



## Conveyor for humid limestone (steel production)

**Product group:** Trough conveyor

**Industrial process:** Discharging, feeding, conveying

**Industry:** Steel Production, Foundry Technology

**Type of drive:** Magnetic vibrator



**capacity (t/h):** 150 | **bulk:** limestone | **density (t/m<sup>3</sup>):** 1,6 | **grain size (mm):** 250

### function:

Lime is used in many ways. In the extraction of iron, lime makes the ore lumpy and highly porous. In the blast furnace, lime is used for binding liquid pig iron from interfering mineral impurities. Regarding this process, the customer needs some trough conveyors to transport the material out of the bunker. The limestone contains a humidity of 3-12%. This leads to adhesions and a blocking of the trough conveyor. This reduces the conveying capacity of the feeder.

### solution:

AVITEQ supplied vibrating conveyor with a length of 2070mm and a width of 1300mm (OA2070 / 1300ASC-MVG33-1). The vibration conveyor are excited by a powerful and compact AVITEQ magnetic vibrator. The vibrating conveyor tough were delivered with a ceramic lining and round corners (140mm radius). In order to detect malfunctions at an early stage, a vibration sensor was also installed.

**usability:**

The lining used by AVITEQ helps to reduce caking and also to reduce wear and tear for the customer. The design optimized trough with rounded edges also minimizes the risk that the material can get stuck in any corner. The sensor can detect any malfunctions of the vibrating conveyor at an early stage. The AVITEQ magnet vibrator offers an optimum acceleration for the bulk material and can be adjusted continuously from 0% -100% so that the material can be dosed ideally.

**place of installation:** Turkey