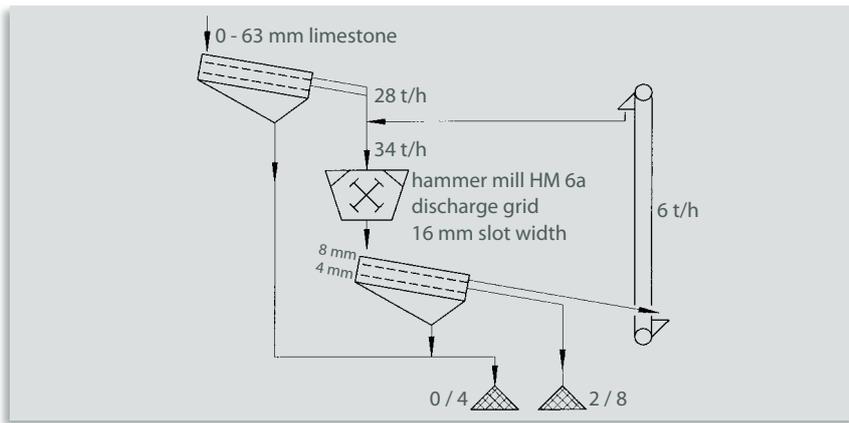


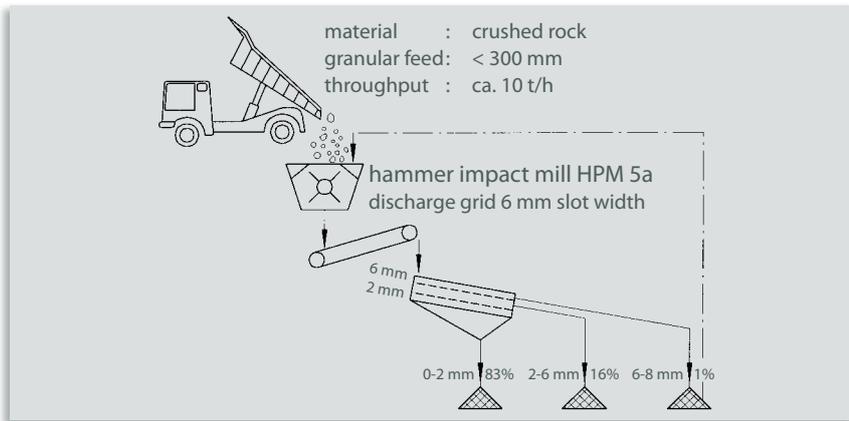
# Hammer- and hammer impact mills



Crushing soft to  
medium-hard materials



cycle crushing of limestone



production of tennis court sand (0 - 2 mm) and a secondary product (2 - 6 mm) made of crushed rock

## Applications

Hammer- and hammer impact mills are suitable for crushing soft to medium hard materials (degrees of hardness according to F. Mohs 2 - 5). For example: agglomerates, coal, limestone, gypsum and slag.

They are designed for large throughput volumes and trouble-free operation.

Hammer impact mills are particularly suited very coarse material for whilst attaining a high degree of comminution with large throughputs.

The hammer mill HM 1 with the collection box in the base frame is for the grinding of small batches, as normally handled in laboratories.

In a special execution that mill can also be used for the grinding of laboratory samples of metal filings.

## Function

In hammer mills the material is pulled into the crushing space by the hammers suspended from the rapid running rotor. Comminution occurs mainly through impact in the area of the grid basket. The material being crushed remains in the crushing space until the degree of fineness required has been achieved, so that it can then pass through the discharge grid.

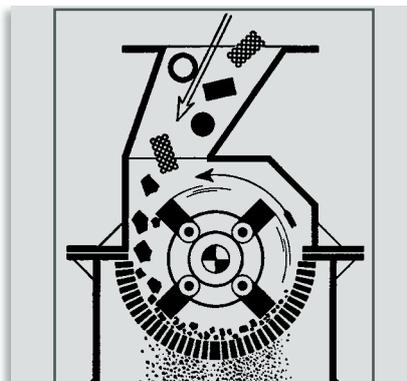
In both types of mills the fineness of the finished material is influenced by changing the grid slot width and circumferential speed.

