

JAW CRUSHER B4e

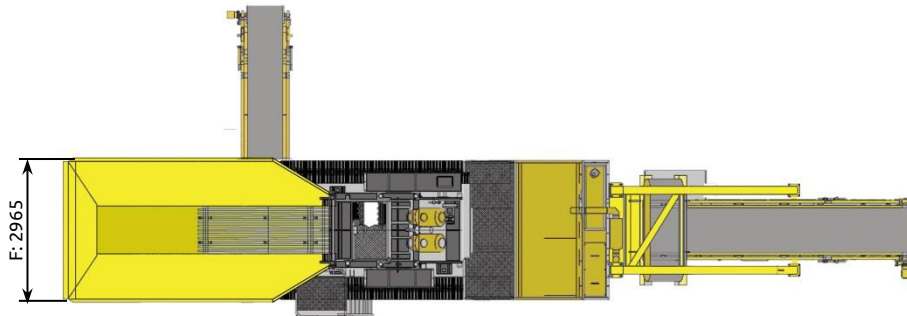
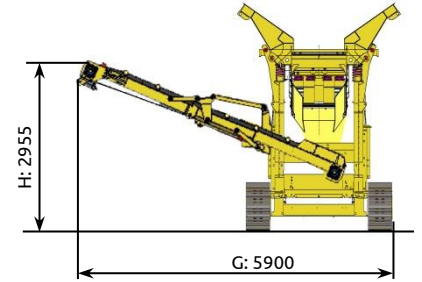
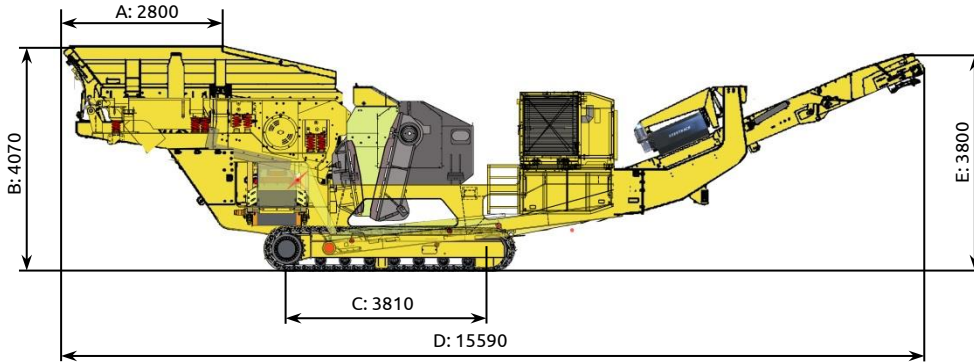


JAW CRUSHERS

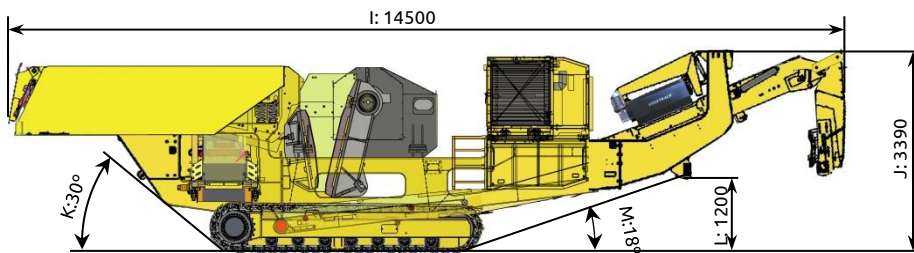


DIMENSIONS

OPERATION:



TRANSPORT:



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

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

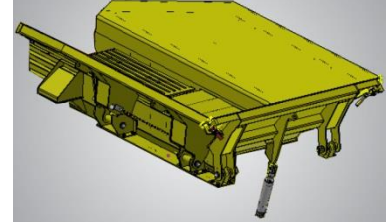
Transport width 2.700 mm (8'10")

