

# JAW CRUSHER B<sub>4</sub>

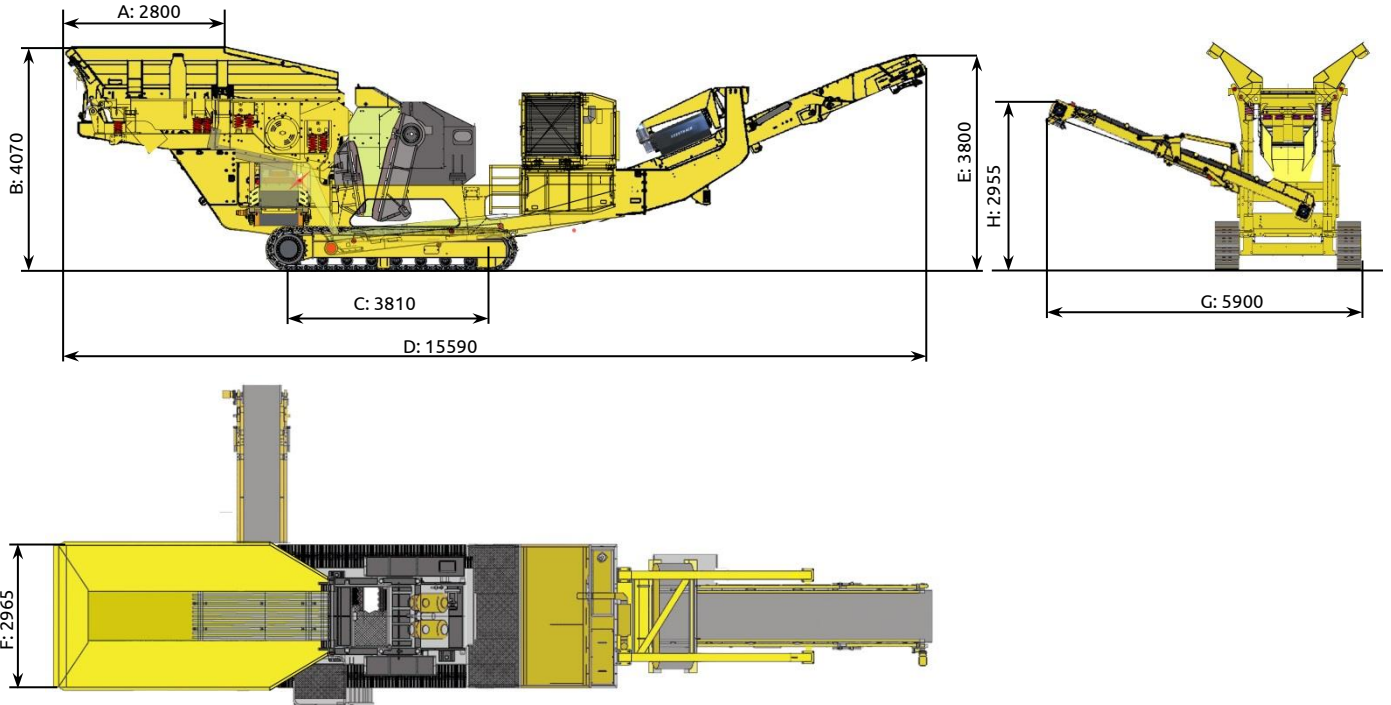


JAW CRUSHERS

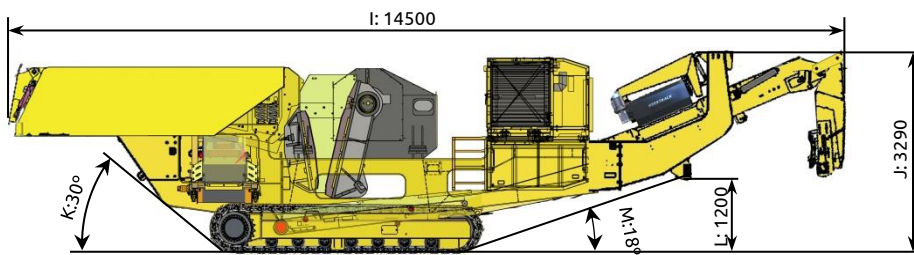


# DIMENSIONS

## OPERATION:



## TRANSPORT:



### Weight: approx. 44 t (without options)

Weight options:	
Magnetic separator lift able	1.500 kg
Hopper wear plates	478 kg
Conveyor pre-screening	1.120 kg

