

Spiral Elevator

The spiral conveyor is a special type of vibratory conveyor that transports the product vertically. The product moves up the spiral as the conveyor vibrates.

The spiral conveyor combines the advantages of gentle product handling and vertical transport with vibration technology for bulk products suitable for feeding or in combination with thermal treatment. Transport is done via the micro-throw motion known in the vibrating technology. The operating parameters like vibrating stroke, frequency and angle of attack (throw-angle) will be selected individually to the application. The JOEST spiral conveyor for thermal treatment is suitable for operation with different types of heat exchange media and temperatures. Special design for convective heat exchange is available too.

Optionally, aspiration or overflowing of the transport surface is possible depending to the application. Static or co-vibrating housing is disposable. The design of the flights developed by JOEST enables an efficient heat exchange.

A high level of mechanical stability is achieved by welded lateral curb execution. Additionally the typical reduction of material thickness in the bending radius of press formed flights is not applicable. Two unbalance motors with adjustable angle of attack on the drive saddle, displaceable vibrating stroke and operation with frequency converter provides an efficient operation.



ADVANTAGES

- ✓ Specific design to your application
- ✓ Consolidated design
- ✓ High mechanical stability
- ✓ Low-maintenance
- ✓ Gentle vertical transport
- ✓ Simultaneously feeding and thermal processing
- ✓ Efficient heat exchange

OPTIONS

- Different types of heat exchange media and temperatures
- Convective heat exchange
- Several variance of operation manipulation
- Non-standard installation sizes and -designs
- Mild steel and various types of stainless steel
- Aspiration or overflowing of the transport surface
- Static or co-vibrating housing



APPLICATIONS

- Chemical products
- Food
- Plastics
- Electronic Scrap
- Slag/Ash
- Tires Recycling
- Stone
- Minerals
- Castings

TECHNICAL DATA

- Outside spiral diameter: 320 up to 1400 mm
- Lifting height: up to 8.500 mm
- Drive power: 2 unbalance motors up to 6 kW each
- Feeding capacity: up to 12 m³/h (basing on plastic pellets)
- Material of construction: Mild steel and various types of stainless steel
- Heat exchange medium: Water, steam, thermal oil