A	B	C	D	E	F	G
2800	4070	3810	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	3390	30°	1200	18°	
9'8"	47'7"	10'15"		3'11"		

TECHNICAL SPECIFICATION

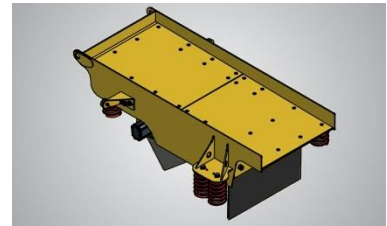
1) FEED HOPPER

- Content	5 m ³	(6,5 yard ³)
- Design	Wear resistant steel HB 450; discharging chute rubber	
- 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	



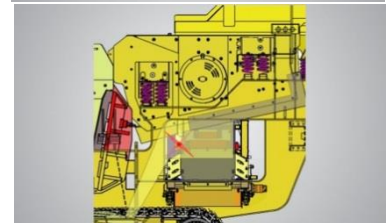
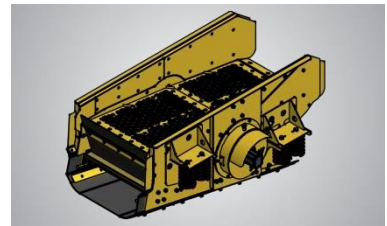
2) VIBRATING FEEDER

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



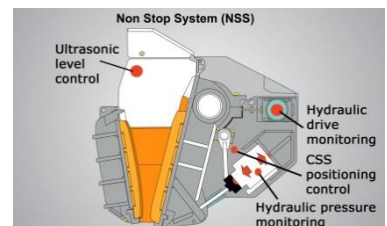
3) DOUBLE DECK PRE-SCREEN

- Length	2.300 mm	(7'7")
- Width	1.000 mm	(3'3")
- Top deck 2 step	Hexagonal or long holes	
Punched plate	Apertures: 20 - 100 mm; s= 15 - 20 mm	
- 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	



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')
- Stroke 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; 1.125 kg	(4'2") (2.480 lb)
	Material: 18Mn2Cr	
- Plate height movable jaw	Toothed swing jaw 1.835 mm; 1.326 kg	(6') (2.923 lb)
	Material: 18Mn2Cr	
- Flywheel diameter	1.450 mm; 1.332 kg/pcs	(4'9")(2937 lb)
- e Drive	Electric motor 110 kW IE3; 4 pole	
		p/n 880316
- 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	
- Discharge to belt	for increased belt service life under hard working conditions	
- Increasing clearance below the crusher	heavy duty rubber plates for discharge from crusher to main belt conveyor the feeding and discharge section can be lowered hydraulically	p/n 164040
- Inclination	7 - 22°	
- e Drive	Electric motor 11 kW	(15 hp)
- Transport	Hydraulically foldable	p/n 805032

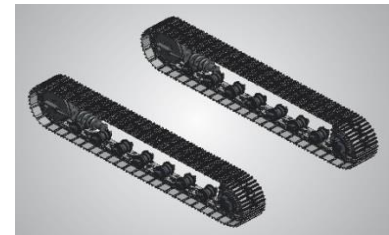


Lowering feed end

Lowering discharge end

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



TECHNICAL SPECIFICATION

7) ENGINE UNIT

- Drive	Diesel / Electric	
- Diesel Motor, Type	JOHN DEERE 6.8 HF G 82 200 fixed speed	p/n 141003
- Emission control	Tier 3; EU STAGE IIIA	
- Power ISO 14396	212 kW / 1.800 rpm	
- Max. torque	984 Nm at 1.400 R.P.M.	
- Engine operating speed	1.750 R.P.M. for low noise emission	
- Bore hole / stroke	106 x 127	
- Combustion chamber	6.800 cm ³	
- Fuel consumption	215 g/kWh, typical 26 - 28 l/h **)	
- Voltage	24 Volt (for improved cold start properties)	
- Cooling	water cooled	
- Fuel	Tank 350 Litres; fuel code acc. to EN 590	
- Air filter	Cyclone pre filter – dual stage fine filter	
- Drive crusher	Engine → Alternator → electric motor → V-belt drive for crusher drive	
- Hydraulic oil tank	200 Litres	
- e Drive	Electric Alternator IP 23; 225 kVa; 50 Hz	
- e Drive	Electric motor for hydraulic pump 55 kW	