**Transport width** 2.700 mm (8'10")

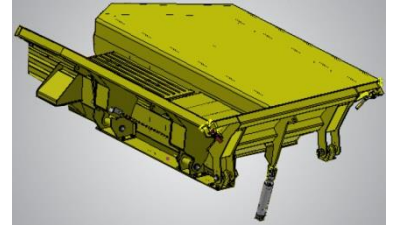
**REMARK:** All pictures might show options, not included in the scope of supply

A	B	C	D	E	F	G
2800	4070	3800	15590	3800	2965	5900
9'2"	13'4"	12'6"	51'3"	12'6"	9'9"	19'4"
H	I	J	K	L	M	
2955	14500	3290	30°	1200	18°	
9'8"	47'7"	10'10"		3'0"		

## TECHNICAL SPECIFICATION

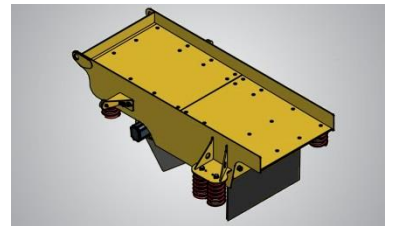
### 1) FEED HOPPER

- Content	5 m <sup>3</sup>	
- Design	Wear resistant steel HB 450	
- Feeding height	4.070 mm	(13'4")
- Feeding width	2.965 mm	(9'9")
- Feeding length	2.800 mm	(9'2")
- Hopper walls	hydraulically foldable for transport	



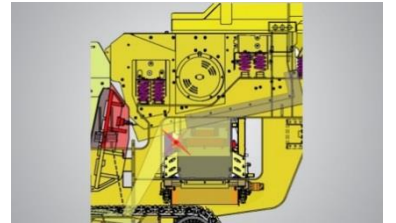
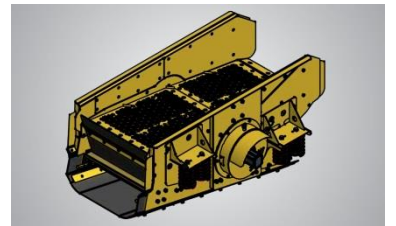
### 2) VIBRATING FEEDER

- Length	2.300 mm	(7'7")
- Width	1.000 mm	(3'3")
- Drive	Hydraulic 11 kW 700 – 1.000 R.P.M. variable speed	(15 hp)



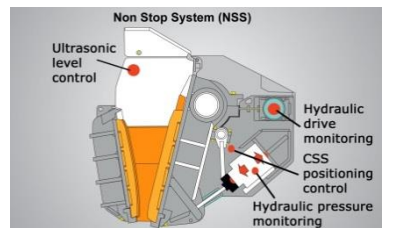
### 3) DOUBLE DECK SCALPER

- Length	2.300 mm	(7'7")
- Width	1.000 mm	(3'3")
- Top deck 2 step Punched plate	Hexagonal or long holes Apertures: 20 - 100 mm; s= 15 - 20 mm	(3/4" - 4")
- Bottom deck	1.750 x 1.000 mm with square mesh of choice - see list (end tensioned)	(5'9" x 3'3")
- Material flow (changeable with manually operated flap)	- fine fraction either in crusher bypass or separately stockpiled (with p/n 164021) - Intermediate fraction either in crusher bypass (lower deck bigger mesh than upper deck) or separately stockpiled (with option p/n 164021)	
- Drive	Hydraulic motor 11 kW; 700 – 1000 U/min	(15 hp)



### 4) JAW CRUSHER

- Model	72 JCR with hydraulic management (gap adjustment and safety release system, patented N.S.S. = Non Stop System)	
- Feed opening	1.100 x 700 mm	(44" x 28")
- Outlet adjustment	C.S.S. min. - max. 45 - 160 mm	(1 3/4" – 6 1/3")
- Throughput (*)	See page 10; the throughput is variable according to feeding material and jaw crusher setting	
- Feed size	0/600 mm	(<2')
- Throw swing jaw	29 mm for hard stone; 32 mm for recycling	
- Weight of jaw crusher	18,5 ton	(20,4 st)
- Plate height fixed jaw	Toothed static jaw 1.325 mm Material: 18Mn2Cr	(4'2")
- Plate height movable jaw	Toothed swing jaw 1.835 mm Material: 18Mn2Cr	(6')
- Flywheel diameter	1.200 mm; 1.200 kg/pcs	(3'11")
- REMARK	Full hydraulic gap setting during operation!!!	



