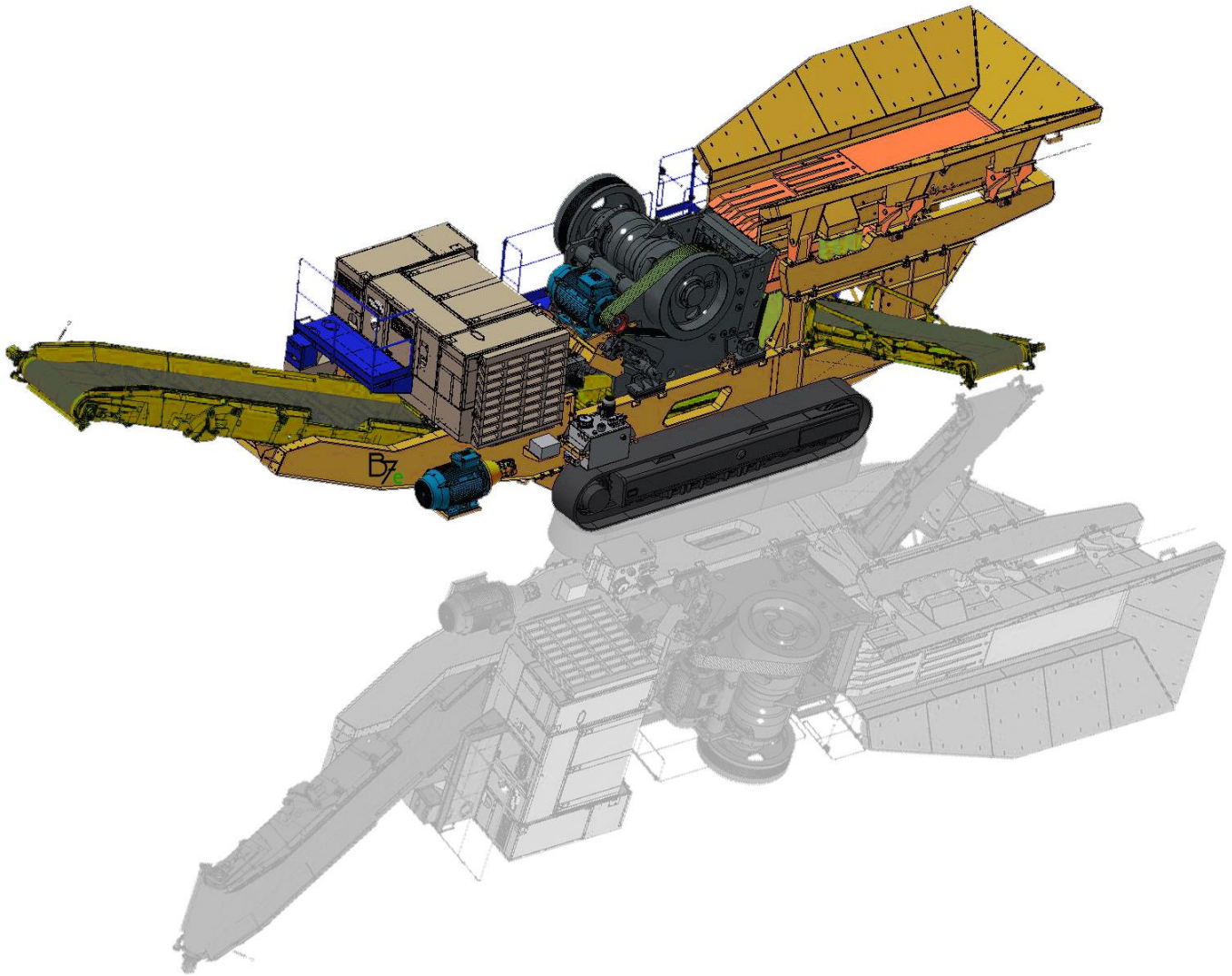


JAW CRUSHER **B7**_e

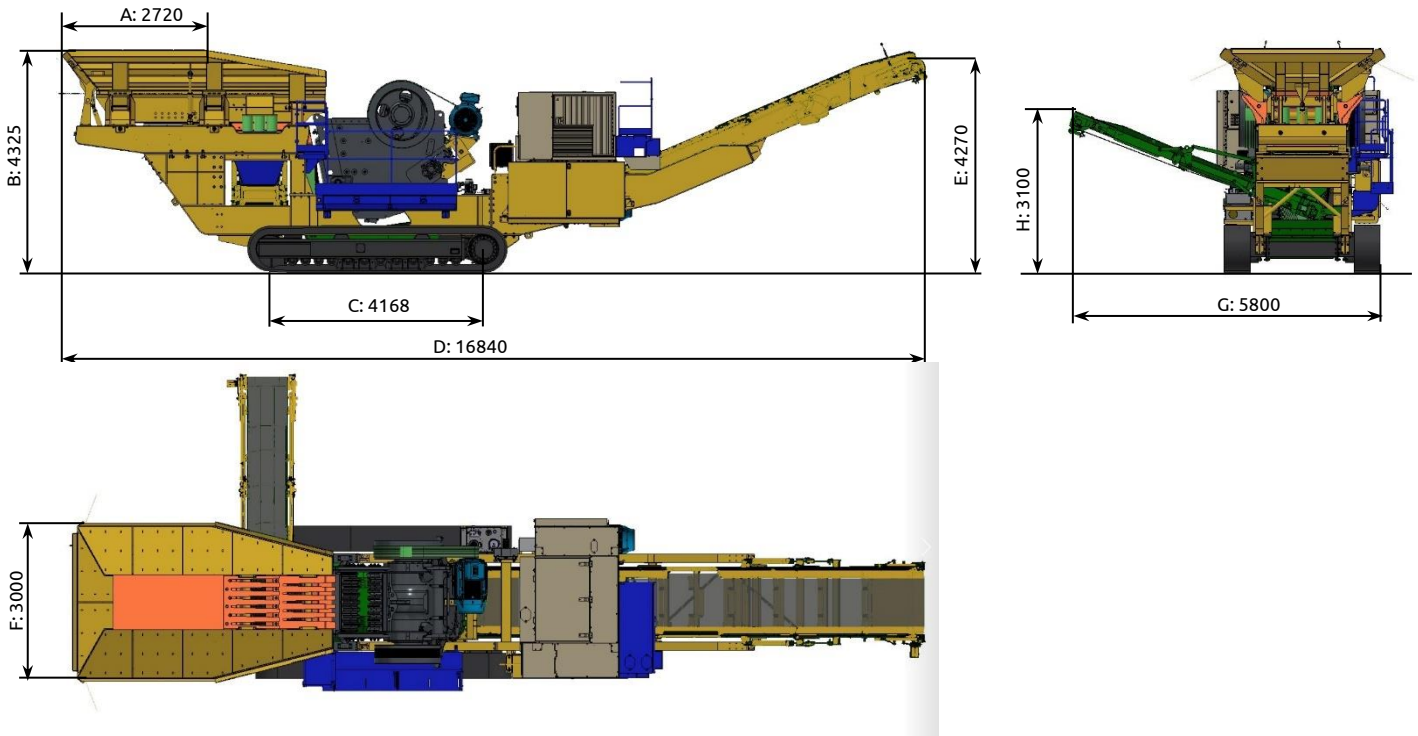


JAW CRUSHERS



DIMENSIONS

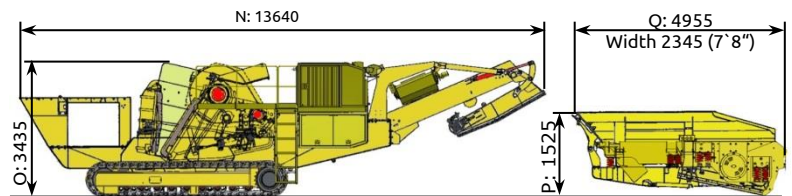
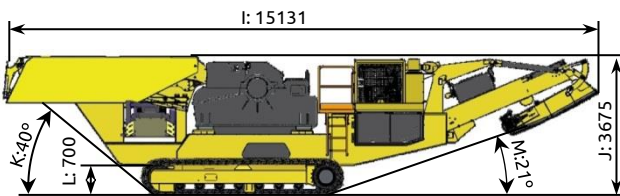
OPERATION:



TRANSPORT:

a) all in one

b) split



Weight: Approx. 66 t (without options)

