

IMPACT CRUSHER R₃

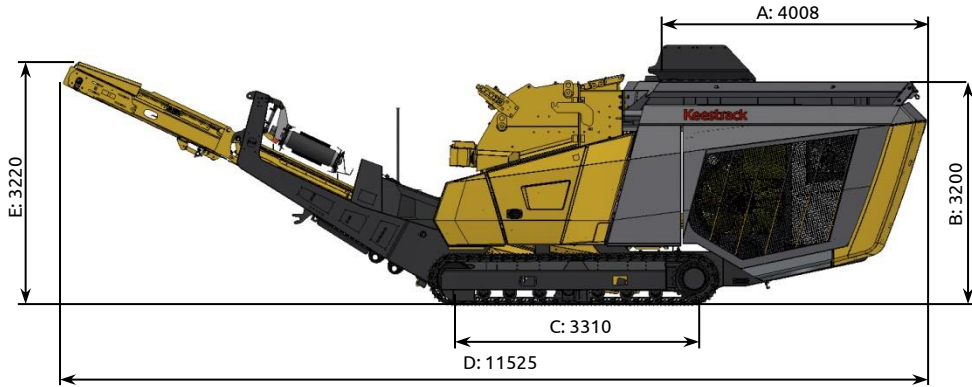


IMPACT CRUSHERS

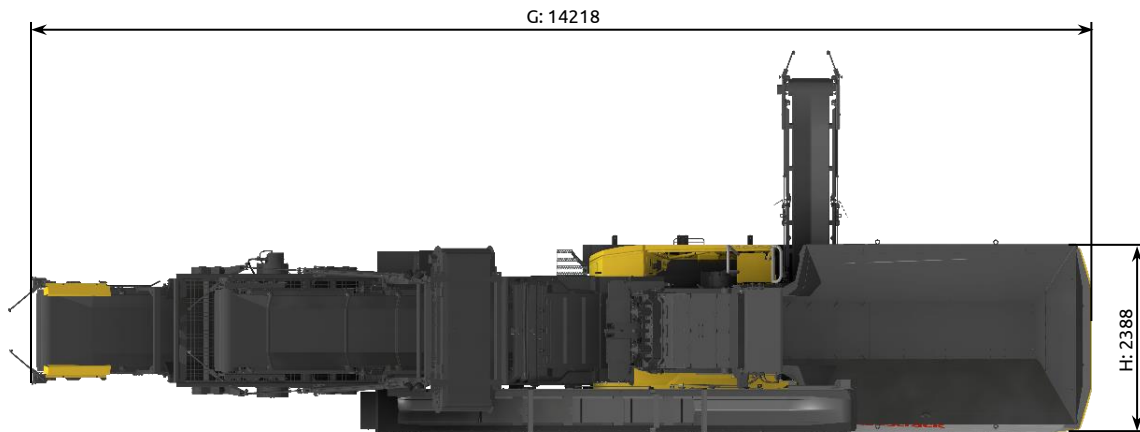


DIMENSIONS

WITHOUT SCREEN:



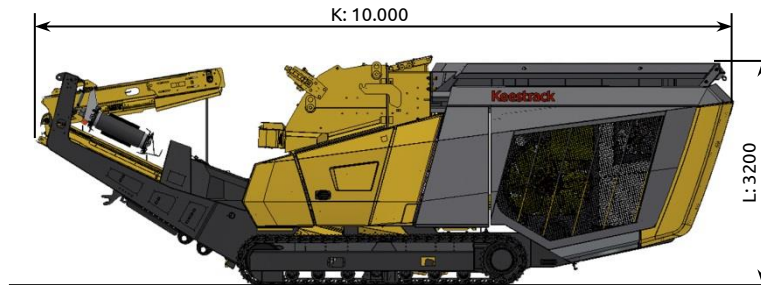
WITH SCREEN:



