

# IMPACT CRUSHER R3e

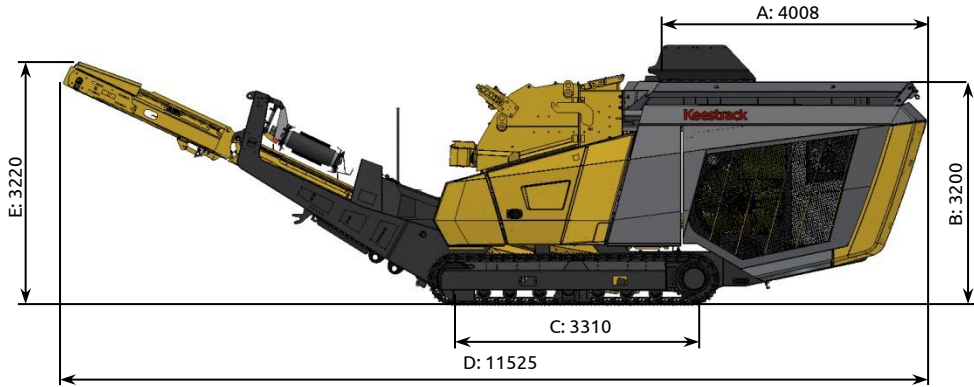


IMPACT CRUSHERS

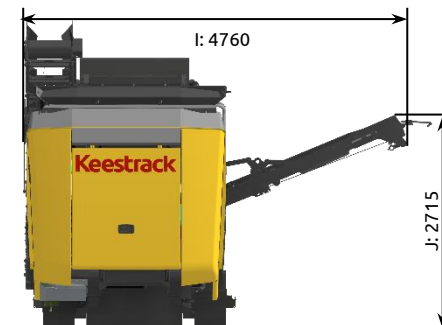
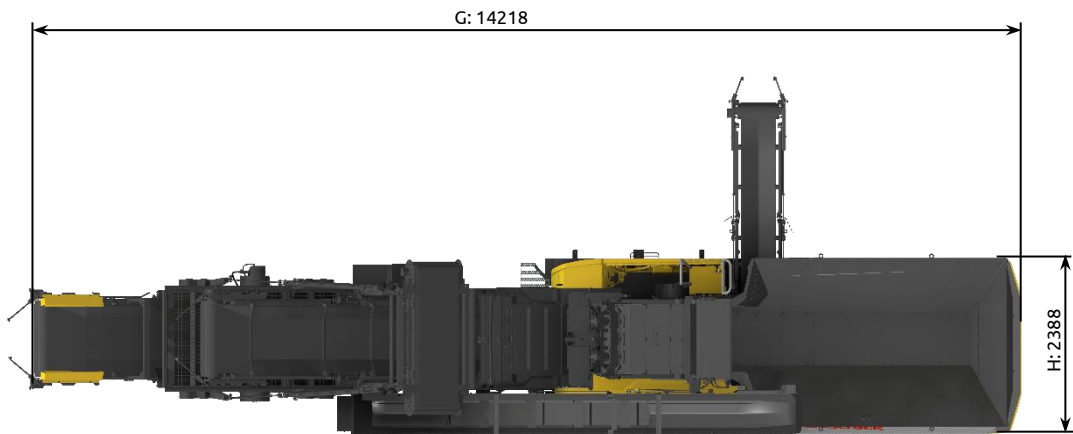


# DIMENSIONS

## WITHOUT SCREEN:



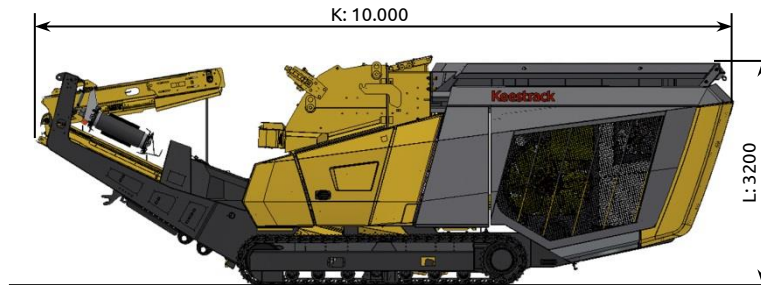
## WITH SCREEN:



