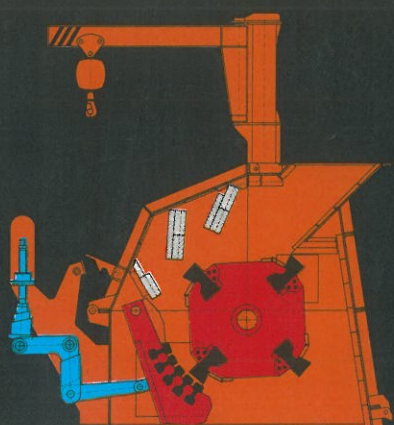
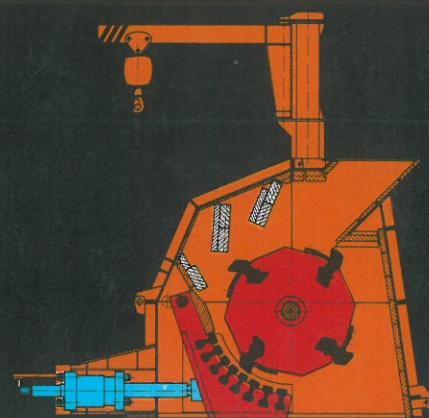




IMPACT CRUSHERS



10. 6.4
12.10.4
12.12.4
12.15.4



Machines of this type-series are used for natural-grain-crushing as well as for the final processing of material already crushed (blasted or out of pre-crushers). Their range of capacity extends up to 280 t/h or to a feed size of up to 450 mm edge length (see opposite data sheet).

Characterization of machine:

Massive crusher housing made of welded construction with armoring, the front wall as well as the housing upper part are hinged for the purpose of servicing and maintenance. The impact elements, consisting of single impact plates, are inserted into the slotted housing-side liners. Inclining the front wall of the housing enables the loose insertion of the wear plates which can be turned according to wear. When the machine housing is closed, the impact elements and wear plates are locked in place without connecting elements between the side liners and the tiltable housing parts. This kind of design features the advantage that control and maintenance can be performed very easily, with the housing not required to be opened.

The design of the rotor and/or its equipment with chilled-casting impact hammers (i. e. the type of the impeller bar and the impeller bar retainer) will be adjusted to each specific operating condition. The rotor is equipped with heavy self-aligning radial roller bearings, located in forged bearing housings and provided with double-labyrinth seals.

The rotor body as well as the drive pulley are mounted on the rotor shaft by means of the proved cone clamping element.

The fulcrum of the swing beam is located behind the lowest impact element, the swing beam is equipped with chilled-casting wear plates. The grinding plate is mounted in the sphere of material feeding; it takes care for a continuous material distribution. In the lower area, special swing beam rails are arranged. The type of the swing beam or the quantity of the swing beam rail rows is also chosen by taking into consideration the respective operating conditions.

The extremely high efficiency of these machines is particularly characterized by the:

- position of the inlet to the impact elements
- arrangement of impact elements
- grinding course as well as design of swing beam
- individual coordination of rotor peripheral speed with the material to be crushed as well as with the final product

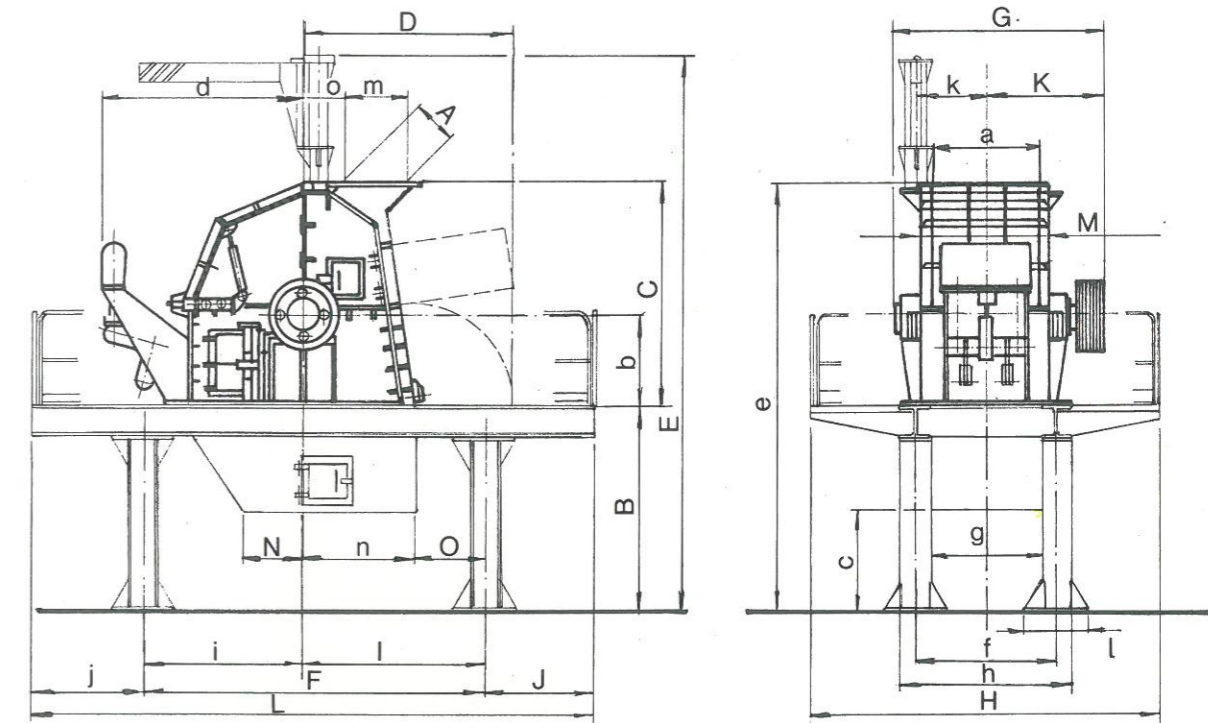
These criterions represent the result of a long constructive as well as empirical work of development, so that for each requirement an already proven machine can be used.

