuel tank and hydraulic oil tank
- Windows opening side, tinted
- Windshield wiper and washer, two speed, intermittent (front)
- Windshield wiper and washer, two speed (rear)

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Auto lube installation for automatic greasing of bearings
- Body liners
- Bluetooth radio stereo system.
- Cold weather coolant -51°C (-60°F)
- Cold weather start attachment
- Engine block heater
- Ether start
- Exhaust heated body
- Fast fuel fill
- Flashing LED beacon
- Fuel additive-anti-waxing
- Heated seat
- Heated rearview motorized mirrors
- Machine Security System (MSS)
- Product Link: PL321, PL522, VIMS™ Cellular, VIMS Satellite (where available)
- Roof mounted High Intensity Discharge (HID) work lights
- Scissor tailgate
- 875/65 R29 wide tires
- Cat production measurement payload monitoring system

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

AEHQ7394-01 (02-2015)
Replaces AEHQ7394

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