

## Technical details **Feed Hopper**



- Highly Customizable
- Robust and stable
- Long term reliable material infeed

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## Application and customer benefit:

Feed hoppers form the entryway to any form of production plant and thus the beginning of an efficient and successful treatment process for aggregates and other bulk materials. Feed hoppers from Moerschen are a long term reliable material feed solution due to their strong and weatherproof design.

## **Your benefits:**

- **Continuous feeding** of the follow up plant, through large hopper volume. Even when the loading of the hopper is interrupted.
- **Safety for your plant** due to the integrated oversize protection
- **Precise variation of the output volume** enabled by the adjustable conveyor drive
- **Reliable for many years** due to the strong construction and weather resistant surface treatment
- **Individually customizable** due to modular design

## Basics:

- Hopper cone made of 8mm Steel sheets
- Hopper side walls made as a reinforced sheet metal design
- Stable underframe made from IPE steel beams
- The underframe is mounted on sleds for easy movements on site
- Hopper cone and side walls finished in primer 60 µm and paint 60 µm
- Underframe galvanized

## Selectable options:

- Volume 7,5, 10, 15, 20, 25, 30 m<sup>3</sup> available
- Output via dosing belt or vibrating feeder
- Oversize separation via hydraulic dumping grid or rod sizer
- Additional protective plating inside the hopper cone
- Approach plates for erection of a loading ramp
- Individual underframe heights

**Option Dosing belt:**

Length:	2,0 m
Belt width:	650 mm
Material width:	500 mm
Drive:	3 kW AC gerabox motor, suitable for frequency converters
Protection class	IP 54
Output rate:	10 - 250 t/h
Belt scraper:	Turn scraper with ROSTA tension elements
Material guide walls:	With interchangeable wear resistant plating and special sealing for materials with a particle size below 0mm
Surface treatment:	All sheet metal components galvanized

**Further properties of the dosing belt:**

- All parts bolted
- Large access holes for easy changing of support rollers
- Belt change without dismantling rollers or pulley
- Idle monitoring via material sensor
- Endless conveyor belt EP 400/3 Decke 4:2
- Convex drive pulley

**Option Vibrating feeder:**

Feeder length	2,0 m
Material width	650 mm
Output	60 – 350 t/h
Material properties	Max. 3% Moisture Without cohesive parts
Drive	2 shaker motors 980 rpm 0,75 kW each
Surface treatment	Primer 60µm, Paint 60 µm

**Further properties of the dosing belt:**

- Supported by 4 spiral springs
- Baseplate and side wall wear protected with 10mm wear plates hardness HB400
- Wear plates interchangeable
- Material infeed via strong feeding chute

## **Option Rod sizer:**

The rod sizer consists of round steel bars that are mounted above the infeed opening of the hopper. The rods are angled towards one side of the hopper and thus deflect all rocks that are too big for the follow up plant. The lower end of the rods is not supported and can swing freely, through this no rocks can be jammed in between the rods.

The angle of the rods can be adjusted by turning the rod mounting bracket.

The rods have a diameter of 60mm and are made of high strength steel.

## **Option Hydraulic dumping grid:**

The hydraulic dumping grid separates large rocks from the infeed material and protects the follow up plant. The grid is available in grid sizes 80, 100, 120 and 150 mm. The grid can be hydraulically lifted and dumps the rocks to the side of the hopper. As a special property the grid tips over 90°.

Because the bars of the grid can move separately from another, rocks that are jammed in between the bars can fall out once the grid is tipped over 90°.

## **Approach plates**

In order to reduce the required lift height to load the hopper an approach ramp can be build next to the hopper. To allow the material to lean against the underframe the approach plates are bolted to the underframe.

## **Wearprotection**

Depending on the application and the resulting material requirements the hopper cone can be equipped with additional wear plates. The wear plates are 8mm thick and have a surface hardness of 400 HB. For an easier and more precise replacement of worn out spots the plates are segmented in manageable pieces.

Technical changes reserved.