

Pasta Processing Plant

Vertical Screw Lift System VEX



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Description ▼

The VEX Vertical Screw Lift System consists of a Horizontal Screw Feeder and a Vertical Screw Conveyor. The Horizontal Screw Feeder, which consists of a U-shape or tubular trough in stainless steel with appropriate surface finishing, may feed material from a silo or hopper or simply convey it being fed by an upstream feeding device. It is equipped with a drive unit suitable for the application. The outlet zone of the Horizontal Screw Feeder consists of a short tubular section flanged at a right angle on the bottom section of the stainless steel Vertical Screw Conveyor.

The Vertical Screw Conveyor consists of a tubular housing with a tangential inlet in the bottom section, connected with the outlet of the Horizontal Screw Feeder, an inclined outlet spout in the top section, complete with a top-mounted drive unit with integrated end bearing assembly (from which the screw is suspended).

For both screws, the helicoid screw flighting is continuously welded on both sides on a centre pipe. At each end, the end bearing assemblies are complete with adjustable packing gland shaft sealing unit (air or gas-purged seals available).

Function ▼

The VE Vertical Screw Lift System consists of two units: a Horizontal Screw Feeder which receives material from a silo, hopper, or another feeder or conveyor, and a Vertical Screw Conveyor that lifts the material to a certain level. Material may be discharged into a weigh hopper, into one or more bins or silos, or into another conveyor or conveying system. Fabricated components, screws, and bearing assemblies have been specially designed for this system to facilitate maintenance. The VE Vertical Screw Lift System, which excels through high volumetric efficiency and excellent mechanical features, was patented in various countries in the 1980s.



Application ▼

The application in the photographs shows the link between horizontal and vertical stainless steel screw.

Benefits ▼

In comparison with bucket elevators or pneumatic conveying systems, the VE Vertical Screw Lift System has the smallest overall dimensions, is easier to maintain, requires the smallest number of spare parts, and offers the best price-performance ratio.

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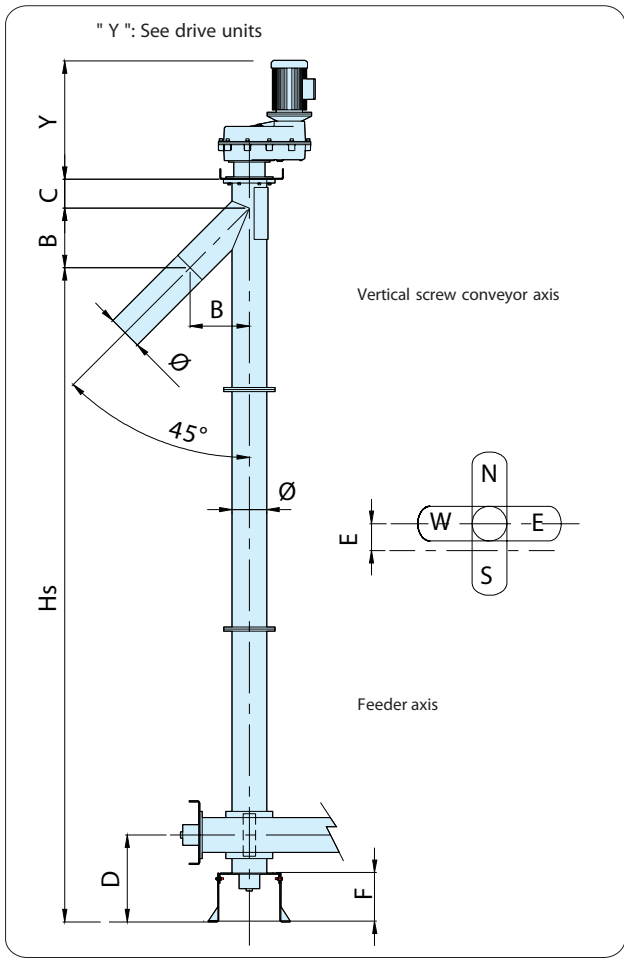
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Technical Features / Performance ▼

- ▶ Small footprint
- ▶ Few parts subject to wear
- ▶ External tube diameter: 114mm, 139mm, 168mm, 219mm, 273mm, 323mm
- ▶ Elevation height without intermediate hanger bearings up to 5 metres (16.5 ft)
- ▶ Throughput rates: between 3m³/h and 95m³/h considering the volumetric efficiency of a free flowing material

Overall Dimensions ▼



Ref.	Hs					
	Ø					
	100	120	150	200	250	300
1	840	840	800	716	716	700
2	1,840	1,840	1,800	1,716	1,716	1,700
3	2,840	2,840	2,800	2,716	2,716	2,700
4	3,840	3,840	3,800	3,716	3,716	3,700
5	4,840	4,840	4,800	4,716	4,716	4,700
6	5,840	5,840	5,800	5,716	5,716	5,700
7	6,840	6,840	6,800	6,716	6,716	6,700
8	7,840	7,840	7,800	7,716	7,716	7,700
9	8,840	8,840	8,800	8,056	8,056	8,700
10	9,840	9,840	9,800	9,716	9,716	9,700

Ø	100	120	150	200	250	300
B	212	212	283	354	354	354
C	100	100	115	130	130	145
D	350	350	440	500	500	550
E	70	90	115	140	165	220
F	150	150	200	200	200	200