Unlike hammer mills, hammer impact mills are provided with additional impact space in the top housing section.

The material once fed in is picked up by the rotor hammers and hurled against the deflectors in the impact space. The material pre-crushed in this manner lands in the bottom crushing space, being subsequently crushed, in the main, on the grid basket.



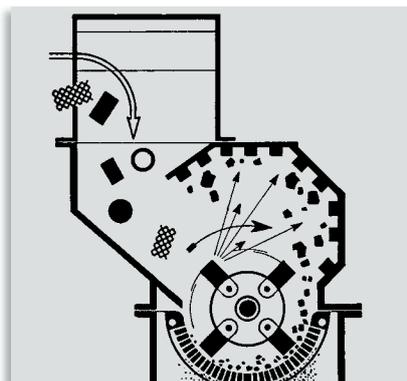
hammer mill HM 3 with feed hopper



principle hammer mill



hammer impact mill HPM 3 with feed hopper



principle hammer impact mill

## Technique

The hammer- and hammer impact mills are of inlet welded steel construction. The two-section housing comprises the top housing section and bottom housing section.

The crushing space is protected from wear by easily exchangeable armoured plates. Continuous bolts holding the hammers, can be withdrawn through openings in the housing sides (over size 3).

Changing and re-positioning of the hammers is quick and easy, without the need to dismantle the mill. Inspection covers (over size 3) on front and rear walls make the mill interior easily accessible.

The two-section grid basket (over size 3) made of low-wear profile bars is incorporated in the lower housing section.

Each half of the grid basket is mounted to swivel with continuous bolts at the extreme end.

In hammer mill HM 1 the top housing section can be swung up, making for rapid and trouble-free grid basket changing and cleaning.

This mill is powered by a three-phase motor and V-belt drive with flywheel.

hammer mill HM 1 with feeding chute and control unit



hammer mill HM 6a



Hammer mill		HM 1	HM 3	HM 4a	HM 4b	HM 5a	HM 5b	HM 6a	HM 6b
Dimension (W x H x D)	mm	990x900x570	1550x855x1460	1772x1030x1600	1972x1030x1600	2550x1355x2000	2718x1335x2000	3000x1550x2135	3250x1550x2135
Weight	kg	608	950	1800	2200	3000	3450	5400	5900
Motor	kW	5,5	11	18,5	22	37	45	55	75
Milling space width	mm	180	320	450	610	810	980	1110	1360
Diameter of grinding chamber	mm		450	590	590	780	780	980	980
Granular feed size (max.)	mm	50	110	150	200	270	330	370	450
Slot width discharge grid	mm	1,0 and larger							
Throughput (with 10 mm slot)	t/h	1	3	7	9	20	24	30	40
Hammer impact mill			HPM 3	HPM 4a	HPM 4b	HPM 5a	HPM 5b	HPM 6a	HPM 6b
Dimension (W x H x D)	mm		1550x1065x1500	1772x1240x1600	1972x1240x1600	2550x1550x2000	2718x1550x2000	3000x1880x2135	3250x1880x2135
Weight	kg		1100	2000	2400	3300	3750	6000	7200
Motor	kW		11	18,5	22	37	45	55	75
Milling space width	mm		320	450	610	810	980	1110	1360
Diameter of grinding chamber	mm		450	590	590	780	780	980	980
Aufgabekörnung (max.)	mm		110	150	200	270	330	370	450
Slot width discharge grid	mm		1,0 and larger						
Throughput (with 10 mm slot)	t/h		3	7	9	20	24	30	40

We reserve the right for technical changes.

# Delivery Program

## Screening Machines Process Equipment

circular and elliptical motion screens  
double counterweight screens  
multideck horizontal screen  
round screens  
jigs

## Sampling Systems, Airtube Systems, Size Reduction Machines, Laboratory Equipment, Control Screening Machines and Automation

individual units and complete installations  
for sampling and sample preparation  
airtube systems  
jaw crushers  
roller mills  
hammer and hammer impact mills  
eccentric vibrating mills and ball mills  
control screening machines  
analytical screening machines  
splitter  
testing drums  
automation

## Centrifuges

scroll-screen centrifuges  
pusher centrifuges  
sliding discharge centrifuges  
vibratory centrifuges  
decanter centrifuges