## TECHNICAL SPECIFICATION

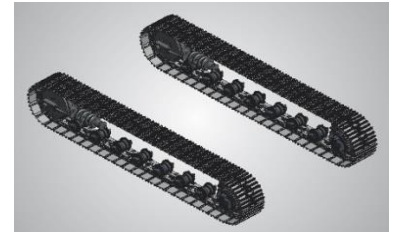
### 5) MAIN BELT CONVEYOR

- Discharge height	3.800 mm	(12'6")
- Stockpile volume	Approx. 170 t ( $\gamma=1,7$ ; 37° angle of repose)	
- Length AD	11.400 mm	(37'5")
- Width BW	1.000 mm	(3'3")
- Belt speed	1,56 m/s	
- Belt	RIP STOP 500/3-5+2; Metal shield in the top cover for increased belt service life under hard working conditions	
- Discharge to belt	heavy duty rubber plates for discharge from crusher to main belt conveyor	
- Inclination	8 - 20°	
- Drive	Hydraulic 15 kW	(20 hp)
- Transport	Hydraulically foldable	



### 6) TRACK - UNIT

- Length	3.800 mm
- Width track shoe	400 mm
- Total width	2.500 mm
- 2 speeds	1,1 km/h and 2 km/h
- Drive	Hydraulic piston pump and planetary gears



### 7) ENGINE UNIT

- Drive	Diesel / Hydraulic	
- Diesel Motor, Type	a) JOHN DEERE 6.8 HF G 82 200 fixed speed b) VOLVO TAD 873 VE	p/n 141003 p/n 103477
- Emission control	a) Tier 3; EU STAGE IIIA b) Tier 4f; EU STAGE IV; SCR, cooled EGR	
- Power ISO 14396	a) 212 kW / 1.800 rpm; b) 235 kW at 1.800 rpm	
- Max. torque	a) 984 Nm at 1.400 R.P.M. b) 1.310 Nm at 1.400 R.P.M.	
- Engine operating speed	1.750 R.P.M. for low noise emission	
- Bore hole / stroke	a) 106 x 127; b) 110 x 135 mm	
- Combustion chamber	a) 6.800; b) 7.700 cm <sup>3</sup>	
- Fuel consumption	a) 215 g/kWh, typical 26 - 28 l/h **	
- Voltage	24 Volt (for improved cold start properties)	
- Cooling	Water cooled	
- Fuel	Tank 450 Litres; fuel code acc. to EN 590	
- Air filter	Cyclone pre filter – dual stage fine filter	
- Drive crusher	Engine → axial piston pump (closed circuit) → hydraulic motor → V-belt drive for crusher drive	
- Hydraulic oil tank	300 Litres	



#### ATTENTION

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

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

## TECHNICAL SPECIFICATION

### 8) CONTROL

- Type	PLC – IP 67; dust and vibration proof
- Display	LCD screen 7"
- Operation	Control panel
- Controller	Wired hand remote controller; or optional Radio remote controller (see option list)
- Level sensor hydraulic	Included; with low level protection
- 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 crusher	Included



### 9) FRAME

- Ease of service	To obtain good and easy maintenance, the feeding and scalping unit can be moved hydraulically for allowing an access opening of 600 mm.
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Frame moved by 600 mm for ease of service

Hydraulic cylinder 600 mm stroke

Perfect access to pre-screen and jaw crusher



(\* ) The throughput is based on crushing dry limestone with appropriate size, having bulk density of 1,6 t/m<sup>3</sup> and 200 MPa compressive strength. Bulk waste material will tend to change considerably the output in relation to his conditioning, size and quantity of metallic components contained. Smaller C.S.S. values can be used only in specific applications for specific product and must first be approved in writing by Keestrack Technical department.

N.B.: Availability of chosen variants and options must always be checked up

(\*\*) The fuel consumption depends on the feed material, machine setting, condition of wear parts, ...

## TECHNICAL SPECIFICATION - OPTIONS

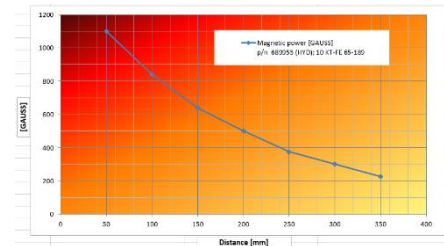
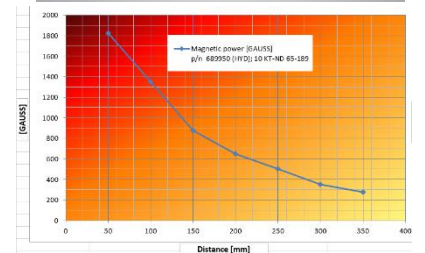
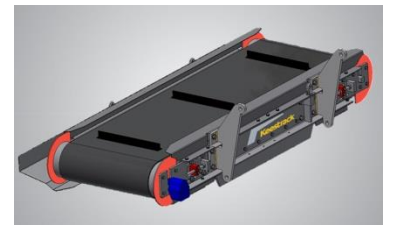
### 10) DUST SUPPRESSION SYSTEM p/n 164018