Grain composition of final product:

In extracts we state some curves from different materials.

MACHINE-EQUIPMENT OR POSSIBILITIES FOR THE EQUIPMENT

- Swing beam rail rows** (quantity according to following synopsis).
- Rotor with BKS-impeller bars and centrifugal fixture:**
This design will be used mainly for feed sizes up to approx. 250 mm edge length and may be considered as "erection-friendly" because of the loose insertion possibility of the impeller bars. The impeller bars are fixed by lateral, axial locking plates.
- Rotor with SSSL-bevel-support impeller bars and centrifugal fixture:**
For harder applications, i. e. for the use in hard aggregate or for a feed sizes of up to max. 450 mm. The extremely wide cross-section of the impeller bars guarantees great breakage resistance at high throughputs. Assembly and disassembly as well as fixation of the impeller bars are performed in the same way as described under item 2.
- Adjustment of swing beam via two spring-loaded pressure spindles:**
- which are coupled at the swing beam via toggles and push rods.
A locking-screw-spindle secures the adjusting device.
- Adjustment of swing beam via one spring-loaded adjustment-cylinder:**
One-point control with sturdy adjustment-spindle and articulated spring-preloading mechanism.
- Horizontal swing-beam adjustment:** To realize a finer material content, the bearing of swing beam is adjustable in horizontal direction by means of two mechanical adjusting cylinders. With this device, the grinding course can be adapted to each wear situation of rotor and swing beam.
- Cover hydraulic:** In order to facilitate access to rotor and wear parts, the tiltable housing upper part can be hinged hydraulically. The cover hydraulic consists of 2 hydraulic cylinders, which are mounted laterally on the housing, as well as of one hydraulic unit with 1,5 kW electric motor and of all connections, pipelines and hoses, finish-mounted, adjusted and checked.
- Slewing crane:** For an effortless replacement of the wear parts, a slewing crane with electric hoist for loads up to 250 kg, 500 kg, 1000 kg (according to the type of machine involved) can be used. The crane will be mounted to the machine housing on a bracket supplied as standard equipment.
- Front liner:** Forged or made of chilled-casting material 90 mm thick, to increase its service, and preferably to be used for abrasive feed material.
- Substructure** with stairs, railings, platform coverings of nipple plate material, discharge box.
- Electric motor, clamping bars, swichtgear**
- 1 set of tools + tool-box**
- Feed box:** Designed according to the type of feeding method involved
- Drive unit** with countershaft as from 200 kW optionally with flexible or with fluid coupling.