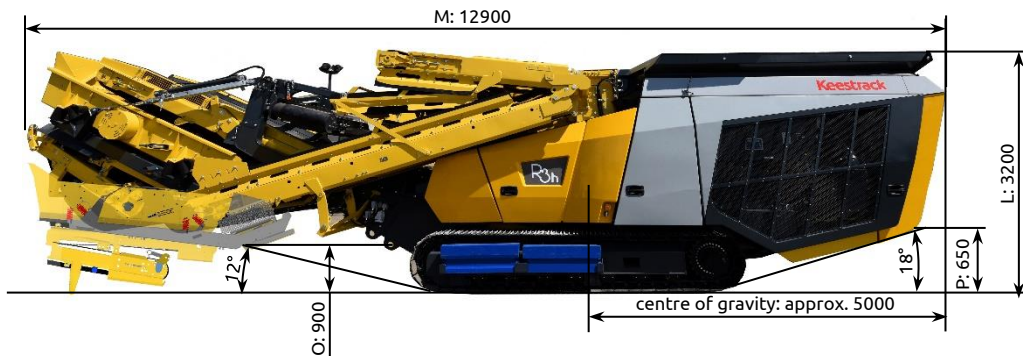
IMPACT CRUSHERS

TRANSPORT DIMENSIONS

TRANSPORT WITHOUT SCREEN:



TRANSPORT WITH SCREEN:



Weight: approx. 24,4 t (without options)

Weight options:	
Magnetic separator Fe	1.070 kg
After screen with RUB	3.700 kg
Oversize stockpile conveyor	860 kg
Milling beam	830 kg
Conveyor pre-screening	730 kg
Air knife	100 kg

Transport width 2.540 mm (8'4")

REMARK: All pictures might show options, not included in the scope of supply

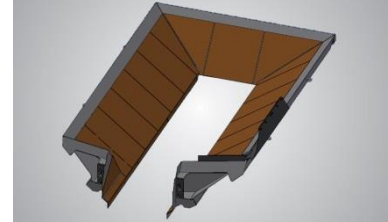
A	B	C	D	E	F	G	H	I	J
4008	3200	3310	11525	3220	3126	14218	2388	4760	2715
13'1"	10'6"	10'10"	37'10"	10'6"	10'3"	46'8"	7'8"	15'7"	8'11"
K	L	M	N	O	P				
10000	3200	12900	3100	900	650				
32'10"	10'6"	42'4"	10'2"	2'3"	2'2"				

IMPACT CRUSHERS

TECHNICAL SPECIFICATION

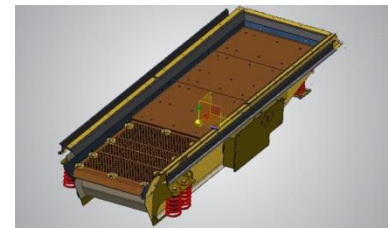
1) FEED HOPPER

- Type	49 FEH 100	
- Content	3,5 m ³	(4,5 yard ³)
- Design	Wear resistant steel HB 450 with welded wear lining HB 450 or 500 (bottom); s=4 mm	
- Feeding height	3.200 mm	(10'6")
- Feeding width	2.400 mm	(7'10")
- Feeding length	3.450 mm right side; 2.750 left side	(11'3"; 9'0")



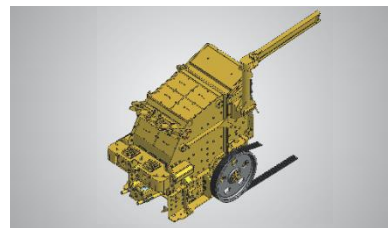
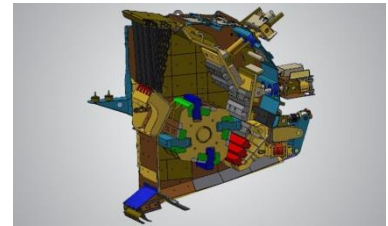
2) VIBRATING FEEDER with punched plate for pre-screen

- Type	49 FED 100-H	
- Total length	3.700 mm	(12'2")
- Width	920 mm	(3'0")
- Length pre-screen	1.200 mm (bolted from top side)	(3'11")
- Punched plate	Openings 15 up to 70 mm; hex. or Z-shaped aperture; (Blind plate p/n 689567)	(1"-3")
- Drive	Hydro motor 7,5 kW – Tooth belt; 800 – 1.050 R.P.M.	(10 hp)