- Type	CAS 91
- Drive	Hydraulic motor 1,1 kW
- Water consumption	Max. 0,75 m³/h
- Spraying areas	Crusher outlet and middle (optional end) of main conveyor
- Nozzles	5 + 5, Hole 1,1 mm; 1,2 l/min at 3 bar



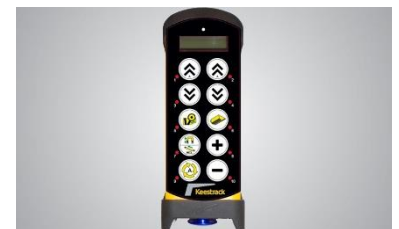
### 11) NEODYM MAGNETIC SEPARATOR

- Type	MAGNET OVERBAND 10 KT-ND 65-183	p/n 101347
	MAGNET OVERBAND 10 KT-FE 65-183	p/n 101359
- Belt width	700 mm	(2'2")
- Belt length (AD)	1.830 mm	(6')
- Magnet L x W	1.070 x 600 mm	(3'6" x 1'11")
- Magnetic power	650 (500) GAUSS at 200 mm	
- Drive	Hydraulic motor 4 kW	(5,5 hp)
- Speed	2,0 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 (10.000 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	



### 12) RADIO REMOTE CONTROL – Level 2 p/n 100370

- Order no.	Remote 103162 Sticker 101473
- Functions	<ul style="list-style-type: none"> <li>- Tracks forwards / backwards proportional with automatic speed control</li> <li>- Belt feeder start / stop and + / -</li> <li>- Crusher gap open / close (C.S.S.)</li> <li>- MCL start / stop and + / -</li> <li>- Magnetic separator up / down</li> <li>- Automatic start / stop</li> <li>- Machine stop button (blue)</li> <li>- Display Crusher gap, Speed, Feeder, Alarms</li> </ul>



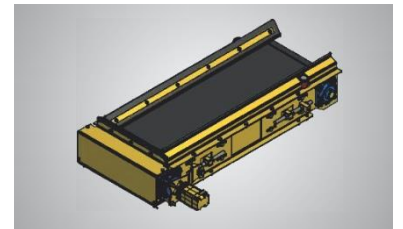
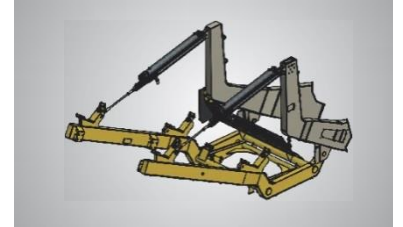
## TECHNICAL SPECIFICATION - OPTIONS

### 13) BUILT ON SINGLE DECK SCREEN with OSR, RUB, FCO

p/n 649691

#### SCREENBOX

	<b>48 SCR 100-00</b>	
- Width	1.200 mm	(3'11")
- Length	2.800 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

	<b>72 OSR 100-00H</b>	
- Length AD	2.850 mm	(9'4")
- Width BW	500 mm	(1'8")
- Drive	Hydraulic 4 kW	(5 hp)
- Transport	hydraulically fold-able	



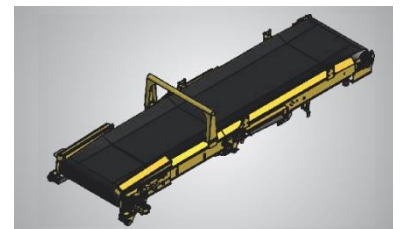
#### RECYCLING CONVEYOR

	<b>72 RUB 100-00H</b>	
- Length AD	6.500 mm	(21'4")
- Width BW	500 mm	(1'8")
- Belt speed	Adjustable; standard 1,15 m/s	
- Inclination	25°	
- Drive	Hydraulic 5,5 kW	(7 hp)
- Rubber belt	Steep inclination belt (Chevron)	
- Transport	Separately transported	
- Transport length	10.860 mm	(35'8")



#### FINES CONVEYOR

	<b>48 FCO 100-00 (p/n 689050)</b>	
- Length AD	4.200 mm	(13'9")
- Width BW	1.000 mm	(3'3")
- Discharge height	3.100 mm	(10'2")
- Belt speed	Adjustable; standard 1,15 m/s	
- Inclination	25°	
- Drive	Hydraulic 7,5 kW	(10 hp)
- Stockpile volume	Approx. 70 t ( $\gamma=1,7; 37^\circ$ )	
- For transport / service	Hydraulically fold-able	