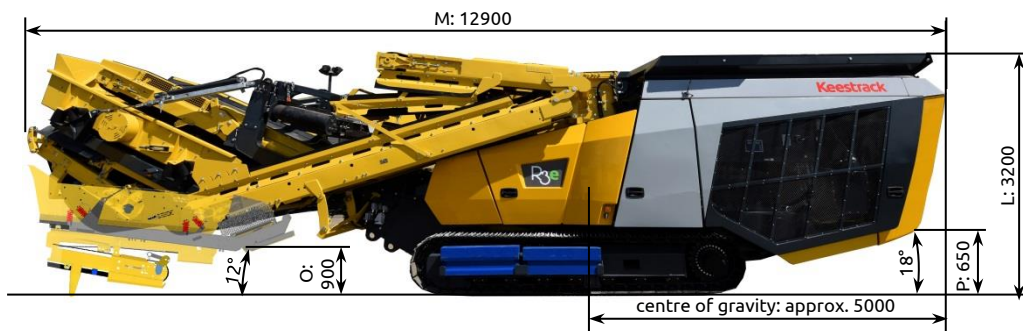
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## TRANSPORT DIMENSIONS

### TRANSPORT WITHOUT SCREEN:



### TRANSPORT WITH SCREEN:



#### Weight: approx. 27,5 t (without options)

Weight options:	
Magnetic separator	1.100 kg
Screen	2.760 kg
Oversize return conveyor	990 kg
Milling beam	830 kg
Conveyor pre-screening	680 kg
Hopper extension	190 kg

Transport width **2.540 mm (8'4")**

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

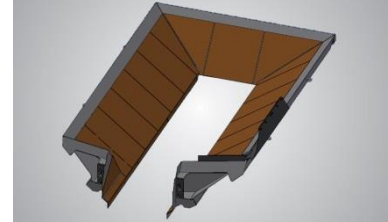
A	B	C	D	E	F	G	H	I	J
4008	3200	3310	11525	3220	3126	14218	2388	4760	2715
13'1"	10'6"	10'10"	37'10"	10'6"	10'3"	46'8"	7'8"	15'7"	8'11"
K	L	M	N	O	P				
10000	3200	12900	3100	900	650				
32'10"	10'6"	42'4"	10'2"	2'3"	2'2"				

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## TECHNICAL SPECIFICATION

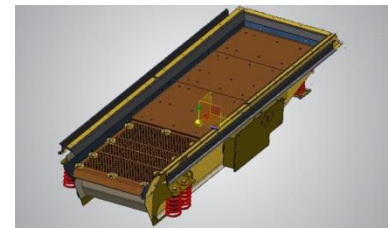
### 1) FEED HOPPER

- Type	49 FEH 100	
- Content	3,5 m <sup>3</sup>	(4,5 yard <sup>3</sup> )
- 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")



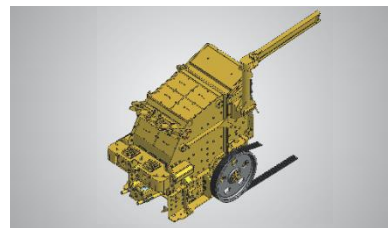
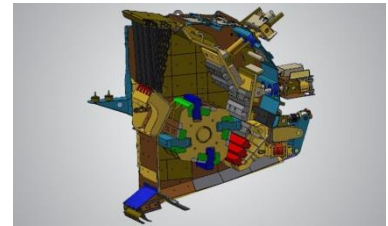
### 2) VIBRATING FEEDER with punched plate for pre-screen

- Type	49 FED 100	
- 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)



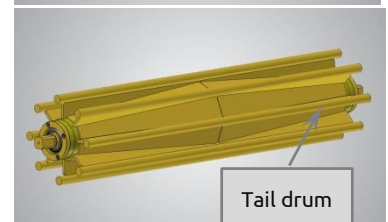
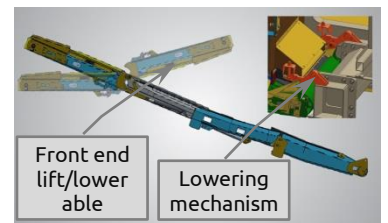
### 3) IMPACT CRUSHER

- 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	Diesel engine, generator, E-motor 160 kW and V-belts	
- Blow bars	2 pcs. each 240 kg + 2 pcs. each 189 kg	
- Rotor speed	ENU 1500 R.P.M.: 551/662 R.P.M. (31,5/37,1 m/s) ENU 1800 R.P.M.: 662/794 R.P.M. (37,1/44,5 m/s)	
- Pulley diameter	Rotor 1.000 mm; motor 375 mm or 450 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-E (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	E-drum motor 11 kW	(15 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	