DROP-OFF Unit

- DROP-OFF UNIT lower service costs due to less dust emission to filters; lower noise level at the machine; perfect access for maintenance

- Plug out 16A; 400 V, 50 Hz; 3 phases + 16A; 220 V; 50 Hz; Optional other plug out connections are possible

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 colour screen 7"
- Operation Control panel
- Program N.S.S. NON STOP SYSTEM
- 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
- Drive for fan 0,07 kW (0,09 hp)



POWER SUPPLY

- external plug-in Electric 400 V; 50 Hz; 300 A (ca. 200 kVA)



ep+:
Main switch for external power supply

Power Lock 5
Lines L1; L2;
L3; N; Earth

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.



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/m³ 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

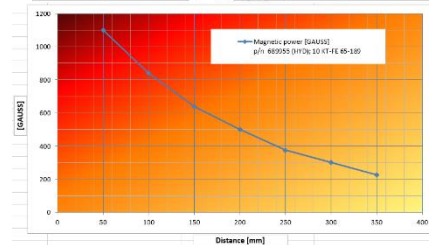
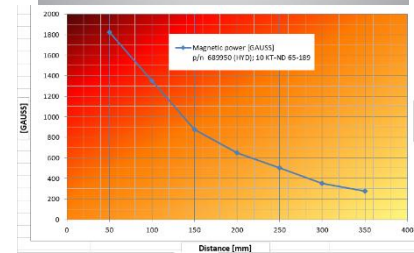
10) DUST SUPPRESSION SYSTEM p/n 204726

- Type	CA 91 A	
- Drive	Electric motor 0,75 kW	(1,0 hp)
- Water consumption	Max. 0,75 m ³ /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 p/n 679750

- Type	MAGNET OVERBAND 10 KT-ND 65-183, ELE MAGNET OVERBAND 10 KT-FE 65-183, ELE 700 mm	
- Belt width	1.830 mm	
- Belt length (AD)	1.070 x 600 x 215 mm	
- Magnet L x W	650 (500) GAUSS at 200 mm	
- Magnetic power	E-drum motor 4 kW	
- Drive	2 m/s	(5,5 hp)
- Speed	Hydraulic 150 up to 345 mm	
- Lift able and lower able	ND: 760 kg; FE: 863 kg	
- Weight	Endless rubber belt KT Flex 400/1; 4+2,5; Grade RS; cleats vulcanized T 35 (40) mm	
- Belt	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	
- Bearings	Made of stainless steel to avoid reduction of magnetic forces	
- Frame and cladding		



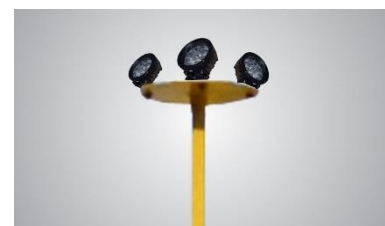
12) RADIO REMOTE CONTROL – Level 2

- Order no.	Remote 103162 Sticker 101473
- Functions	- Tracks forwards / backwards proportional with automatic speed control - Belt feeder start / stop and + / - - Crusher gap open / close (C.S.S.) - MCL start / stop and + / - - Magnetic separator up / down - Automatic start / stop - Machine stop button (blue) - Display Crusher gap, Speed, Feeder, Alarms



