Dosing and weighing of screws and nuts

**Product group:** Trough conveyor

**Industrial process:** weighing

**Industry:** Steel Production, Foundry Technology

**Type of drive:** magnetic vibrator

**capacity (t/h):** 7.2 | **bulk:** Screws and nuts | **density (t/m³):** 1.5 - 5 | **grain size (mm):** M8

**function:**
The challenge from the customers: Discharging of 2 tones of screws and nuts in portions. A portion (batch) weighs 270 kg. The material may not be damaged during the transport and fine dust particles should be screened. The screws are dosed at the end in a box.

**solution:**
An AVITEQ vibrating trough conveyor (OA3000 / 1400 700ASG-MVG33-1P) provided with magnetic vibrator and frame has four load cells. The trough has a length of 3000 mm and 1400 mm width. The weighing terminal measures the actual weight of the material (nuts and screws) in the trough. If the material is transported by the vibrations to the end of the chute, the loss of weight is measured. The actual weight of the material is passed through the analog output in the SPSS. At a loss of 270 kg, the vibrating conveyor stops. On the frame a local service module was attached to the switch "Auto / local". There are two variants have been implemented to control: external control (automatic mode) and local control (local operation).
**usability:**
- Finest dosing by the magnetic vibrator
- Gentle product transport by vibration technology
- Weighing accuracy of ±1%

**place of installation:** Germany