Weight options:
 Hopper wear plates 1.140 kg
 Conveyor pre-screening 1.120 kg

Transport width 3.000 mm (9'10")
 Transport weight feeding unit Approx. 7.600 kg
 Transport weight Crusher Approx. 58.400 kg

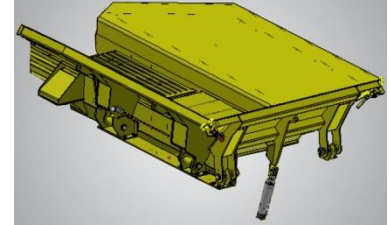
REMARK: All pictures might show options, not included in the scope of supply

A	B	C	D	E	F	G
2720	4325	4168	16840	4270	3000	5800
8'11"	14'2"	13'8"	55'3"	14'0"	9'10"	19'0"
H	I	J	N	O	P	Q
3100	15131	3675	13640	3435	1525	4955
10'2"	49'8"	12'1"	44'9"	11'3"	5'0"	16'3"

TECHNICAL SPECIFICATION

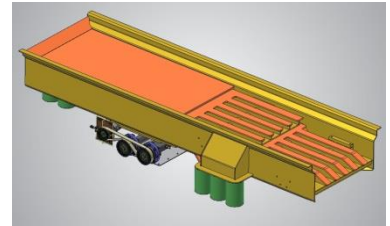
1) FEED HOPPER

- Content	6 m ³	(7,8 yard ³)
- Design	Wear resistant steel HB 450	
- Feeding height	4.375 mm FP 950: 4.600 mm	(14'4")
- Feeding width	3.000 mm	(9'10")
- Feeding length	3.350 mm	(11'0")
- Hopper walls	Hydraulically fold-able for transport	



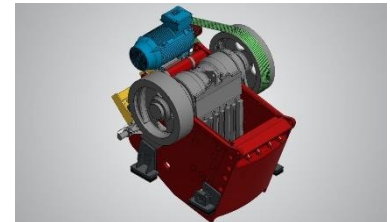
2) VIBRATING FEEDER with SCALPER

- Total length	4.500 mm	(14'9")
- Width	1.080 mm	(3'7")
- Length grizzly with step	1.100 + 1.100 = 2.200 mm	(3'7" + 3'7" = 7'3")
- TD Grizzly bars	Gap standard 40/90 mm;	
- Bottom deck	Wire mesh, end tensioned; L= 1.450 mm; W=870 mm	(4'9"; 2'10")
- Pre-screening chute	Upper part: swivel able with hydraulic cylinder for ease of service Middle part: turn able for bypass or stockpile Lower part: made of rubber	
- Drive	Hydro motor 10 kW – Tooth belt; Adjustable 700 – 1.000 R.P.M.	(14 hp)



3) JAW CRUSHER

- Model	with hydraulic management (gap adjustment)	
- Feed opening	1200 x 800 mm	(47" x 31,5")
- Outlet adjustment	C.S.S. min. - max. 75 - 250 mm	(3" - 10")
- Throughput (*)	See page 9 the throughput is variable according to feeding material and jaw crusher setting	
- Feed size	0/700 mm	(<28")
- Stroke swing jaw	32 mm	
- Weight of jaw crusher	28 ton	(31 st)
- Plate height fixed jaw	Toothed static jaw 1.700 mm Material: 18Mn2Cr	(5'7")
- Plate height movable jaw	Toothed swing jaw 1.700 mm Material: 18Mn2Cr	(5'7")
- Flywheel diameter	1.300 mm	(4'3")



4) MAIN BELT CONVEYOR, for transport hydraulic folding

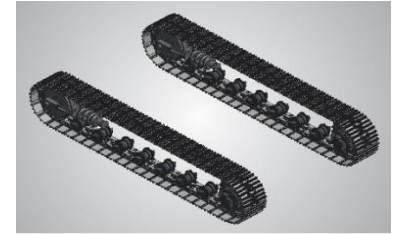
- Discharge height	4.270 mm	(14'0")
- Stockpile volume	Approx. 230 t; $\gamma=1,7$; 37° angle of repose	
- Length AD	12.300 mm	(40'4")
- Width BW	1.200 mm	(3'11")
- Belt speed	1,56 m/s	
- Belt	RIP STOP EP500/3-5+2; Metal shield in the top cover for increased belt service life under hard working conditions	
- Discharge to belt	heavy duty garlands for discharge from crusher to main belt conveyor	
- Inclination	8 - 23°	
- Drive	Hydraulic 15 kW	(20 hp)