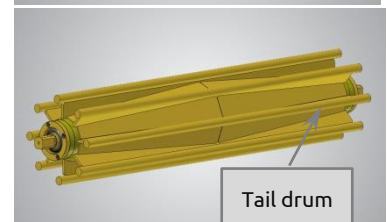
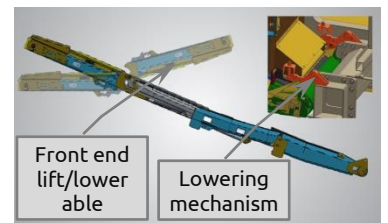
3) IMPACT CRUSHER

- Type	49 ICR 100-00 (housing made of HB 450)	
- Inlet opening	770 x 960 mm (H x W)	(2'6"x3'2")
- Weight impact crusher	approx. 8.450 kg (without milling beam)	
- Rotor width	920 mm	(3'0")
- Rotor diameter	1.100 mm	(3'8")
- Drive	Direct via elastic coupling, transmission gear, Turbo clutch and V-belts	
- Blow bars	2 pcs. each 240 kg + 2 pcs. each 189 kg	
- Rotor speed	591 R.P.M. (32,8 m/s @ 1.500 R.P.M.) up to 788 R.P.M. (43,7 m/s @ 2.000 R.P.M.)	
- Pulley diameter	Rotor 825 mm; engine 335 mm	
- Weight rotor	approx. 3.200 kg (without bearings)	
- Throughput capacity	60 up to 250 t/h	
- Impact aprons	2 pcs. (milling beam optionally possible)	
- Gap upper apron	(new tools) 10 / 270 mm; Dodging max. 380 mm	
- Gap lower apron	(new tools) -50 / 180 mm; Dodging max. 180 mm	
- OPTION (without hoist)	Swivelling arm for hoist; p/n 648200	



4) MAIN BELT CONVEYOR

- Type	49 MPC 100-00-H (KT-Flex)	
- Discharge height	3.220 mm	(10'6")
- Stockpile volume	approx. 85 t; $\gamma=1,7$; 37° angle of repose	
- Length AD	8.100 mm	(26'7")
- Width BW	1.000 mm	(3'3")
- Belt speed - inclination	1,6 m/s - 25°	
- Drive	Hydraulic motor 15 kW	(20 hp)
- Tail drum	Rod drum for avoiding material jamming with inside maintenance free bearings	
- Rubber belt quality	KT-Flex 630/1 6+3 RS	
- Service	Lower able mechanically to change the belt Front end hydraulically lift- and lower able	



IMPACT CRUSHERS

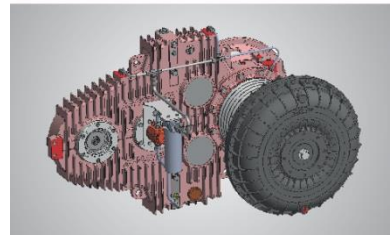
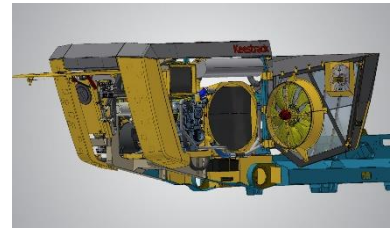
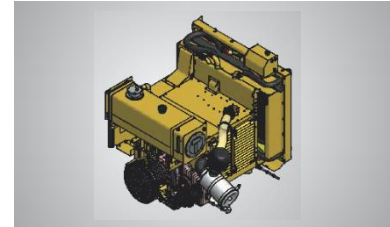
TECHNICAL SPECIFICATION

5) ENGINE UNIT

EU = Europe / US = United States
REM = ROW - Rest of World (except China and India)