13) 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

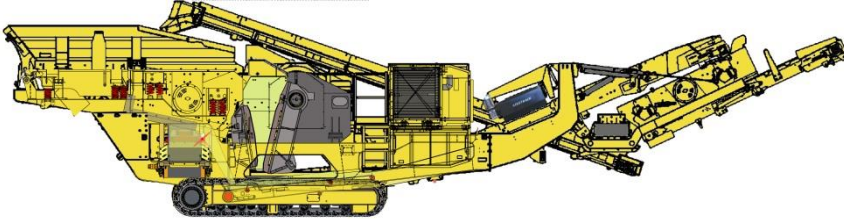
14) BUILT ON SINGLE DECK SCREEN with OSR, RUB, FCO

p/n 649691

SCREENBOX

48 SCR 100-00 (p/n 649950)

- 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	



OVERSIZE CONVEYOR

72 OSR 100-00E

- Length AD	2.850 mm	(9'4")
- Width BW	500 mm	(1'8")
- Drive	E-drum motor 2,2 kW	(3 hp)
- Transport	hydraulically fold-able	

RECYCLING CONVEYOR

72 RUB 100-00E

- Length AD	10.010 mm (transport 6.500 mm)	(32'10")
- Width BW	500 mm	(1'8")
- Belt speed	Adjustable; standard 1,15 m/s	
- Inclination	25°	
- Drive	E-drum motor 5,5 kW	(7 hp)
- Rubber belt	Steep inclination belt (Chevron)	
- Transport	Separately transported	
- Transport length	10.860 mm	(35'8")

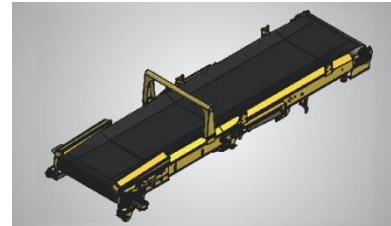
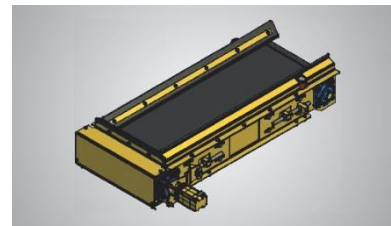
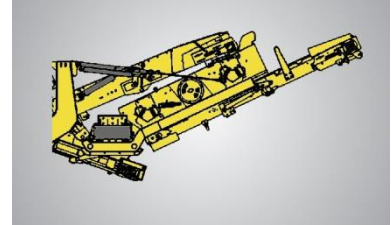
FINES CONVEYOR

48 FCO 100-00 (p/n 689050)

- 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	E-drum motor 7,5 kW	(10 hp)
- Stockpile volume	Approx. 70 t (y=1,7; 37°)	
- For transport / service	Hydraulically fold-able	
- Weight	+ ca. 4.000 kg	(4.800 lb)

15) PRE-SCREENING STOCKPILE CONVEYOR LEFT & RIGHT p/n 693170

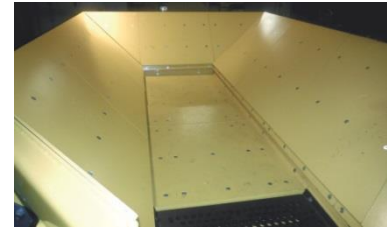
- Type	LSC	
- Length AD	5.000 mm	(16'5")
- Width BW	800 mm	(2'7")
- Discharge height	2.955 mm	(9'8")
- Belt speed	1,15 m/s	
- Inclination	22°	
- e Drive	Electric motor 4 kW	(5,44 hp)
- Stockpile volume	Approx. 80 t (y=1,7; 37°)	
- For transport	Hydraulically foldable for transport	
- Weight	1.120 kg	(2.469 lb)



TECHNICAL SPECIFICATION - OPTIONS

16) FEED HOPPER WITH WEAR PLATES p/n 164019

- Wear plates set 8 mm HB 450, fitted in the feed hopper
- Weight 478 kg (1.054 lb)