TECHNICAL SPECIFICATION

5) TRACK - UNIT

- Length	4.168 mm	(13'8")
- Width track shoe	500 mm	(1'8")
- Total width	3.000 mm	(9'10")
- 2 speeds	1,1 km/h and 2 km/h	(0,7 / 1,2 mph)



6) ENGINE UNIT

Drive	Diesel / Hydraulic	
- Diesel Motor, Type	a) VOLVO TAD 1351 GE, fixed speed b) VOLVO TAD 1371 VE	p/n 101618 p/n 101617
- Emission control	a) Tier 3; EU STAGE IIIA b) Tier 4f; EU STAGE IV; SCR; light EGR	
- Power ISO 14396	a) 279 kW / 1.500 R.P.M. b) 285 kW / 1.500 R.P.M.	(379 hp) (387 hp)
- Max. torque	a) 1.938 Nm at 1.500 R.P.M. b) 1.965 Nm at 1.200 R.P.M.	(1.430 lb ft) (1.450 lb ft)
- Engine operating speed	1.500 R.P.M. for low noise emission	
- Bore hole/stroke	a - b) 131 x 158 mm	(5,2" x 6,2")
- Combustion chamber	a - b) 12.780 cm ³	(780 cu in)
- Fuel consumption	197 g/kWh at 1.500; typical 35 - 40 l/h **)	
- Voltage	24 Volt (for improved cold start properties)	
- Cooling	Water cooled	
- Fuel	Tank 580 Litres; fuel code acc. to EN 590	(153 gal)
- Air filter	Cyclone pre filter – dual stage fine filter	
- Drive crusher	Engine → Alternator → electric motor 132 kW → V-belt drive for crusher drive	(180 hp)
- Hydraulic oil tank	120 Litres	(185 gal)
- e Drive	Alternator IP 23; 330 kVA at 50 Hz - 1.500 R.P.M	
- 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
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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

7) CONTROL

- Type PLC – IP 67; dust and vibration proof
- Display LCD colour 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
- Drive for fan 0,07 kW



POWER SUPPLY

- external plug-in Electric 400 V; 50 Hz; 300 A (ca. 250 kVA)

ep+:
Main switch for external power supply

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



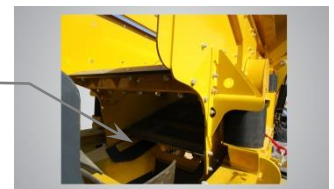
8) FRAME

- 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/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.

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

9) DUST SUPPRESSION SYSTEM p/n 166018

- Type	CAS 91	
- Drive	Hydraulic motor 1,1 kW	
- Water consumption	Max. 0,75 m ³ /h	(1,5 hp)
- 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	



10) RADIO REMOTE CONTROL – Level 2 (p/n 100370)

- 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



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

- Type	LSC	
- Length AD	5.000 mm	(16'5")
- Width BW	800 mm	(2'8")
- Discharge height	3.100 mm	(10'2")
- Belt speed	1,15 m/s	
- Inclination	22°	
- Drive	Hydraulic 5,5 kW	(7 hp)
- Stockpile volume	Approx. 100 t (γ=1,7; 37°)	
- For transport	Hydraulically fold-able for transport	
- Weight	1.120 kg	(2.470 lb)



12) FEED HOPPER WITH WEAR PLATES p/n 108013

- Wear plates	set 12 mm HB 450, welded in the feed hopper	
- Weight	1.140 kg	(2.500 lb)



TECHNICAL SPECIFICATION - OPTIONS

13) 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	¾" 1,5 m long	
- Drive	On board-electric 24 V DC	



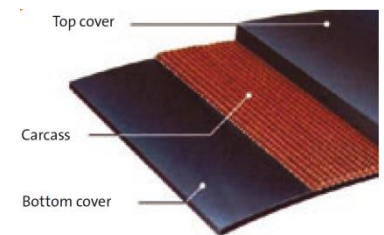
14) CENTRAL GREASING SYSTEM p/n 166017

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



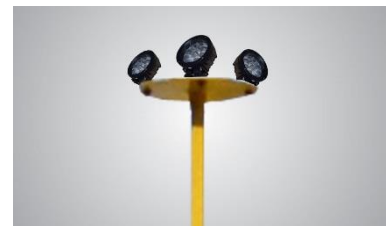
15) MCL KT FLEX BELT p/n 166046

- 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.



