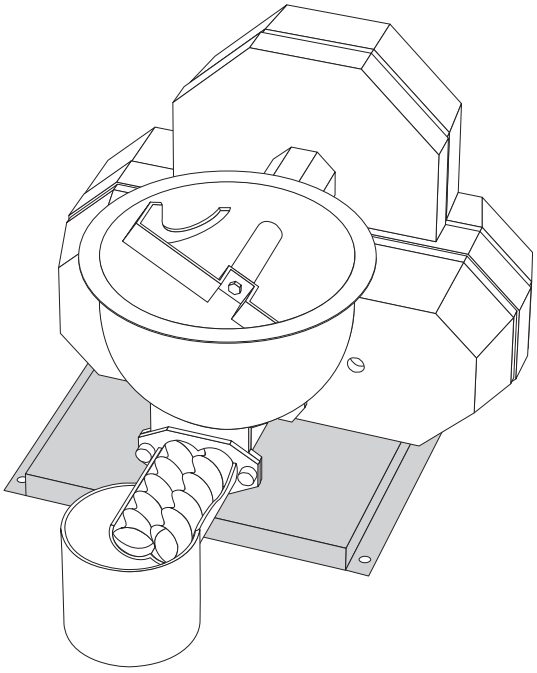
Application

Volumetric feeding of free flowing to difficult powders (e.g. lumpy, moist or bridge building materials) as well as fibers, flakes and other bulk materials.
The feeder can be upgraded to a loss-in-weight feeder system at any time.



Design

Twin screw feeder with interchangeable feeding tools.
All parts in contact with the material being fed are stainless steel. Feeding equipment is easy to disassemble. The modular components are held together by V-clamps. The horizontal agitator gently moves bulk material to the large throat and then into the discharge screws. It is removable without tools. The horizontal agitator speed totals 5% of the screw speed.
High and low reducer ranges are available. The user will need to select either high or low range. Unit can mechanically be changed over as necessary.
This equipment conforms to CE standards regarding EMC and safety.

Controller: (see separate data sheets)

The SmartConnex® control system allows individual or multi-component control. Each feeder has its own control module. Connection between feeders, operator interface and smart I/O is via an industrial network. A variety of protocols is available for connection to the plant's host system.

Hazardous Location Options: (see sheet I-000002)

NEC	Class II, Div. 2, Groups F & G / Class II, Div. 1, Groups F & G Class I, Div. 2, Group D / Class I, Div. 1, Group D
ATEX	3D/3D, 3D/2D, 3G/3G, 2GD/2GD (outside/inside)

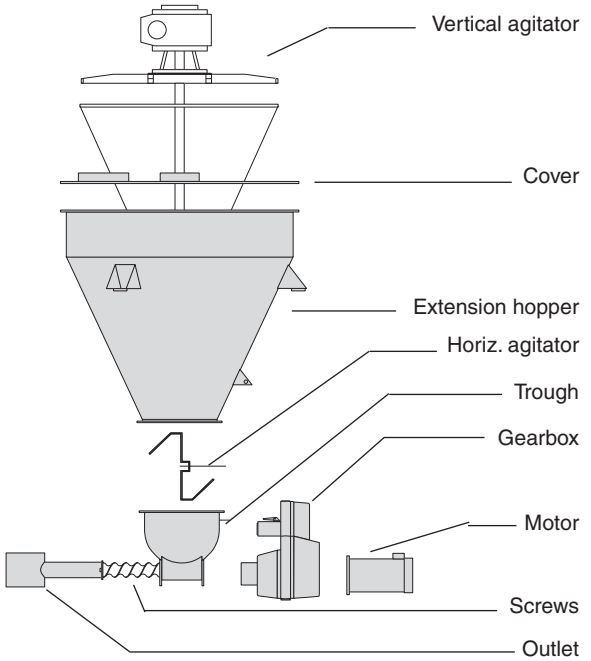
Feed Screws and Feed Rates

Actual feeder screws are determined based on the material being fed.
Attention: The following rates are theoretical values for free flowing materials being fed volumetrically. Actual feed rates depend on individual material characteristics. The feed range for loss-in-weight feeders is somewhat smaller. For feed rates at the upper or lower limits of the theoretical range, check with a K-Tron Test Lab.

