Sorting of by-pass filter dusts

Client: CEMEX Cement, k.s., Cementárna Prachovice,
Czech Republic
Realization: January 2017

Z 2620

Prime condition

New condition

Customer's requirement:
DSD-Dostál, a.s. was selected on the basis of a public tender for complete deliveries to the "Removing foreign objects from chloride filter dust generated during clinker production" project.

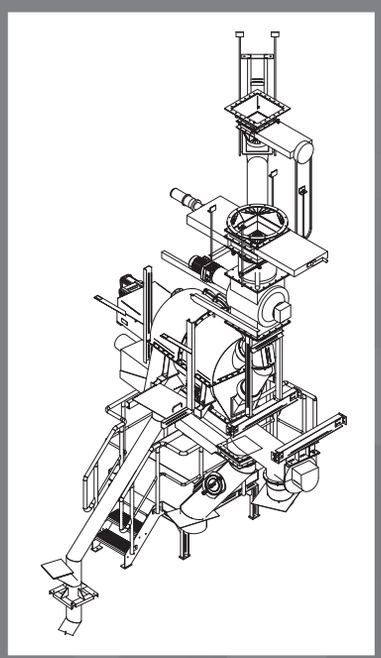
The foreign objects specified as the unburnt components of fuels fed at the input to the rotary furnace, have a minimum size of 15x15 mm and maximum 100x100 mm. The intent is to locate the equipment under the bypass silo, in better words to integrate it into the existing emptying system of the silo from which this material is transported by tubular conveyor belts to two consumption points.

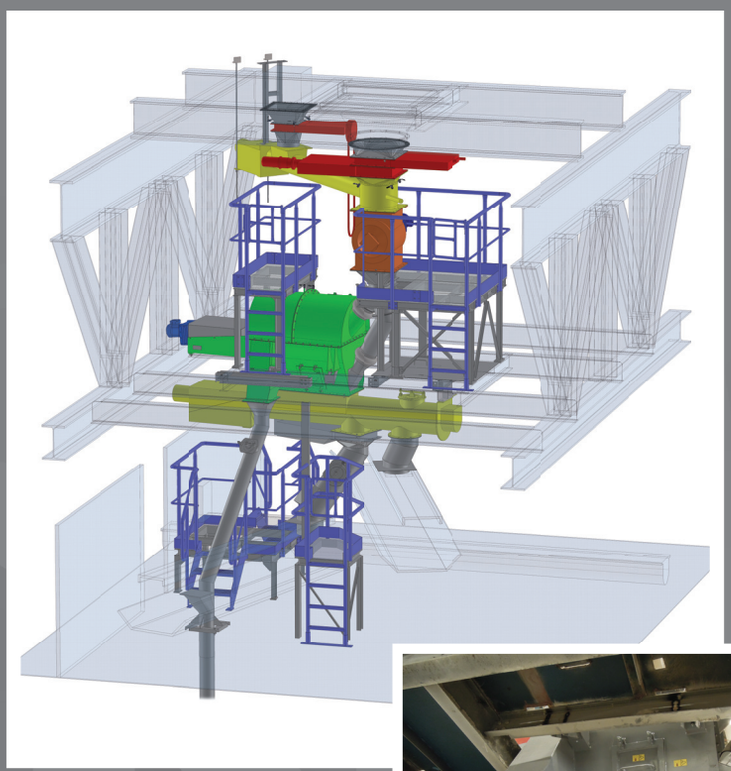
Task, final formulation of the design:
Removal and sorting of foreign objects larger than 5 mm from the chloride by-pass filter dusts generated during clinker production for an output of 30 t/hour.

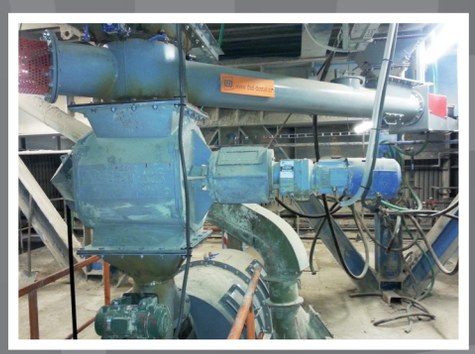
Description of the final design discussed and approved by the customer:
This concerned measurement of the current state, solution design, emptying of the assembly systems of sorting technology, processing of the shop drawings of the chutes, platforms and steel structures, modification of standard products, production itself, transport to the site, disassembly and assembly works, commissioning including signalling tests, tests with and without material.
The sorting technology comprises of the following equipment:

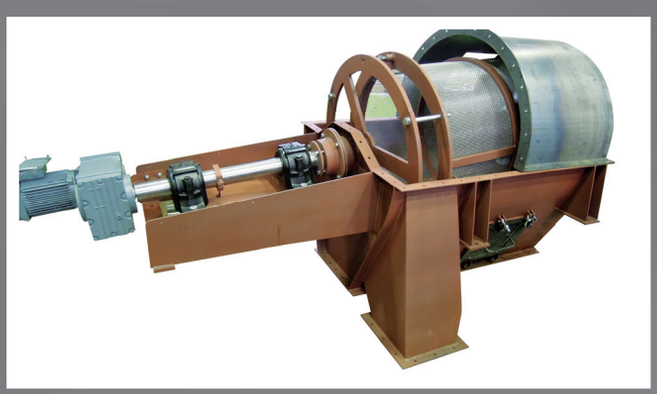
- cut-off gate of size 300x300 controlled by a chain wheel
- tube screw conveyor, ø250, of length 3150 mm
- rotary sieve 800x900 mm with drive and speed sensor
- tube screw conveyor, ø400, of length 2600 mm
- cut-off gate of size 400x400 controlled by an electric motor
- connecting chutes and a transition piece between the individual pieces of equipment and the existing technological equipment
- service and access platforms
- steel supports for the equipment, chutes and platforms

Schema of the final design









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