16) WORKING LIGHTS

	p/n 701006	
- Tower with 4 lamps	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)



17) 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	(+ 11 lb)
- Additional	Incl. timer for 3 starting times and temperature pre-selection	


HEATING SYSTEM FOR ENGINE



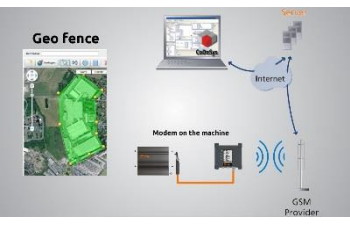
TECHNICAL SPECIFICATION - OPTIONS

18) BELT SCALE

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> - System - Calibration - Sensors
 - Belt speed - Data transfer | <p>Volumetric recording p/n 102869</p> <p>Only one time and only takes a few seconds.</p> <p>The Sensor operates without any contact to the material and therefore has no wear.</p> <p>It is insensitive against dust and vibrations.</p> <p>The belt speed is measured using an inductive switch mounted on the drive drum.</p> <p>Wireless data transmission via blue tooth to a handheld PDA with various operation functions:</p> <ul style="list-style-type: none"> - client - date/time - operator - location - material - print options - connection to lap/desktop using a USB cable <p>Charger unit that allows both 12/24 V charging</p> <p>Integrated thermal printer</p> <p>Protective carry case</p> | 
 |
|---|---|--|

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> - System - Display
 - Components | <p>Weight recording p/n 101774</p> <p>Feed capacity summary, daily feed capacity, actual capacity, belt speed</p> <p>Roller station for weight take-up</p> <p>Speed take-up station</p> <p>Display with electronic unit</p> |  |
|---|--|--|

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

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> - Functions
 - option | <p>- WEB portal: position of the machine can be displayed on Google Maps; a geo-fence can be generated.</p> <p>FOR DEALER ONLY:</p> <p>- Real time access to Diesel engine, parameters of components and alarms.</p>
<p>International ROAMING SIMCARD
1 year limited data volume – p/n 880884</p> |  |
|---|---|---|

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.

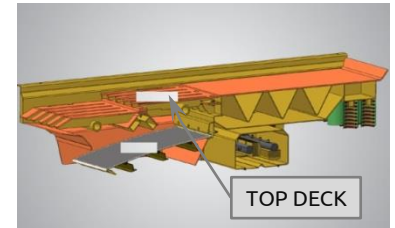
The Buyer explicitly acknowledges that this information is provided free of charge to KEESTRACK for the delivery of services offered by KEESTRACK and to adapt or improve its services and/or products.

TECHNICAL SPECIFICATION – SCREEN CHOICE

20) SCREENS for TOP DECK of VIBRATINGFEEDER with SCALPER

Grizzly bars

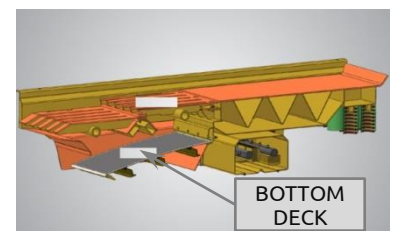
p/n	opening	Hardness
802639	40 / 90 mm	HB 450



21) SCREENS for BOTTOM DECK of VIBRATINGFEEDER with SCALPER

Grizzly bars

p/n	Dimension	Thickness [mm]	Hardness
108007	25 x 25 mm	5	HB 450
108026	35 x 35 mm	7	HB 450