### 14) SIDE BELT CONVEYOR FOR PRE-SCREEN p/n 164021

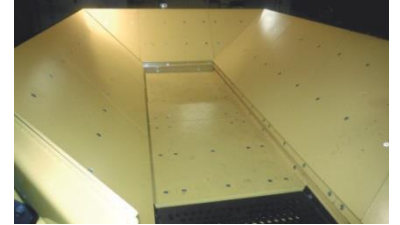
- Type	LSC	
- Length AD	5.000 mm	16'5")
- Width BW	800 mm	(2'7")
- Discharge height	2.955 mm	(9'8")
- Belt speed	1,15 m/s	
- Inclination	22°	
- Drive	Hydraulic 5,5 kW	(7,5 hp)
- Stockpile volume	Approx. 80 t ( $\gamma=1,7; 37^\circ$ )	
- For transport	Hydraulically foldable for transport	
- Weight	1.120 kg	(2.469 lb)
- Conveyor arrangement	Can be built on to the left and right side	



## TECHNICAL SPECIFICATION - OPTIONS

### 15) FEED HOPPER WITH WEAR PLATES p/n 164019

- Wear plates set 8 mm HB 450, fitted in the feed hopper
- Weight 478 kg



### 16) FUEL FILLING PUMP p/n 701030

- Weight 10 kg
- Model F 80-24-1"; with automatic filling stop
- 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



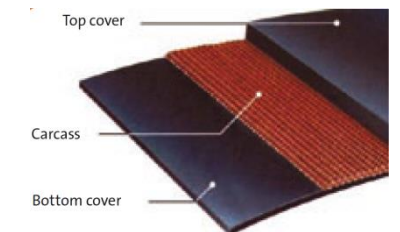
### 17) CENTRAL GREASING SYSTEM p/n 164017

- Weight 6 kg (13 lb)
- Type Central greasing , 24 Volt DC
- Remark with adjustable lubrication intervals



### 18) MCL KT FLEX BELT p/n 164035

- Type KT-Flex 630/1; GRADE RS
- Advantages
  - Superior impact resistance comparable to that of a 4-ply EP belt type 1600/4.
  - Superior rip resistance four times greater superior tear resistance.



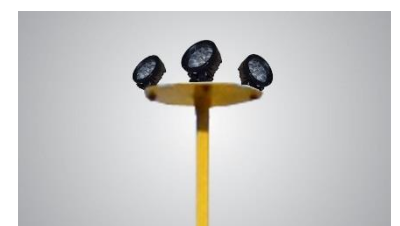
### 19) MCL LIFTING / LOWERING SYSTEM

- Increasing clearance below the crusher for recycling applications
- Optionally, the feeding section (p/n 808771) and discharge section (p/n 805134) can be lowered hydraulically



### 20) 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)



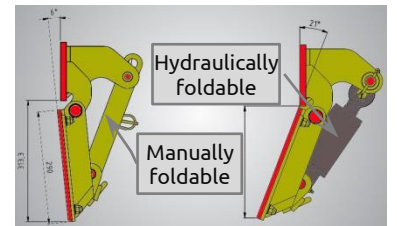


## TECHNICAL SPECIFICATION - OPTIONS

### 21) DEFLECTOR

Deflector plate for recycling application  
(manually foldable)  
p/n 807570; with HB 450 wear plates ; 94 kg

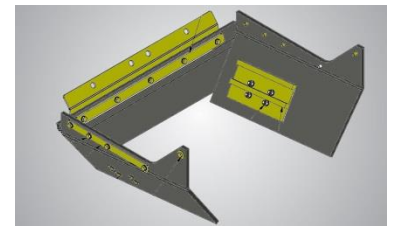
Deflector plate for recycling application  
(hydraulically foldable)  
p/n 807571; with HB 450 wear plates; 114 kg



### 22) WEAR RESISTANT RUBBER DISCHARGE CHUTE p/n 805809

- Type Fixed rubber discharge chute
- Made off rubber
- Arrangement At the crusher discharge
- Weight 57 kg

(+120 lb)



### 23) HEATING SYSTEM FOR ENGINE p/n 203460

- Heating power up to 9,1 kW
- Fuel consumption 0,19 - 1,1 l/h
- Voltage / Watt 24V; 37-90 W
- Operating temperature -40°C - + 80°C
- Weight 4,8 kg
- Additional Incl. timer for 3 starting times and temperature pre-selection

HEATING SYSTEM FOR ENGINE

(+ 11 lb)



## TECHNICAL SPECIFICATION - OPTIONS

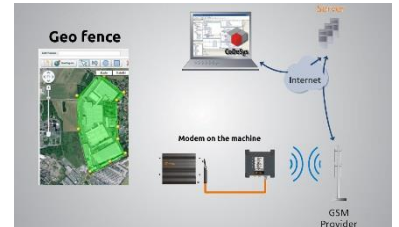
### 24) UMTS MODEM WITH GPS TRACKING SYSTEM "KEESTRACKER" (without SIM card) p/n 102971

- 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.

