



Spiral conveyor for cooling TPE granulate

Product group: Thermal spiral conveyor

Industrial process: cooling, heating, drying

Industry: Chemicals, Plastics, Pharmaceuticals

Type of drive: Unbalance motor



capacity (t/h): 2,5 | **bulk:** TPE-Granulat | **density (t/m³):** 0,5 bis 0,9 | **grain size (mm):** 2 - 5

function:

TPE granules are thermoplastic elastomers and do not consist of rubber (rubberu), what means that they behave like conventional elastomers, but can be plastically deformed with heat supply what results in a thermoplastic behavior. Within the production process, the hot granules must be cooled down in the core. In addition, the product must overcome a height difference of 4 meters.

solution:

An AVITEQ spiral conveyor is ideally suited for this task. AVITEQ sold a WF4000 / 890-UVH38W spiral conveyor with double-walled bottoms. According to the invention, the helical conveyor is designed as a cooling conveyor. In this case, the double bottoms are connected in series with rubber hoses and connected to an inlet and outlet system. The helical conveyor has a height of 5630 mm and a winding speed of 890 mm and is made of V2A. The ViwateQ® process has been applied to optimize the surface finish.

usability:

The spiral conveyor is feeding up the product up only within lifting movements as result of the vibration. The TPE granulate is located in the air at 2/3 of the time and can therefore be conveyed upwards in a very sensible. Through the double floors, cold water can be conveyed into the product-contacting floor. This allows the product to be ideally cooled down from its original temperature to a temperature range in which no more deformation takes place.

place of installation: Germany