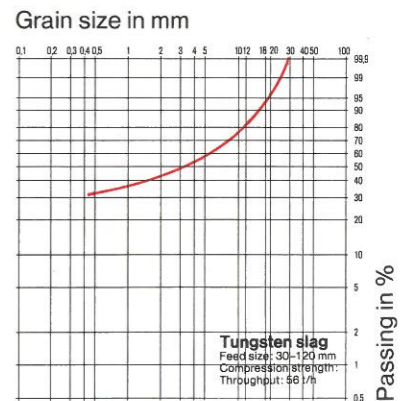
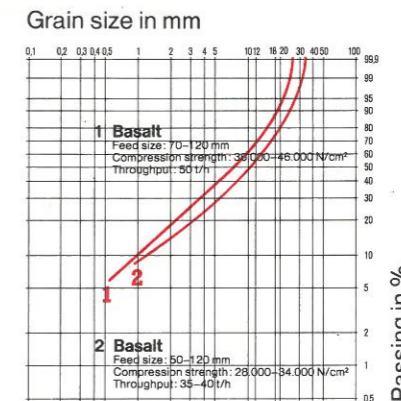
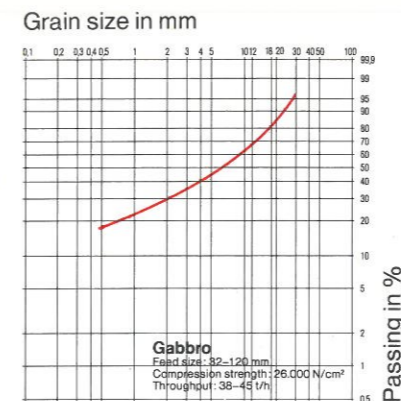
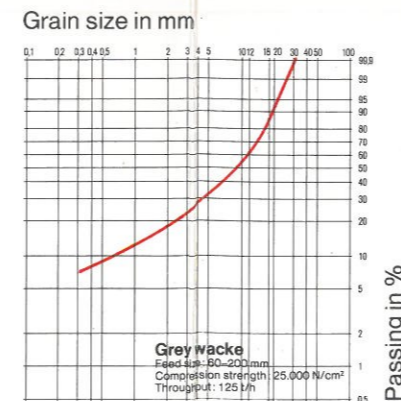
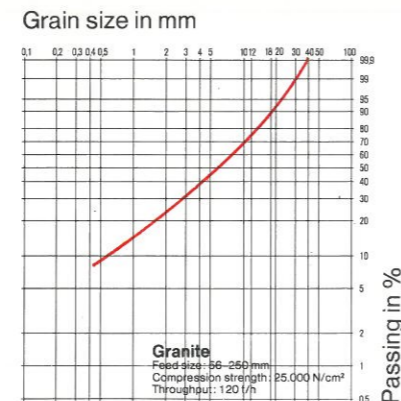
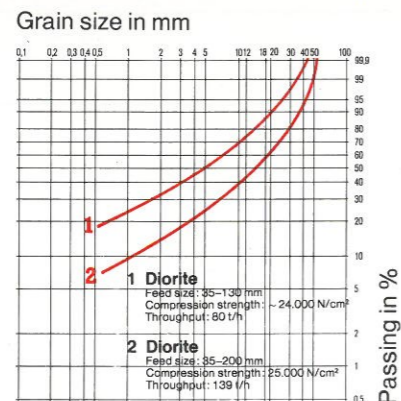
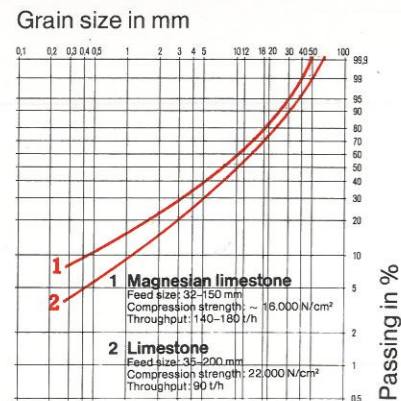


TYPE	10.6.4 E2	12.10.4 E2	12.10.4 E3	12.12.4 E	12.15.4 E
Weight of basic machine/kg	8300	13950	14250	20600	24200
Weight with substructure/kg	11850	18850	19150	25850	30200
Throughput					
Hard aggregate	up to 50 t/h	up to 100 t/h	up to 100 t/h	up to 140 t/h	up to 180 t/h
Lime stone	up to 100 t/h	up to 160 t/h	up to 160 t/h	up to 210 t/h	up to 280 t/h
Feed size					
Hard aggregate	up to 180 mm	up to 300 mm	up to 350 mm	up to 350 mm	up to 350 mm
max. edge-length Lime stone	up to 300 mm	up to 400 mm	up to 450 mm	up to 450 mm	up to 450 mm
Drive capacity/kW	75-110	110-160	110-160	160-250	250-320
Reduction ratio	1:20-50	1:20-50	1:20-50	1:20-50	1:20-50
Inlet opening/mm:					
A a	350 620	430 1010	430 1010	430 1240	500 1510
B b	1830 685	2000 890	2000 890	2000 890	2000 890
C c	1755 1030	2160 1000	2160 1000	2160 1000	2160 1000
D d	1610 1600	2040 1915	2040 2245	2040 2245	2040 2240
E e	4450 3585	5370 4160	5370 4160	5370 4160	5420 4160
F f	2700 980	3350 1370	3350 1370	3350* 1600	3350 1870
G g	1460 680	1990 1070	1999 1070	2199 1300	2880 1570
H h	2950 1280	3280 1670	3280 1670	3510 1900	3780 2170
I i	1650 1050	1775 1575	1775 1575	1775 1575	1775 1575
J j	1105 1205	1060 1060	1060 1060	1060 1060	2160* 1075*
K k	805 450	1124 670	1124 670	1420 785	1728 965
L l	5010 600□	5470 600□	5470 600□	5470 600□	5470 600□
M m	870 490	1260 650	1260 650	1490 650	1760 720
N n	200 900	635 1030	635 1080	635 1080	635 1080
O o	750 365	700 400	700 400	700 400	700 400

