Vibrating screen for classifying fine limestones

**Product group:** Linear vibrating screen

**Industrial process:** screening, classifying, dewatering

**Industry:** Steel Production, Foundry Technology

**Type of drive:** Unbalance motor

**capacity (t/h):** 400  |  **bulk:** Limestone | **density (t/m³):** 1  |  **grain size (mm):** 0 - 80

**function:**
During the steel production lime is used in different places. For example, lime is used in steel heaters for separating pig iron and crude steel from interfering components. In addition to different hopper discharge units with unbalance motors and magnetic vibrators, the customer needs a linear vibrating screen for classifying the lime into three fractions. The separation cut should be > 50 mm, between 10 and 50 mm and <10 mm. The temperature range in steelworks are between -38 to +39 °C.

**solution:**
AViTEQ chose a linear vibration screen with unbalance motors (VSBO 1600/6000 - ASS - 2UVP119W) as the best solution. The screen has a length of 6000 mm and a width of 1600 mm. As screen insert were used Longitudinal tensioner, which can be quickly removed. The screen holes are long meshes and the material of the screen cover consists of spring steel. The screen is driven by two 6-pole unbalance motors with a speed of 1,000 rpm (corresponds to a vibration frequency of 16.67 Hz). Additional linings made of Hardox 450 help against wear. In
order to keep the dust load low, the screen has a dedusting flange for classifying the dust particles. A special aluminum plate was also used for the inspection covers, which is characterized by its lightness and stability.

**usability:**
By means of the screen, the customer achieves the desired screen quality and can use the limestone optimally in his process. The screen is designed for longevity and temperature fluctuations. The dedusting prevents dust from spreading in the production environment and the special aluminum honeycomb plate allows for a very easy removal of the inspection cover without loss of sensitivity.

**place of installation:** Russia