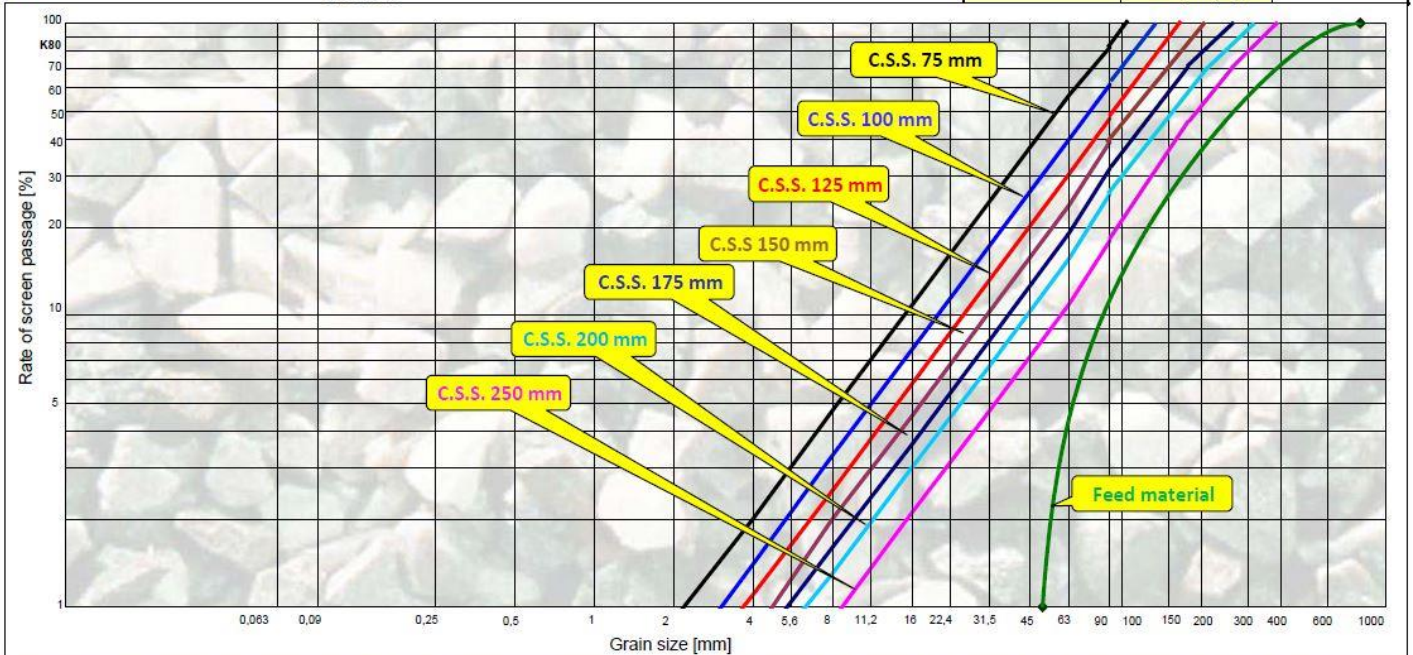


INDICATIVE PRODUCT GRADATION AT CRUSHING GAP (C.S.S.):

Screening analysis

Feed material	Granite	
Feed size	50	800
Feed capacity		
Crusher Type	JAW CRUSHER	
	Humidity (%)	Weight (humid)
		Weight (dry)

