Our range of curved chain conveyors with long inclination is convenient and useful for industries with high explosion risks.

In risk assessment reports curved chain conveyors are preferred for product lifting to standard systems with bucket elevators horizontally fed by belt, screw, or chain conveyors.

Explosion risks are reduced significantly thanks to the slow conveying speeds of chain conveyors. According to the NFEN1127-1 standard at a speed below 1 m/s no spark is produced by a shock between 2 metallic parts. The conveying speeds are usually adjusted between 0.2 and 0.6 m/s for chain conveyors and between 2 to 3 m/s for bucket elevators.
Curved chain conveyors J or Z shapes

Characteristics

Principle of curves

In addition to the technical and legislative aspects, elevators suitable to industries with high explosion risks are costful by reason of their explosion protective systems.

Beside the «Z» curved chain conveyors (the most commonly used), we have also designed the «J» shape conveyors.

One of the advantages to have a single curve instead of 2 is to allow the use of motors with lower power, thus reducing the required power consumption. The upper curve generates significant frictions requiring an increase of motors torque. By removing the upper curve we are also increasing the lifetime of mechanical elements thus subject to less stress.

These advantages will offer our customer lower running costs.

Our range has capacities from 20 up to 300 m³/h varying according to inclination.