Pitch	Twin concave-profile screws	Twin auger screws	Double auger screws		Reduction/ Max Screw Speed (RPM)
Coarse	52 - 5200	72 - 7200	43 - 4300	dm^3/hr	High 4.7:1 / 425
	1.9 - 185	2.5 - 250	1.5 - 150	ft^3/hr	
	31 - 3000	43 - 4200	26 - 2500	dm^3/hr	Low 8:1 / 250
	1.1 - 108	1.5 - 150	0.9 - 90	ft^3/hr	
Fine	27 - 2650	36 - 3500	22 - 2100	dm^3/hr	High 4.7:1 / 425
	1 - 95	1.3 - 125	0.78 - 78	ft^3/hr	
	14 - 1350	22 - 2100	13 - 1300	dm^3/hr	Low 8:1 / 250
	0.48 - 48	0.75 - 75	0.45 - 45	ft^3/hr	

DC-motor with speed controller / Range 1 : 100 / Max. motor speed 2000 RPM
Feed rates when using AC motors: The feed rates may here be roughly estimated through a calculation using the screw speeds.
Europe/Asia: AC motor with frequency inverter / Range 1 : 17 / Max. motor speed 2440 RPM
Americas: AC motor with frequency inverter / Range 1 : 12 / Max. motor speed 1725 RPM

Configuration



Description	Alternatives	Remarks	Weight kg (lb)
Vertical agitator	KS: 230/400 VAC 1.5 kW IP55 / KA: 115/230 VAC 1 HP or 180/200 VDC 1, 1.5 HP	10D	130 (286)
Cover		10D	27 (59)
Extension hopper		10D	see below
Horiz. agitator			1.8 (4)
Trough	15 L		7 (15.4)
Gearbox			28 (62)
Motor	200 V DC 1.6 kW IP 65 / 3 phase with freq. inverter KS: 230/400 VAC KA: 230/460 VAC 1.5 kW, IP 55	standard: 1.6 kW	30 (66)
Screws		see page 1	12 (26.4)
Outlet	Horiz. outlet / Vertical outlet / Pressure compensation	standard: horiz. outlet	5 (11)

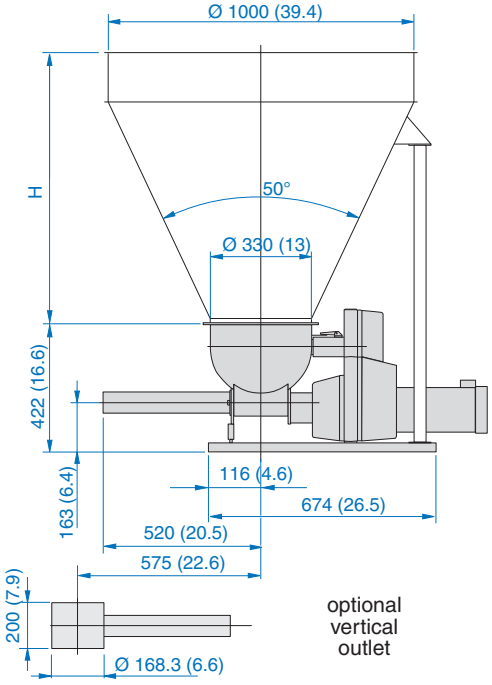
Materials:

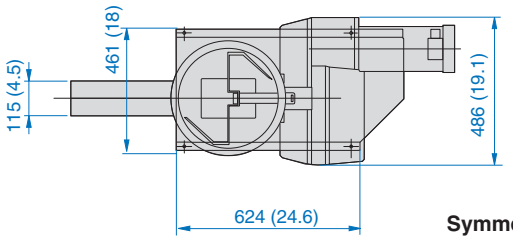
Product contact parts*:	Stainless steel
	DIN 1.4404, 1.4435 (AISI 316L)
	DIN 1.4409 (ASTM A743 CF3M)
*Horiz. agitator:	DIN 1.4034 (AISI 420) standard
	DIN 1.4404 (AISI 316L) option
Seals:	PTFE, Neoprene, Silicon
Painting:	Light grey RAL 7035

Temperature-Limits:

Ambient:		0 to 40.5 °C (32 to 105°F)
Material:	standard:	-20 to 55 °C (-4 to 130 °F)
	option:	-20 to 150 °C (-4 to 300 °F)

Dimensions mm (in)





Options

1. Standard hopper
2. Vertical outlet
3. Special paint / finish
4. Extended screws

Symmetrical Hoppers

Volume dm³ (ft³)	H mm (in)	Weight kg (lb)
250 (9)	732 (29)	37 (81)
450 (15)	1086 (43)	59 (130)
750 (26)	1450 (57)	82 (180)
1100 (39)	1820 (72)	106 (234)
1400 (49)	2350 (93)	140 (308)

6D and 16D hoppers also available

Caution: these measurements are for general reference only. Please consult dimensional drawing for exact measurements

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