17) CENTRAL GREASING SYSTEM p/n 101945

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



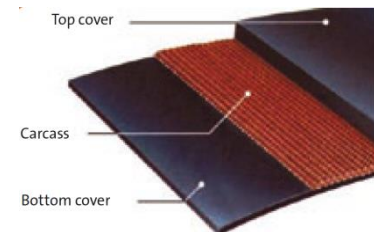
18) FUEL FILLING PUMP p/n 701030

- Weight 10 kg (22 lb)
- Model F 80-24-1"; with automatic filling stop
- Capacity 80 l/min
- Filter 3 micron with water absorbant media
- Suction hose 3/4" 1,5 m long
- Drive On board-electric 24 V DC



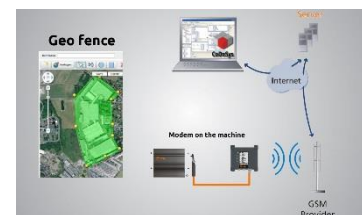
19) MAIN BELT CONVEYOR SPECIAL BELT p/n 164046

- 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.



20) 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.

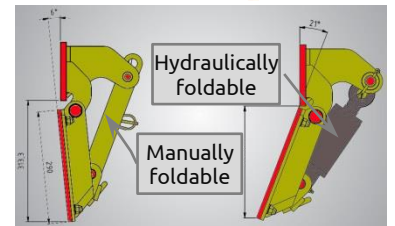
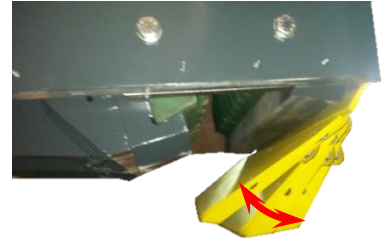
The Buyer explicitly acknowledges that this information is provided free of charge to KEESTRACK for the delivery of services offered by KEESTRACK and to adapt or improve its services and/or products.

TECHNICAL SPECIFICATION - OPTIONS

21) DEFLECTOR

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

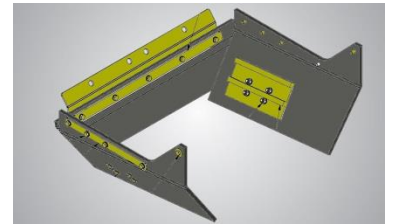
Deflector plate for recycling application
(hydraulically foldable)
p/n 807571; with HB 450 wear plates; 114 kg



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)

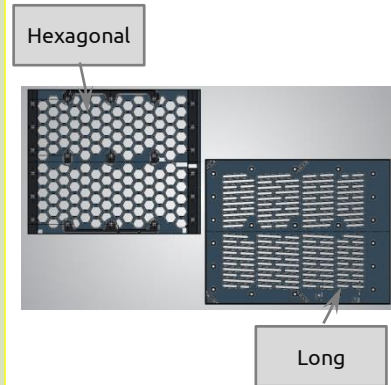


TECHNICAL SPECIFICATION - SCREENS

24) 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
608014+608015	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
645731+645733	Hexagonal 100 mm	15	HB 450