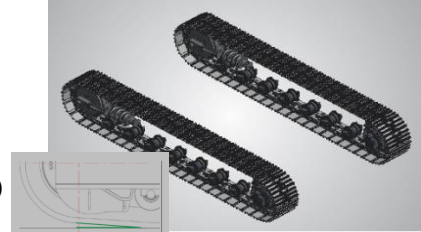


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## TECHNICAL SPECIFICATION

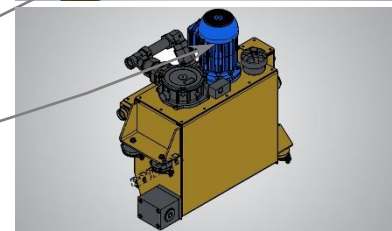
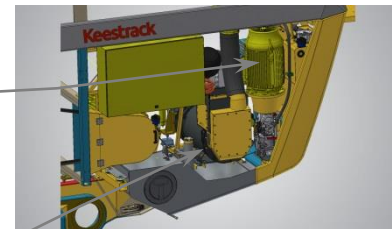
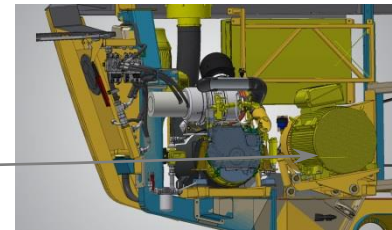
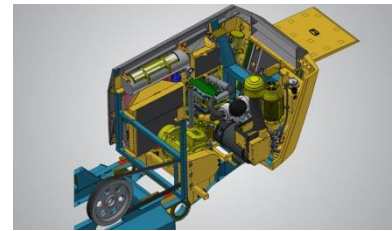
### 5) TRACK - UNIT

- 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	



### 6) ENGINE UNIT

- Type	49 ENU-100-00; Diesel / Electric	
- Diesel Motor, Type	a) VOLVO TAD 873 VE b) VOLVO TAD 754 GE fixed speed;	(p/n 103477) (p/n 103014)
- Emission control	a) Tier 4f; EU STAGE IV; SCR, cooled EGR b) Tier 3 EU STAGE III A	
- Power ISO 14396	a) 235 kW at 1.800 rpm ; b) 260 kW at 1800 rpm	(319/353 hp)
- Max. torque	a) 1.310 Nm at 1.400 R.P.M. b) 1.596 Nm@1.500 rpm	(966; 1177 lbft)
- Motor revolution	1.500 R.P.M. and 1.800 R.P.M.	
- Bore hole / stroke	a) + b) 110 x 135 mm	(4,3" x 5,4")
- Combustion chamber	a) + b) 7.700 cm <sup>3</sup>	(10 yard <sup>3</sup> )
- Diesel consumption	a) + b) 200 g/kWh	
- 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 → alternator → E-motor 160 kW (optionally frequency inverter) → V-belt drive for crusher direct drive	Alternator
- Drive hydraulic	E-motor 45 kW → hydraulic load sense piston pumps for: a) for tracks, VIF, RUB, SCR: 85 cm <sup>3</sup> with PVG 50 b) for fans of coolers: 45 cm <sup>3</sup> c) E-motor 1,5 kW on hydr. tank with gear pump 2,2 cm <sup>3</sup> for lifting of magnet and hydr. foldings	E-motor for crusher E-motor for hydraulic E-motor 1,5 kW on hydr. tank
- Alternator	400 V; 50 or 60 Hz, 300 kVA	
- Oil tank	180 Litres	
- Power plug-in	For drive of the crusher from external power sources (net), a plug-in is foreseen: 3 Phase, 400V; 50 Hz; 300 kVA	Power Lock 5 Lines L1; L2; L3; N; Earth
- Power plug out	For the supply of external machines: Socket 63 A (max. 38 kW), 3 Phase, 400V; 50 Hz	Plug out 63 A