- option
  - International ROAMING SIMCARD
  - 1 year limited data volume – p/n 880884



### 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.

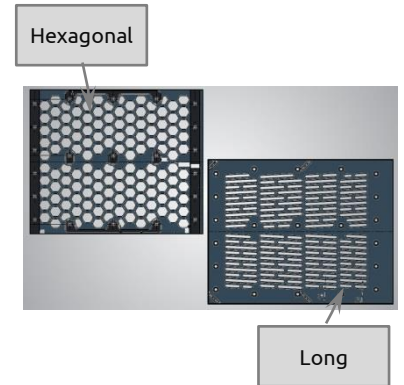
The Buyer explicitly acknowledges that this information is provided free of charge to KEESTRACK for the delivery of services offered by KEESTRACK and to adapt or improve its services and/or products.

## TECHNICAL SPECIFICATION – SCREEN CHOICE

### 25) SCREENS for TOP DECK of PRE-SCREEN

Punched plates

p/n	Dimensions	Thickness s=[mm]	Hard- ness
697145	LONG 22x100 mm	15	HB 450
697110	Hexagonal 20 mm	15	HB 450
697115	Hexagonal 30 mm	15	HB 450
697120	Hexagonal 40 mm	15	HB 450
697125	Hexagonal 50 mm	15	HB 450
679175	Hexagonal 55 mm	12	HB 450
697130	Hexagonal 60 mm	15	HB 450
697135	Hexagonal 70 mm	20	HB 450
697140	Hexagonal 80 mm	20	HB 450
679170	Hexagonal 100 mm	15	HB 450



### 26) SCREENS for BOTTOM DECK of PRE-SCREEN

Square mesh

p/n	Dimensions
202746	10 x 10 x 3 mm
202680	12 x 12 x 3 mm
202681	15 x 15 x 3 mm
202682	20 x 20 x 4 mm
202677	22 x 22 x 4 mm
202683	25 x 25 x 5 mm
202684	30 x 30 x 5 mm
202700	35 x 35 x 7 mm
202793	40 x 40 x 8 mm
202879	50 x 50 x 8 mm



### 27) SCREENS for TOP DECK (2-WAY-SPLIT)

Square mesh

p/n	Dimensions
201995	40 x 40 x 8 mm
202449	45 x 45 x 8 mm
202143	50 x 50 x 8 mm
202256	55 x 55 x 8 mm
202058	60 x 60 x 8 mm
202647	70 x 70 x 8 mm
202833	80 x 80 x 8 mm
202903	90 x 90 x 10 mm



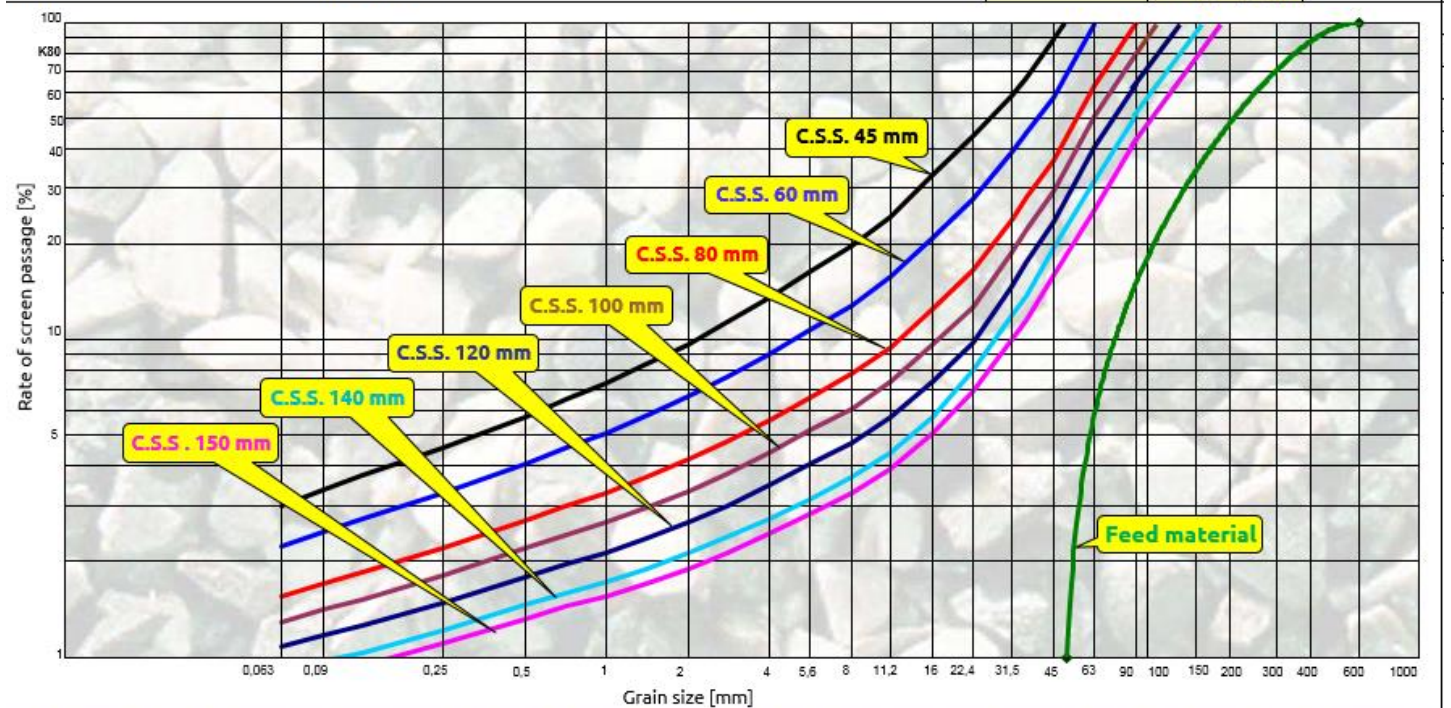
# INDICATIVE PRODUCT GRADATION AT CRUSHING GAP (C.S.S.):