25) 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



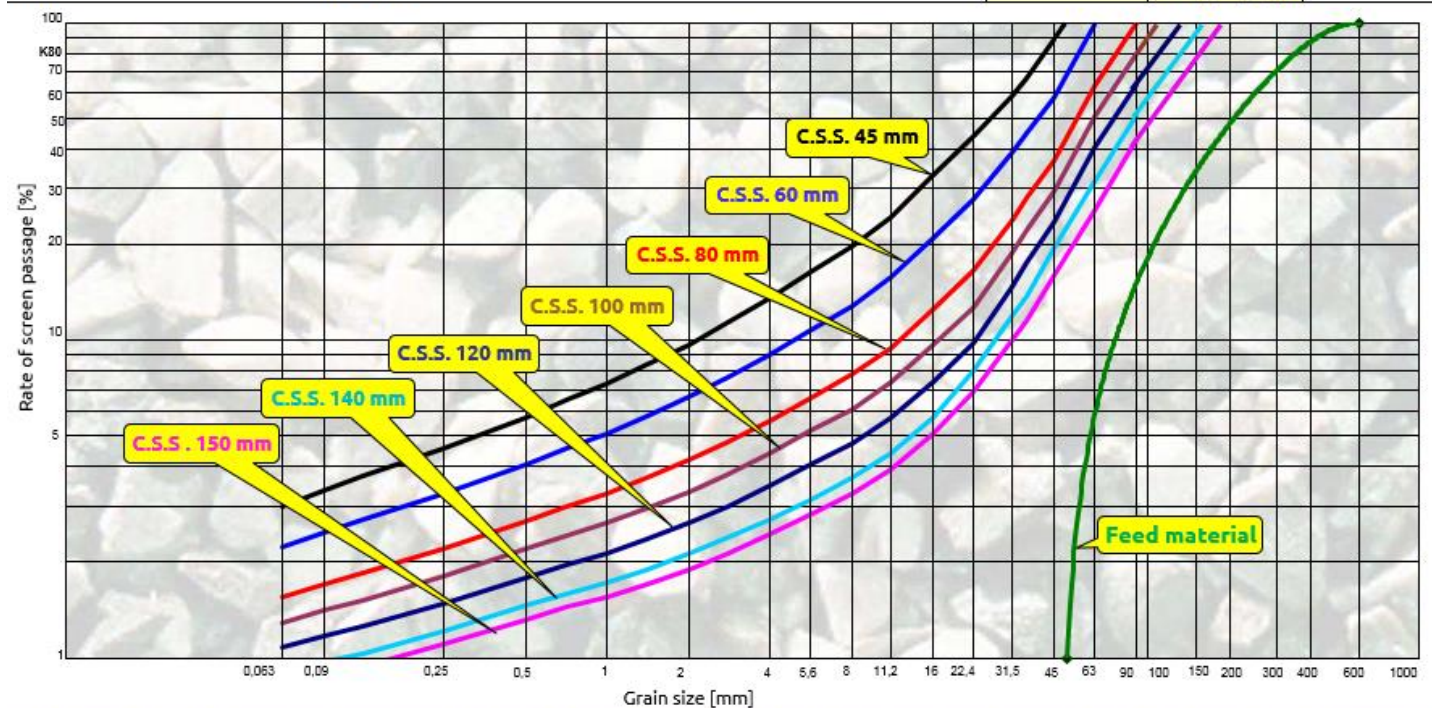
INDICATIVE PRODUCT GRADATION AT CRUSHING GAP (C.S.S.):