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### ATTENTION

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

**With electric drive, the fuel consumption is reduced by ca. 20-25%, compared to hydraulic systems.**

## TECHNICAL SPECIFICATION

### 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 204726

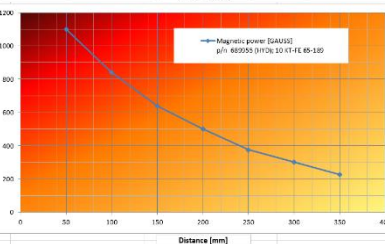
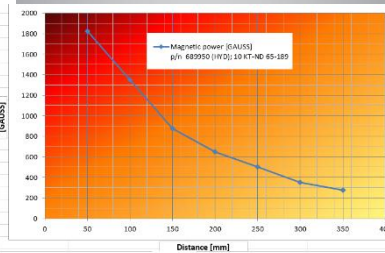
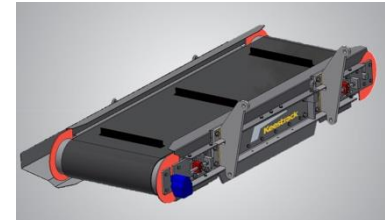
- Type	CA 91 A	
- Drive	E-motor 0,75 kW; 2.900 R.P.M.	(1 hp)
- Water consumption	Max. 0,75 m³/h	
- Spraying areas	Crusher inlet and outlet (optional end of main and fines conveyor)	

p/n 204726



### 9) NEODYM MAGNETIC SEPARATOR p/n X115485 (oder FERRIT p/n X115486)

- Type	ND: MAGNET OVERBAND 10 KT-ND 65-183, ELE FE: MAGNET OVERBAND 10 KT-FE 65-183, ELE	
- 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	E-drum motor 4 kW	(5,5 hp)
- Speed	2 m/s	
- Lift able and lower able	Hydraulic 150 up to 345 mm	
- Weight	ND: 760 kg; FE: 863 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	



### 10) RADIO REMOTE CONTROL – Level 2

- Order no.	Remote 100921 (433 MHz for Europe); 101694 (915 MHz for Indonesia, China, USA)
	Sticker 100357

- Functions	<ul style="list-style-type: none"> <li>- Tracks forwards / backwards proportional with automatic speed control</li> <li>- Upper apron up / down</li> <li>- Belt feeder start / stop and + / - proportional</li> <li>- Magnetic separator up / down</li> <li>- MPC start / stop and + / -</li> <li>- Automatic start / stop</li> <li>- Machine stop button (blue)</li> <li>- Display</li> </ul>
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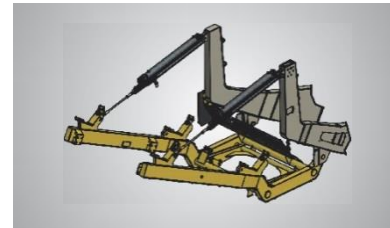
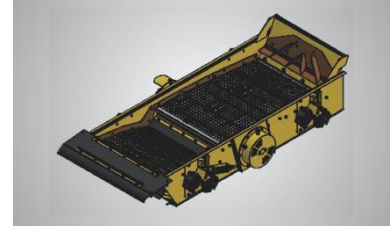


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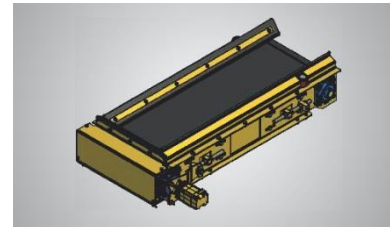
## TECHNICAL SPECIFICATION - OPTIONS

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

<b>SCREENBOX</b>	<b>49 SCR 100-00 (p/n X105295)</b>	
- 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	



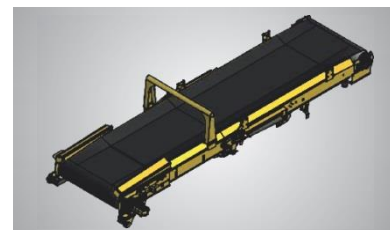
<b>OVERSIZE CONVEYOR</b>	<b>49 OSR 100-00-E (p/n X109430)</b>	
- Length AD	1.500 mm	(4'11")
- Width BW	500 mm	(1'8")
- Drive	E-drum motor 2,2 kW	(3 hp)



<b>RECYCLING CONVEYOR</b>	<b>49 RUB 100-00-E (p/n X105726)</b>	
- Length AD	6.500 mm	(21'4")
- Width BW	500 mm	(1'8")
- Belt speed	Adjustable with inverter; standard 1,6 m/s @50 Hz	
- Inclination	25°	
- Drive	E-drum motor 5,5 kW	(7,5 hp)
- Rubber belt	Steep inclination belt (Chevron)	
- For transport	Hydraulically fold-able	



<b>FINES CONVEYOR</b>	<b>49 FCO 100-00-E (p/n X103108)</b>	
- 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	E-drum motor 7,5 kW	(11 hp)
- Stockpile volume	Approx. 70 t (y=1,7; 37°)	
- For transport / service	Hydraulically fold-able	