Legend:
(a) = actual; (s) = standard; (o) = optional

- Type	49 ENU-100-00H; Diesel / Hydraulic	
- Diesel Motor, Type	a) VOLVO TAD 754 GE (EU) - (a); (REM) - (a) b) VOLVO TAD 873 VE (US) - (a) c) CUMMINS B 6.7 (EU + US) - (s) d) CUMMINS B 6.7 (REM) - (s)	p/n 103014 p/n 101372AC p/n P000032 p/n
- Emission control	a) Tier 3; EU STAGE IIIA; DOC b) Tier 4f; EU STAGE IV; DOC c) Tier 4f; EU Stage V; DOC / SCR / DPF d) Tier 3; EU STAGE IIIA	
- Power ISO 14396	a) 260 kW @ 1.800 R.P.M.; b) 235 kW @ 1.800 R.P.M. (354 / 320 hp) c) 202 kW @ 1.500 R.P.M.; 222 kW @ 1.800 R.P.M. (275 / 302 hp) d) 202 kW @ 1.500 R.P.M.; 222 kW @ 1.800 R.P.M. (275 / 302 hp)	
- Max. torque	a) 1.596 Nm @ 1.500 R.P.M. b) 1.310 Nm @ 1.400 R.P.M. c + d) 1.288 Nm @ 1.500 R.P.M.	(1.177 lb ft) (966 lb ft) (950 lb ft)
- Motor revolution	1.500 R.P.M. up to 2.000 R.P.M.	
- Bore hole / stroke	a) 108 x 130 mm; b) 110 x 135 mm; c + d) 107 x 124 mm	
- Combustion chamber	a) 7.150 cm ³ ; b) 7.700 cm ³ ; c + d) 6.700 cm ³	(409 – 469 cuin)
- Diesel consumption	a) 218 g/kWh, typical 22 - 25 l/h **)	
- Voltage	24 Volt (for improved cold start properties)	
- Cooling	Combi cooler (water, air) with fan ø 1.100 mm, max. 1.300 R.P.M. for low noise emission (100 LWA@1.000 R.P.M.); can be cleaned from both sides; fan can be swivelled out Separate cooler for hydraulic; (for cleaning purpose fold-out easily; fan can be swivelled out with fan ø 550 mm, max. 2.300 R.P.M.	
- Fuel	Tank 400 Litres stainless steel; acc. to EN 590	(105 gal)
- Air filter	Cyclone pre-filter + dual stage fine filter	
- Drive crusher	Engine → power transmission gear → Turbo clutch → V-belt drive for crusher direct drive	
- Power transmission	Flange with elastic clutch for damping engine vibrations; Flange for hydraulic pump 45 kW (track drive i=1:1,2); Switchable toothed clutch (for emergency and service only), V-belt pulley and Turbo clutch; Pump with oil filter for lubrication of gear	
- Oil tank	75 Litres	(20 gal)
- Hydraulic drives	LOAD SENSE pump 130 ccm with PVG + gear pump 35 ccm	



ATTENTION

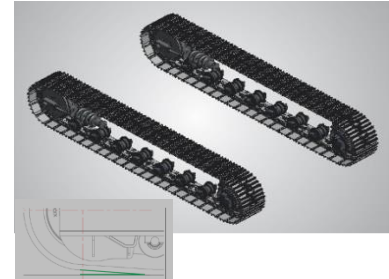
Engine warranty expires in case non genuine Keestrack filters are used!

With „Load sensing“ hydraulic pumps, the fuel consumption is reduced by ca. 20-25%, compared to standard gear pump and flow divider hydraulic systems.

TECHNICAL SPECIFICATION

6) TRACK - UNIT

- Type	49 TRA 100-00	
- Length	3.310 mm (drive and take-up pinion raised)	(10'10")
- Width track shoe	400 mm	(1'4")
- Total width	2.300 mm	(7'7")
- 2 speeds	1,1 km/h and 2 km/h	(0,7/1,2 mph)
- Drive	Hydraulic piston pump and planetary gears	



7) CONTROL

- Type	PLC – IP 67; dust and vibration proof
- Display	LCD screen 7"
- Operation	Control panel with Key pad, 12 buttons
- Controller	Wired hand remote controller; or optional Radio remote controller (see option list)
- Temperature control of hydraulic oil	> 83° C protection; first feeder stops, later engine stops
- Diesel fuel tank level sensor	First low level warning, then feeder stops, then engine stops
- Cold start protection	Below 0° C a warm-up is required
- Speed sensor for rotor	Included



TECHNICAL SPECIFICATION - OPTIONS

8) DUST SUPPRESSION SYSTEM p/n X108633

- Type	49 WAS 1000-H
- Spraying area	Crusher inlet and outlet, MPC, FCO, RSC
- Drive	Hydraulic motor 1,1 kW
- Water consumption	max. 0,75 m ³ /h
- Filter	5/4"
- Weight	31 kg

Water pump

(1,5 hp)

(68 lb)