Up to 160 kW

Subject to change without notice

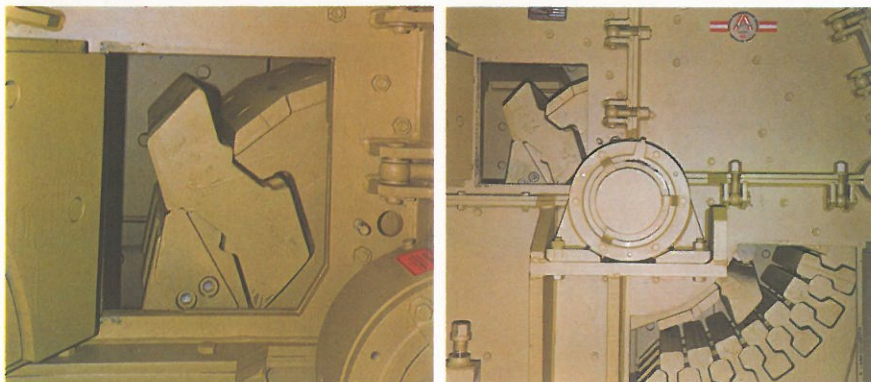
Machine equipment – synopsis	10.6.4 E2	12.10.4 E2	12.10.4 E3	12.12.4 E	12.15.4 E
Standard equipment = ● Additional equipment = ■					
1. Swing beam rail rows Quantity/machine	● 7	● 5	● 8	● 8	● 8
2. Rotor with BKS-impeller bars and centrifugal fixture	● 4	● 4	● 4	■ 2 x 4	—
3. Rotor with SSSL-bevel-support impeller bars and centrifugal fixture, piece/rotor	■ 4	■ 4	■ 4	■ 2 x 4	● 4
4. Adjustment of swing beam via two spring-loaded pressure spindles	●	●	—	—	—
5. Adjustment of swing beam via one spring-loaded adjusting cylinder	—	—	●	●	●
6. Swing-beam horizontal adjustment	■	■	■	■	■
7. Cover hydraulic	● 1,5 kW	● 1,5 kW	● 1,5 kW	● 1,5 kW	● 4 kW
8. Slewing crane Loadbearing capacity	■ 250 kg	■ 500 kg	■ 500 kg	■ 500 kg	■ 1000 kg
9. Front liner – wear plates 50 mm Front liner – wear plates 90 mm	●	●	●	●	●
10. Substructure with stairs, railings, platform covers of nipple plate material, discharge box, belt-cover, V-belts, rotor and motor V-belt pulley	■	■	■	■	■
11. Electric motor, clamping bars, switchgear	●	●	●	●	●
12. 1 set of tools + tool box	●	●	●	●	●
13. Feed box – acc. to kind of feeding method	■	■	■	■	■
14. Drive unit as from 200 kW with countershaft	—	—	—	■	■



Design Features of this Proven SBM-Type Series with the Combined Impact-Grinding system

- the cubical product volume substantially exceeds STANDARD requirements
- favourable impact and abrasion values due to selective comminution (cubical and crack-free grain product)
- largely variable and adjustable reduction rates as a function of the swing beam system and of respective setting means, eliminating the necessity for terminal comminutors and plant components
- also operable as a secondary comminution stage for the production of natural-like sands
- economy-priced, high-speed fragmentation machinery for all kinds of reduction work
- high efficiency and low operating cost as a consequence of the perfected design
- maximum economy due to the high degree of utilization of the wear parts
- low energy requirements coupled with a high throughput
- extremely accessible and service-compatible (large service doors, hydr. and mech. moving aids)
- high degree of availability (operational safety and reliability)
- low noise level, less than 90 dB(A) at a distance of 1 m under load
- applicable to both stationary and mobile plants

10.6.4 E2 – Mobile drive: diesel unit



12.10.4 E2 – Stationary drive: electric motor



SBM

Wageneder
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