### 12) OVERSIZE STOCKPILE CONVEYOR RIGHT SIDE p/n X102870

- Type	49 RSF-100-00	
- 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	E-drum motor 4 kW	(5,5 hp)
- Stockpile volume	Approx. 50 t (y=1,7; 37°)	
- Weight	820 kg	(1720 lb)
- For transport	Disassembled	



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## TECHNICAL SPECIFICATION - OPTIONS

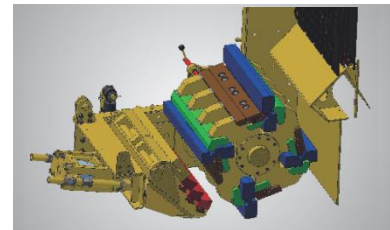
### 13) PRE-SCREENING STOCKPILE CONVEYOR RIGHT SIDE p/n X105953

- Type	49 RSC 100-00-E	
- 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	E-drum motor 4 kW	(5,5 hp)
- Stockpile volume	Approx. 55 t (y=1,7; 37°)	
- For transport	Hydraulically fold-able	
- p/n 649995	Hopper for RSC	



### 14) MILLING BEAM p/n X106748

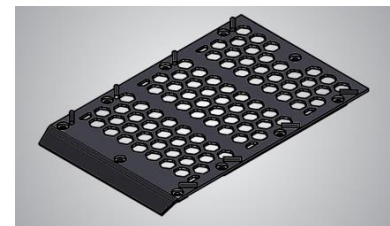
- Type	49 ICR 100-10-00	
- Application	For increasing fine material percentage and reducing oversize percentage	
- Design	3 rows of inserted liners and one screwed plate; with special spring pre-stressed	
- Horizontal setting	Mechanically via distance pieces (3 x 25 mm)	(3x1")
- Swivelling setting	Mechanically 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	<i>For crushing of reinforced material, the milling beam has to be disassembled</i>	



### 15) PRE-SCREEN

- Punched plates	p/n 679010: aperture 38 mm HEXAGONAL
s=15 mm; HB 500	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



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## TECHNICAL SPECIFICATION - OPTIONS

### 16) WORKING LIGHTS

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



### 17) FUEL FILLING PUMP p/n 101945 or 701030

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








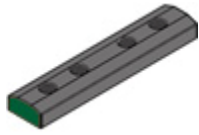

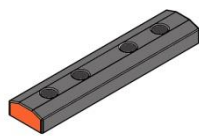

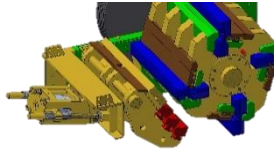
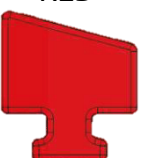
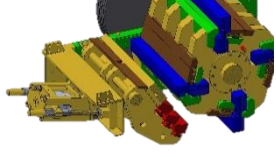
### 18) CENTRAL GREASING SYSTEM incl. AFTERSCREEN p/n 102946

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



## TECHNICAL SPECIFICATION - OPTIONS

### 19) BLOW BARS AND APRON LINER

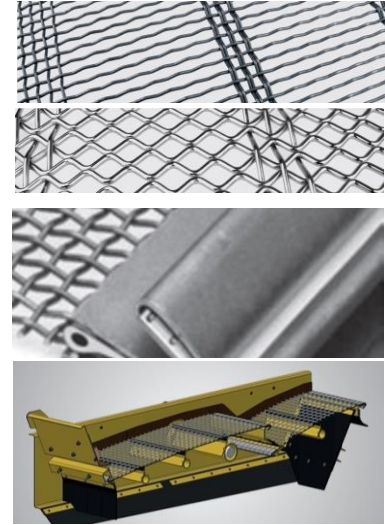
p/n	Material	Colour	Ca. Hardness [HRC] *)	Weight [kg/pcs.]** )	Applications	Picture
X114977	Martensitic + Master ceramic (Inlay extra high)	<p>BLUE</p> 	54 - 58	240	Feed size < 500 mm; concrete with medium reinforcements of steel	
X116366	High Chrome + ceramic	<p>RED</p> 	60 - 65	240	Asphalt, secondary crushing, feed size < 150 mm	
100873	Apron liner High Manganese Mn20Cr3	<p>GREEN</p> 		109	Concrete with reinforcement	
101438	Apron liner Medium Chrome	<p>ORANGE</p> 	55 - 60	109	Asphalt, secondary crushing, feed size < 150 mm	
103532	3. Impact panel (milling beam liner) Mangan 18	<p>GREEN</p> 		68		
102890	3. Impact panel (milling beam) High Chrome 27	<p>RED</p> 		68	without reinforcement	