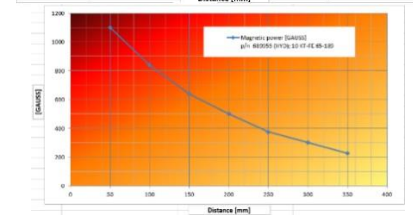
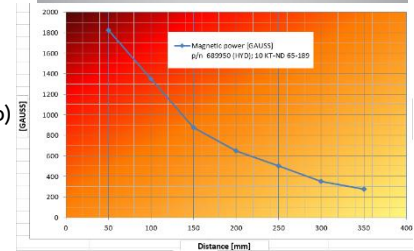
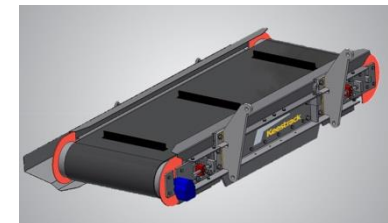


9) NEODYM MAGNETIC SEPARATOR p/n X115488 (or FERRIT p/n X115487)

- Type	ND: MAGNET OVERBAND 10 KT-ND 65-183, HYD FE: MAGNET OVERBAND 10 KT-FE 65-183, HYD
- Belt width	700 mm
- Belt length (AD)	1.830 mm
- Magnet L x W	1.070 x 600 x 215 mm
- Magnetic power	650 (500) GAUSS at 200 mm
- Drive	Hydraulic motor 4 kW
- Speed	2,0 m/s
- Lift able and lower able	Hydraulic 150 up to 345 mm
- Weight	ND: 890 kg; FE: 1.070 kg
- Belt	Endless rubber belt KT Flex 400/1; 4+2,5; Grade RS; cleats vulcanized T 35 (40) mm
- Bearings	Inside arranged bearings at drive and take up drum to avoid hanging-in of tramp iron. Bearings are lubricated for life time (50.000 hours); so no more lubrication is necessary; double sealing with radial ring and V-ring
- Frame and cladding	Made of stainless steel to avoid reduction of magnetic forces

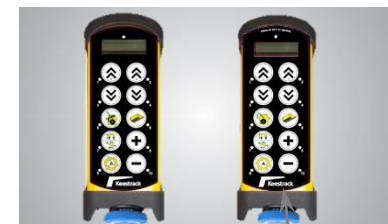
(5,5 hp)

(1.962/2.360 lb)



10) RADIO REMOTE CONTROL – Level 2

- Order no.	Remote 100921 (433 MHz for Europe); 101694 (915 MHz for Indonesia, China, USA) Sticker 100357 (option: 205665 Inlet opening up / down)
- Functions	- Tracks forwards / backwards; fast /slow - Upper apron up / down (option 205665: Inlet opening up / down) - Vibrating feeder start / stop and + / - proportional - Magnetic separator up / down - MPC start / stop and + / - (only R3h) - Automatic start / stop - Machine stop button (blue) - Display

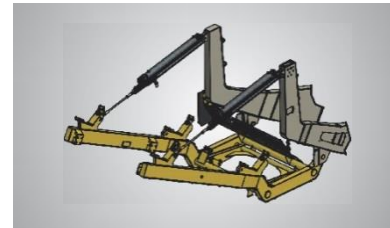
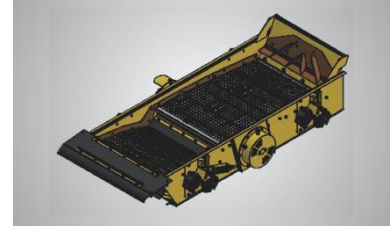


option:
p/n 205665

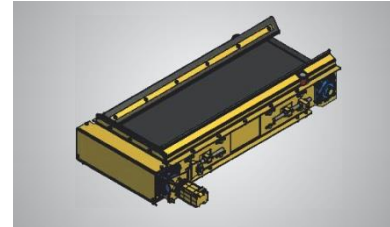
TECHNICAL SPECIFICATION - OPTIONS

11) BUILT ON SINGLE DECK SCREEN with OSR, RUB, FCO p/n 649691

SCREENBOX	49 SCR 100-00 (p/n X105295)	
- Width	1.400 mm	(3'11")
- Length	3.100 mm (without feeding tray)	(9'2")
- Drive	Hydraulic 7,5 kW	(10 hp)
- Tensioning system	2 screen nets, mechanically tensioned	
- p/n 649700	Frame for secondary screening unit	