Screening analysis

Feed material	Granite	
Feed size	50	600
Feed capacity		
Crusher Type	JAW CRUSHER	

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

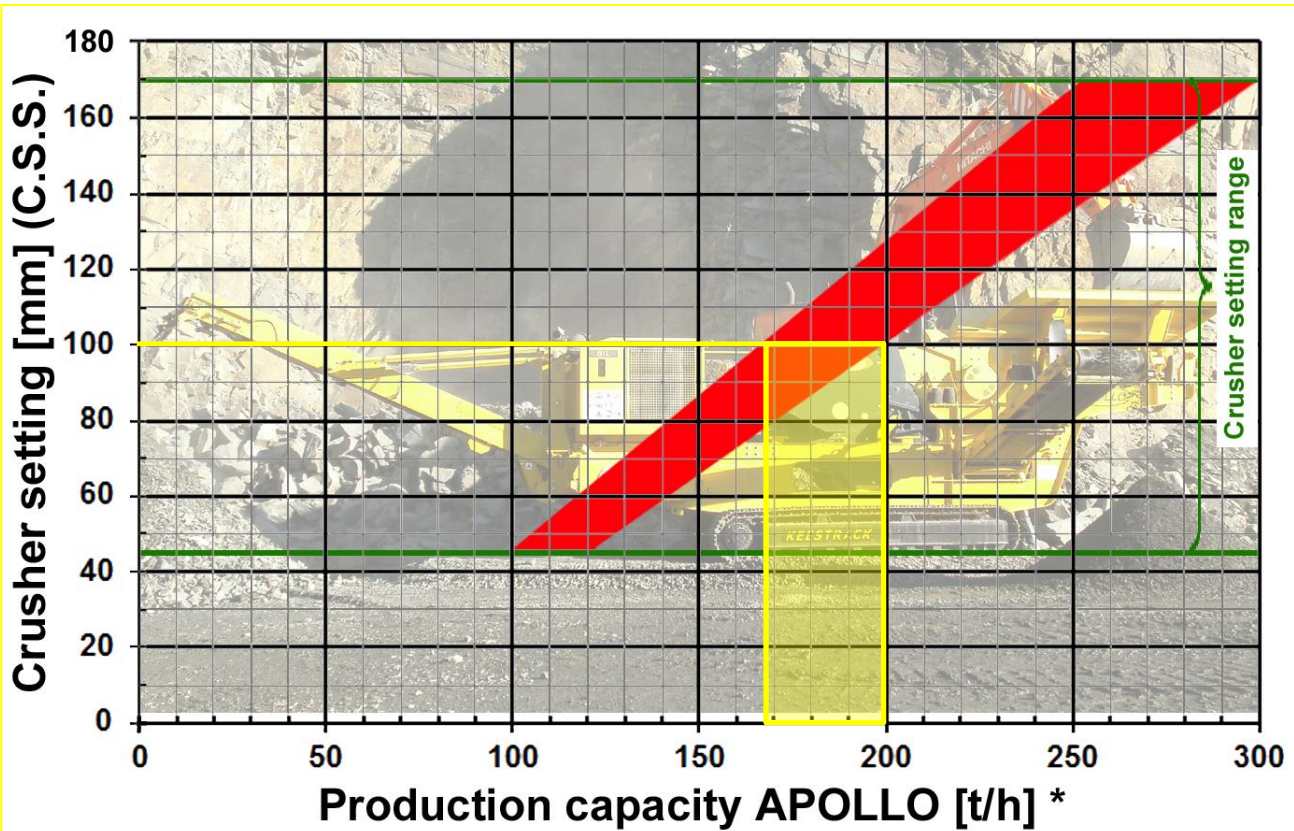
Humidity (%)	Weight (humid)
	Weight (dry)



Cumulated percentage	Grain size [mm]																	Legend			
	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
Screen size C.S.S. 45 mm	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	83,3	100,0	Legend
Screen size C.S.S. 60 mm	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	15,8	21,1	27,9	39,0	44,8	58,3	80,4	Legend
Screen size C.S.S. 80 mm	1,6	1,7	1,9	2,2	2,5	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	Legend
Screen size C.S.S. 100 mm	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	Legend
Screen size C.S.S. 120 mm	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	Legend
Screen size C.S.S. 140 mm	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	Legend
Screen size C.S.S. 150 mm	0,8	0,9	0,9	1,1	1,3	1,4	1,6	1,7	1,8	2,1	2,4	2,8	3,3	3,9	5,1	6,9	10,1	11,5	16,0	25,8	Legend

JAW CRUSHERS

INDICATIVE PRODUCTION CAPACITY:



*** Production capacity is depending and based on:**

- Medium hard feed material with specific gravity of 2,7 t/m³ (bulk density 1,7-1,8 t/m³)
- Proper and constant feed
- Adequate feed size distribution without oversize
- Proper discharge of the crushed material

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/m³ (see TECHNICAL INFO Page 3), the production capacity will be between $168 / 1,6 = 105$ m³/h and $200 / 1,6 = 125$ m³/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