## Screening analysis

<b>Feed material</b>	Granite	
<b>Feed size</b>	50	600
<b>Feed capacity</b>		
<b>Crusher Type</b>	JAW CRUSHER	

**Title:** INDICATIVE PRODUCT GRADATION AT CRUSHING GAP (C.S.S.):  
**Date:** 22.04.2015

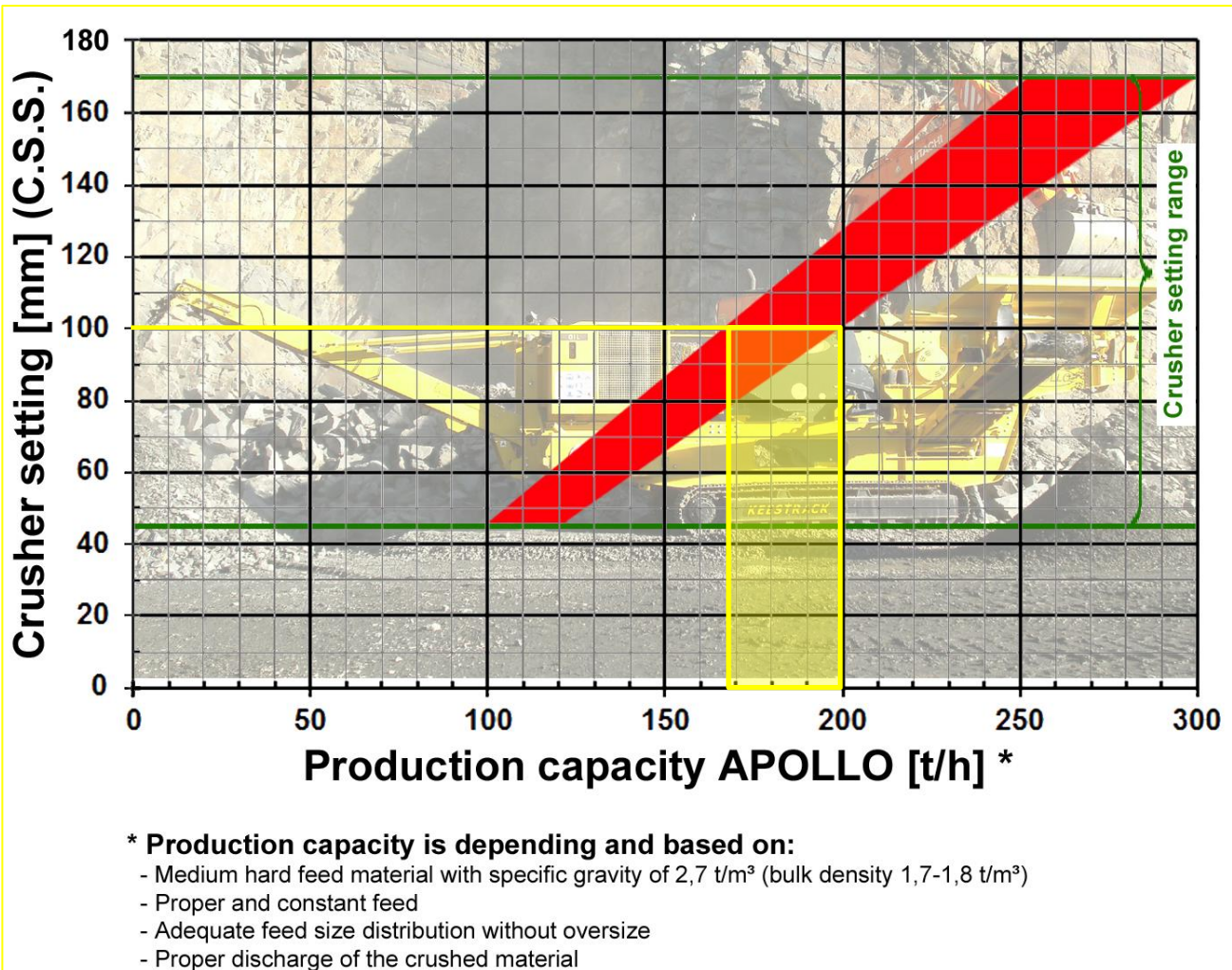
<b>Humidity (%)</b>	<b>Weight (humid)</b>
	<b>Weight (dry)</b>