OVERSIZE CONVEYOR	49 OSR 100-00-H (p/n X115653)	
- Length AD	1.500 mm	(4'11")
- Width BW	500 mm	(1'8")
- Drive	Hydraulic motor 4 kW	(5 hp)



RECYCLING CONVEYOR	49 RUB 100-00-H (p/n X115671)	
- Length AD	6.500 mm	(21'4")
- Width BW	500 mm	(1'8")
- Belt speed	Adjustable; standard 1,15 m/s	
- Drive	Hydraulic motor 5,5 kW	(7,5 hp)
- Rubber belt	Steep inclination belt (Chevron)	
- For transport	Hydraulically fold-able	

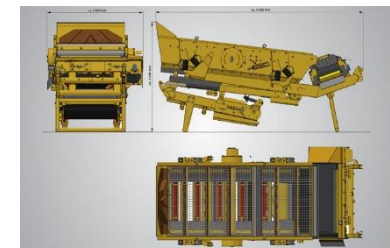


FINES CONVEYOR	49 FCO 100-00-H (p/n X115619)	
- Length AD	4.200 mm	(13'9")
- Width BW	1.000 mm	(3'3")
- Discharge height	3.100 mm	(10'2")
- Belt speed	1,6 m/s	
- Inclination	25°	
- Drive	Hydraulic motor 7,5 kW	(10 hp)
- Stockpile volume	Approx. 70 t (y=1,7; 37°)	
- For transport / service	Hydraulically fold-able	



12) SEPARATE TRANSPORT FOR AFTERSCREEN

- Length	4.300 mm	(14'1")
- Width	2.000 mm	(6'7")
- Height	2.200 mm	(7'3")
- Weight	2.900 kg	(6.393 lb)



IMPACT CRUSHERS

TECHNICAL SPECIFICATION - OPTIONS

13) OVERSIZE STOCKPILE CONVEYOR RIGHT SIDE p/n X115615

- Type	49 RSF-100-00H	
- Length AD	4.400 mm	(14'5")
- Width BW	500 mm	(1'8")
- Discharge height	2.520 mm	(8'3")
- Belt speed	1,5 m/s	
- Inclination	21°	
- Drive	Hydraulic motor 4 kW	(5,5 hp)
- Stockpile volume	Approx. 50 t (y=1,7; 37°)	
- Weight	860 kg	(1.900 lb)
- For transport	disassembled	



14) PRE-SCREENING STOCKPILE CONVEYOR RIGHT SIDE p/n X115531

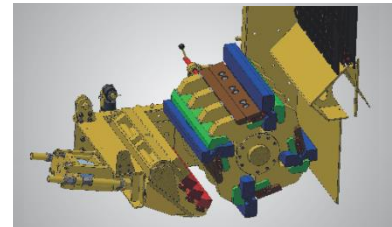
- Type	49 RSC 100-00-H	
- Length AD	3.900 mm	(12'10")
- Width BW	500 mm	(1'8")
- Discharge height	2.715 mm	(8'11")
- Belt speed	1,5 m/s	
- Inclination	22°	
- Drive	Hydraulic motor 5,5 kW	(7,5 hp)
- Stockpile volume	Approx. 55 t (y=1,7; 37°)	
- For transport	hydraulically fold-able	
- p/n 649995	chute for RSC	



15) MILLING BEAM p/n X106748

- Type	49 ICR 100-10-00	
- Application	For increasing fine material percentage and reducing oversize percentage	
- Design	3 rows of inserted liners and one screwed plate; with special spring pre-stressed	
- Horizontal setting	Mechanically via distance pieces (3 x 25 mm)	(3x1")
- Swivelling setting	Mechanically via spindles	
- Upper gap	Max. 50 mm with new blow bars and liners	(2")
- Lower gap	Max. 50 mm with new blow bars and liners	(2")

- Remark *For crushing of reinforced material, the milling beam has to be disassembled*