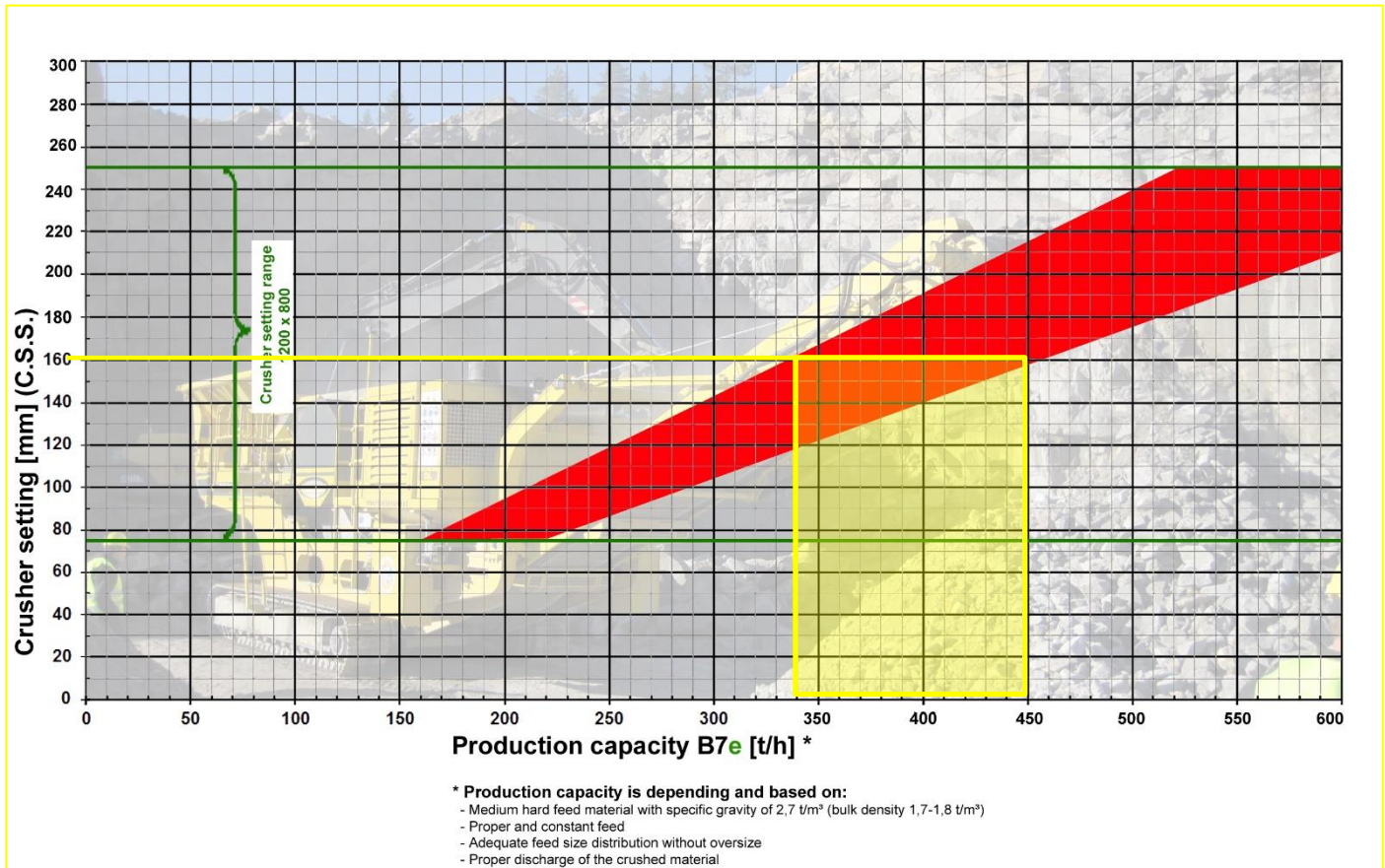
Title: INDICATIVE PRODUCT GRADATION AT CRUSHING GAP (C.S.S.):
Date: 07.03.2018



Cumulated percentage	Screen size	0,25	0,5	1	2	4	8	16	31,5	63	90	Legend
	C.S.S. 75 mm		0,1	0,2	0,4	0,9	2,0	4,7	10,8	24,5	100,0	
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 100 mm		0,1	0,3	0,8	1,4	3,3	7,6	17,3	40,0	100,0	Legend	
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 125 mm		0,1	0,2	0,5	1,1	2,5	5,8	13,2	30,4	100,0	Legend	
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 150 mm		0,1	0,2	0,4	0,8	2,0	4,5	10,3	23,8	39,2	Legend	
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 175 mm		0,1	0,1	0,3	0,7	1,6	3,6	8,2	19,1	31,8	Legend	
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 200 mm		0,1	0,2	0,6	1,4	3,3	7,7	17,8	40,0	Legend		
Screen size		0,5	1	2	4	8	16	31,5	63	90	Legend	
C.S.S. 250 mm		0,1	0,3	0,4	0,9	2,1	4,7	10,9	18,0	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 160 mm, the max. production will be between 340 and 450 t/h. Considering the bulk weight of the material of 1,7 t/m³ (see TECHNICAL INFO Page 3), the production capacity will be between $340 / 1,7 = 200$ m³/h and $450 / 1,7 = 265$ m³/h. For Granite ($W_i=16$), the production will be in the middle range = approx. 395 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