Screen size	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	Legend	
	<b>C.S.S. 45 mm</b>	3,0	3,4	3,7	4,5	5,7	6,5	7,3	8,4	9,7	11,4	13,5	16,3	19,7	24,5	33,0	43,8	59,0	66,7	83,5	100,0	Legend
<b>C.S.S. 60 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 80 mm</b>	2,2	2,5	2,7	3,3	4,1	4,6	5,1	5,8	6,6	7,7	9,0	10,8	12,9	15,6	21,1	27,9	39,0	44,8	56,3	68,4	100,0	Legend
<b>C.S.S. 80 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 80 mm</b>	1,6	1,7	1,9	2,2	2,7	3,0	3,3	3,7	4,2	4,8	5,6	6,6	7,8	9,5	12,5	16,5	24,0	28,0	37,0	63,0	100,0	Legend
<b>C.S.S. 100 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 100 mm</b>	1,3	1,4	1,5	1,8	2,2	2,4	2,7	3,0	3,3	3,8	4,4	5,2	6,1	7,4	9,6	12,7	18,8	22,1	29,5	50,4	80,0	Legend
<b>C.S.S. 120 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 120 mm</b>	1,1	1,2	1,3	1,5	1,8	2,0	2,1	2,4	2,7	3,0	3,5	4,0	4,7	5,7	7,4	9,8	14,8	17,5	23,5	40,3	64,0	Legend
<b>C.S.S. 140 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 140 mm</b>	0,9	1,0	1,0	1,2	1,5	1,6	1,7	1,9	2,1	2,4	2,7	3,2	3,7	4,4	5,7	8,0	12,0	13,8	19,5	31,5	51,2	Legend
<b>C.S.S. 150 mm</b>	0,063	0,09	0,125	0,25	0,5	0,71	1	1,4	2	2,8	4	5,6	8	11,2	16	22,4	31,5	35,5	45	63	90	Legend
<b>C.S.S. 150 mm</b>	0,8	0,9	0,9	1,1	1,3	1,4	1,6	1,7	1,9	2,1	2,4	2,8	3,3	3,9	5,1	6,9	10,1	11,5	16,0	25,8	43,1	Legend

JAW CRUSHERS

## INDICATIVE PRODUCTION CAPACITY:



**EXAMPLE:** Feed material is granite ( $W_i=16$ ). If the crusher is set to a C.S.S. of 100 mm, the max. production will be between 168 and 200 t/h. Considering the bulk weight of the material of 1,6 t/m<sup>3</sup> (see TECHNICAL INFO Page 3), the production capacity will be between  $168 / 1,6 = 105$  m<sup>3</sup>/h and  $200 / 1,6 = 125$  m<sup>3</sup>/h. For Granite ( $W_i=16$ ), the production will be in the middle range = approx. 184 t/h.

The actual production depends on the material. If the Work Index  $W_i$  (see also TECHNICAL INFO Page 3) is low (10-14), the production will be on the higher range. If  $W_i$  is medium (14-18), the production will be in the middle range. If  $W_i$  is high (18-22), the production will be in the lower range.

WORK INDEX ( $W_i$ )	CRUSHABILITY
<10	very soft
10-14.	soft
14-19	medium
18-22	hard
>22	very hard