TECHNICAL SPECIFICATION - OPTIONS

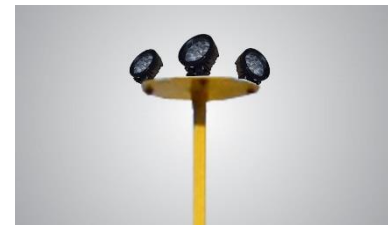
16) PRE-SCREEN

- Punched plates
 - p/n 679010: aperture 38 mm HEXAGONAL
 - p/n 689581: aperture 40 mm HEXAGONAL
 - p/n 689577: aperture 45 mm HEXAGONAL
 - p/n 689569: aperture 55 mm HEXAGONAL
 - p/n 689578: aperture 70 mm HEXAGONAL
 - p/n X111293: aperture 10 mm Z-shaped
 - p/n 689566: aperture 15 mm Z-shaped
 - p/n 699960: aperture 20 mm Z-shaped
 - p/n 689568: aperture 25 mm Z-shaped
 - p/n 689576: aperture 30 mm Z-shaped
 - p/n X103959: aperture 40 mm Z-shaped
 - p/n 689567: blind plate
- Pre-screen plate; HB 450
 - p/n X103959: aperture 40 mm ZIG-ZAG



17) WORKING LIGHTS

- Tower with 4 lamps
 - p/n 701006
 - LED lights 12/24 V; 45 W
 - each lamp: 9 pcs. LED's (p/n 205147)
 - 4500 Lumen
- protection degree
 - IP69K
- Weight
 - 9 kg
 - (20 lb)



18) FUEL FILLING PUMP p/n 701030

- with automatic stop
 - p/n 701030
- Weight
 - 10 kg
 - (22 lb)
- Model
 - F 80-24-1"
- Capacity
 - 80 l/min
- Filter
 - 3 micron with water absorbant media
- Suction hose
 - ¾" 1,5 m long
- Drive
 - On board-electric 24 V DC




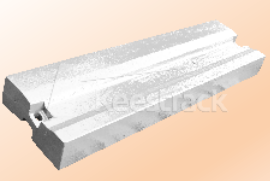

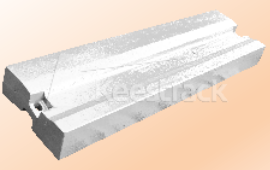





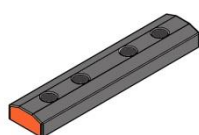
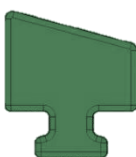
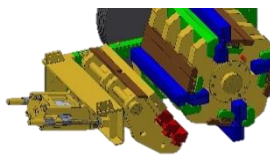
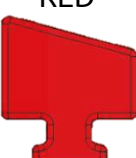
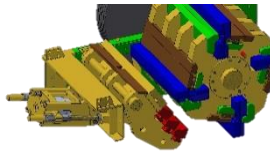
19) CENTRAL GREASING SYSTEM incl. AFTERSCREEN p/n 102946

- Cycle time
 - Adjustable
- Drive
 - On board electric, 24 V DC
- Weight
 - 6 kg
 - (13 lb)



TECHNICAL SPECIFICATION - OPTIONS

20) BLOW BARS AND APRON LINER

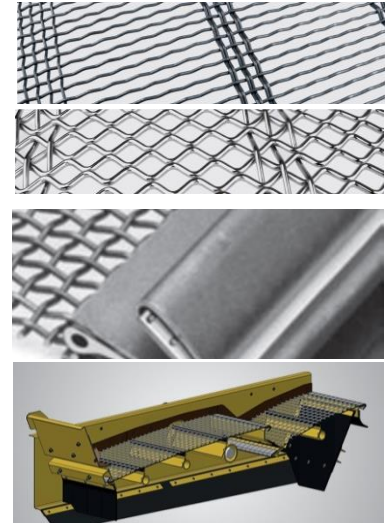
p/n	Material	Colour	Ca. Hardness [HRC] *	Weight [kg/pcs.]**	Applications	Picture
X114977W	Martensitic + Master ceramic 940 x 320 mm (Inlay extra high)	WHITE 	54 - 58	240	Feed size < 500 mm; concrete with medium reinforcements of steel	
X114978W	Martensitic + Ceramic inlay 940 x 280 mm	WHITE 	54 - 58	200	Feed size < 500 mm; concrete with medium reinforcements of steel	
X116366	High Chrome + ceramic	RED 	60 - 65	240	Asphalt, secondary crushing, feed size < 150 mm	
100873	Apron liner High Manganese Mn20Cr3	GREEN 		109	Concrete with reinforcement	
101438	Apron liner Medium Chrome	ORANGE 	55 - 60	109	Asphalt, secondary crushing, feed size < 150 mm	
103532	3. Impact panel (milling beam liner) Mangan 18	GREEN 		68		
102890	3. Impact panel (milling beam) High Chrome 27	RED 		68	without reinforcement	