## TECHNICAL SPECIFICATION - OPTIONS

### 20) 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
	10 x 10 x 3 mm
202971	15 x 15 x 3 mm
	18 x 18 x 4 mm
	20 x 20 x 4 mm
	22 x 22 x 4 mm
202971	25 x 25 x 5 mm
	30 x 30 x 5 mm
	32 x 32 x 6 mm
	35 x 35 x 7 mm
202973	40 x 40 x 8 mm
	45 x 45 x 8 mm
	50 x 50 x 8 mm
	55 x 55 x 8 mm
	60 x 60 x 8 mm



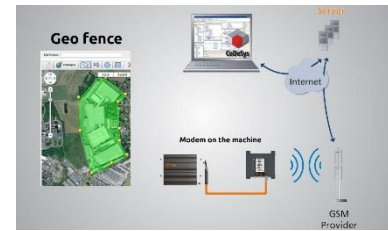
### 21) UMTS MODEM WITH GPS TRACKING SYSTEM "KEESTRACKER"

(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:

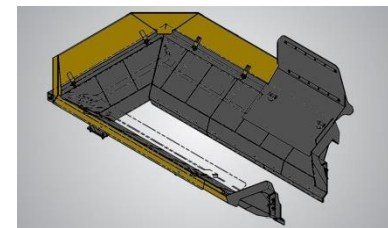
- Location data of the machine
- Machine usage data (such as: performance of the engine and other functions)

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.

### 22) FEED HOPPER EXTENSION, p/n X105454

- Material, content	High strength steel 700; s=4 mm; 5 m <sup>3</sup>	(6,5 yard <sup>3</sup> )
- Design	On 3 sides, manually foldable via hinges (corners bolted and disassembled for transport)	
- Feeding height	3.500 mm	(11'6")
- Feeding width	3.150 mm	(10'4")
- Feeding length	3.700 mm right side; 3.000 left side	(12'2"; 9'10")
- Weight	190 kg	(400 lb)

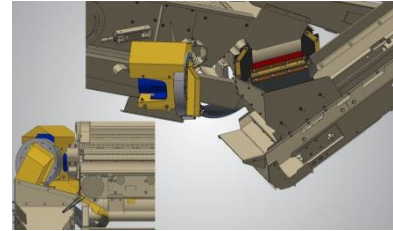


IMPACT CRUSHERS

## TECHNICAL SPECIFICATION - OPTIONS

### 23) WINDSIFTING for OVERSIZE FRACTION (AIR KNIFE) p/n X114457

- Type	49WIS100-00	
- Fan diameter	400 mm	(1' 4")
- Installed power	E-motor 7,5 kW @ 2.800 R.P.M. (max. 5.910 R.P.M.) (11 hp) with inverter (up to 100 Hz)	
- Hoses	2 pieces dia. 114 mm	
- Air volume	38 m <sup>3</sup> /min @ 10.180 Pa	
- Weight	215 kg	(470 lb)
- Transport	whole unit can stay on machine for transport (rubber curtain below nozzle removable by unfixing 1 pin)	



### 24) VOLUMETRIC BELT SCALE p/n 103898

- Calibration	The calibration of the system is only one time and only takes a few seconds.	
- Sensors	The Sensor operates without any contact to the material and therefore has no wear. It is insensitive against dust and vibrations.	
- Belt speed	The belt speed is measured using an inductive switch mounted on the drive drum.	
- Data transfer	Wireless data transmission via Bluetooth to a handheld PDA with various operation functions: - client - date/time - operator - location - material - print options - connection to lap/desktop using a USB cable Charger unit that allows both 12/24 V charging Integrated thermal printer Protective carry case	
- Weight	+ 51 kg	(112 lb)
- Transport	manually fold-able	



IMPACT CRUSHERS

# DECLARATION NOISE EMISSIONS

Abteilung Lärmschutz  
*(A. Pambolzer)*



MEASURING POINT	L <sub>A,eq</sub> (DB) without after screen	L <sub>A,eq</sub> (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 <sub>pFA</sub> [DB]	<b>80,6</b>	<b>84,4</b>
Summary L <sub>WA</sub> [DB]	<b>105,7</b>	<b>109,9</b>

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