

Description: MCS



The new generation in the Grinding technology



purposes:

- grinding
- opening connected materials
- grading reduction
- ball shaping (Verkugelung)

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1 machine structure

The mill consists of a lower frame of steel structure. The workroom is formed in two half shells; a fixed one and a movable one. The mobile one can be easy used for maintenance – or tool changing actions. The impact tools are moved by a vertical installated rotor which is electrical belt powered.

2 principle

The functional design principle is a combination of impact crushing in combination with an optionally forced passage through grids. Hereby we reach an optimal grinding and ball shaping of the input materials.



3 Purpose

This mill is able to execute different materials and material mixtures of recycling, building materials and much more as follows:

- grinding
- dedusting
- ball shaping
- disagglomeration
- selective crushing

4 Input material

Forsaken material must generally be able to be crushed, e.g. WEEE scrap, Automotive Shredder Residue (ASR), various materials coming from screening drums, minerals and other brittle fracturing materials, maximum input particle size is limited by the inlet geometrics of the machine.

5 Output material

The result is a crushed, deformed, ball-shaped and / or cleaned material as well as fines (dust).

6 Process

The material will fed in the machine by an standard input chute, which is often used for bulky materials.

A limitation is given by the geometry of the free cross-sectional feeding area. The workroom is used for impact crushing. Therefore are on the vertical rotor different movable impact tools in four levels. The material accelerates to wearresistant plates being fixed on the body. Within this process it crushes by the absorbed impact energy and has to pass different tool levels.



The fifth level assumes material transport to discharge it. A fifth tool level is responsible for material output transportation. The MCS is adjustable to different requirements through choosing shape and number of tools, their geometries, rotor speed and feeding intensity by our patented adjustment system.

The MCS will be connected with a dedusting system at the entry as well as at the outlet.

Due to installation of an air faciliation with zyclon separator and heavy parts selection after the Mill the machine can be optimized to the various input materials.

The drive is built by a v-belt system. The rotor speed can be easily modified by changing diameters of the v-belt pulleys. During operation the flexibility in speed is given by using a frequency converter for the electric motor.

7 maintenance

The machine is built on a fixed supporting steel frame. The front half shell of the machine can be opened by hand. Thus opened a rotor change is easy to perform. Our targets are very fast machine adaptions and easy maintenances.



8 Additional characteristics

- Rotor: vertical arranged
- 5 tool levels: equipped with movable mounted tools
- Maximum input particle size: depends on geometry of the inlet chute
- Machine weight: approx. 4,5 t depending of hight base frame
- Drive: electric motor with optional frequency converter / multiple v-belt drive
- Installed motor power: approx:. 75 KW
- Rotor speed/peripheral speed tool outside diameter: 35 m/s bis 73 m/s



Rotation direction of the rotor: reversible

Machine characteristics are subject to change without notice.

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