TECHNICAL SPECIFICATION - OPTIONS

21) SCREEN NETS for BUILT ON SINGLE DECK SCREEN

WOVEN WIRE MESH

p/n	Description
	4 x 200 x 1,2 mm
	10 x 200 x 2.5 mm
	10 x 200 x 3 mm
202971	10 x 10 x 3 mm
	15 x 15 x 3 mm
	18 x 18 x 4 mm
	20 x 20 x 4 mm
202971	22 x 22 x 4 mm
	25 x 25 x 5 mm
	30 x 30 x 5 mm
	32 x 32 x 6 mm
	35 x 35 x 7 mm
	40 x 40 x 8 mm
202973	45 x 45 x 8 mm
	50 x 50 x 8 mm
	55 x 55 x 8 mm
	60 x 60 x 8 mm



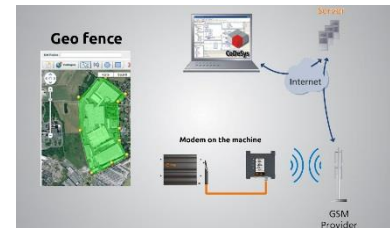
22) UMTS MODEM WITH GPS TRACKING SYSTEM "KEESTRACKER"

(without SIM card) p/n 102971

- Functions
- WEB portal: position of the machine can be displayed on Google Maps; a geo-fence can be generated.

FOR DEALER ONLY:

- Real time access to Diesel engine, parameters of components and alarms.



TRANSFER MACHINE DATA THROUGH KEESTRACKER

The Buyer will not transfer personal data to KEESTRACK. As part of the service, KEESTRACK will receive the following data regarding the machine through "Keestracker", the tracking and controlling system of the machine in question:

- Location data of the machine
- Machine usage data (such as: performance of the engine and other functions)

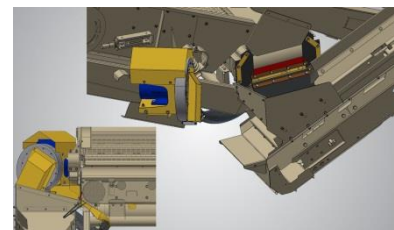
The Buyer acknowledges that this information does not constitute confidential business information of the Buyer. The Buyer provides its explicit consent for this data collection and takes appropriate technical and organizational measures to ensure that natural persons cannot be identified by these mechanical data.

The Buyer explicitly acknowledges that this information is provided free of charge to KEESTRACK for the delivery of services offered by KEESTRACK and to adapt or improve its services and/or products.

23) WINDSIFTING for OVERSIZE FRACTION (AIR KNIFE)

p/n X115634

- Type 49WIS100-00H
- Fan diameter 400 mm (1'4")
- Installed power Hydraulic motor 11 kW; max. 5.910 R.P.M. (15 hp)
- Hoses 2 pieces dia. 114 mm
- Air volume 38 m³/min @ 10.180 Pa
- Weight 92 kg (200 lb)
- Transport whole unit can stay on machine for transport (rubber curtain below nozzle removable by unfixing 1 pin)



IMPACT CRUSHERS

DECLARATION NOISE EMISSIONS

Abteilung Lärmschutz
(A. Pambolzer)



MEASURING POINT	L _{A,eq} (DB) without after screen	L _{A,eq} (DB) with after screen
1	88,6	92,0
2	81,1	86,3
3	73,4	83,1
4	65,9	81,6
5	64,3	82,3
6	69,3	81,5
7	76,8	82,4
8	84,4	87,2
9	81,5	83,8
10	84,4	86,5
11	80,1	83,4
12	75,3	79,8
13	69,4	79,7
14	70,0	79,5
15	73,8	80,1
16	76,5	81,9
Summary L _{pFA} [DB]	80,6	84,4
Summary L _{WA} [DB]	105,7	109,9

IMPACT CRUSHERS

