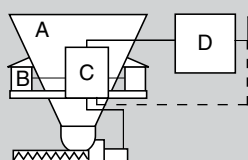


Coperion K-Tron Product Specification

Loss-in-Weight Twin Screw Feeder

K2-ML-T60



- Ext. communication to Host System
- A Feeder
 - B Weighing System
 - C Control Module
 - D Operator Interface

Each Coperion K-Tron Weigh feeder consists of the components A, B, C and D.

Component A is specified here.

Application

Gravimetric feeding of free flowing to difficult powders (e.g. lumpy, moist or bridge building materials) as well as fibers, flakes and other bulk materials.

Design

Twin screw feeder with interchangeable feeding tools suspended in a three-point weighing system.

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. By opening the V-clamp on the lower hopper end by tool, the feeder will swing out for easy cleaning. 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.

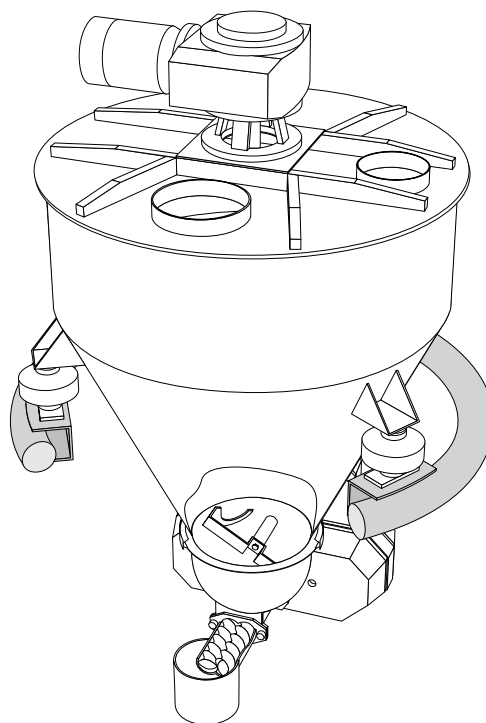
This equipment conforms to CE standards regarding EMC and safety.

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 Sample Feed Rates

Feeder screws are determined based on the material being fed. The theoretical throughput range of 1:100 is influenced by feeder configuration and material characteristics. The sample feed rates below were tested with a free-flowing material (semolina, bulk density 0.783 kg/dm³).

Attention: Actual feed rates depend on individual material characteristics. For feed rates at the upper or lower limits of the theoretical range, check with a Coperion K-Tron Test Lab.

Pitch		Twin concave screws	Twin auger screws	Double auger screws	Reduction/Max Screw Speed (RPM)
Coarse	dm³/h	60 - 5270	85 - 7040	70 - 4050	High
	ft³/h	2.1 - 186	3 - 249	2.4 - 143	4.7:1 / 425
	dm³/h	32 - 3160	48 - 4250	27 - 2280	Low
	ft³/h	1.1 - 112	1.7 - 150	0.9 - 80	8:1 / 250
Fine	dm³/h	32 - 2600	48 - 4430	44 - 3230	High
	ft³/h	1.1 - 92	1.7 - 156	1.5 - 114	4.7:1 / 425
	dm³/h	20 - 1530	28 - 2630	21 - 1780	Low
	ft³/h	0.7 - 54	1 - 93	0.7 - 63	8:1 / 250

Feed rates shown are with DC motor and KCM controller (Range 1:100 / Max. motor speed 2000 RPM).

For feed rates with vector-duty AC motor with speed pick-up and KCM controller multiply values by 0.875 (Range 1:100 / Max. motor speed 1750 RPM).

Coperion K-Tron Product Specification Loss-in-Weight Twin Screw Feeder

K2-ML-T60

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
Weigh bridge 3 x K-SFT:	200 kg 440 lb 300 kg 660 lb 500 kg 1100 lb 1000 kg 2200 lb	IP65, NEMA 4 Gross weigh bridge capacity = 3 x K-SFT	
Horiz. agitator			1.8 [4]
Trough	15 L		7 [15.4]
Gearbox			28 [62]
Motor	200 VDC 1.6 kW IP55 CKS: 3x230 VAC CKA: 3x220 VAC 1.6 kW IP65	standard: 1.6 kW DC	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 gray RAL 7035

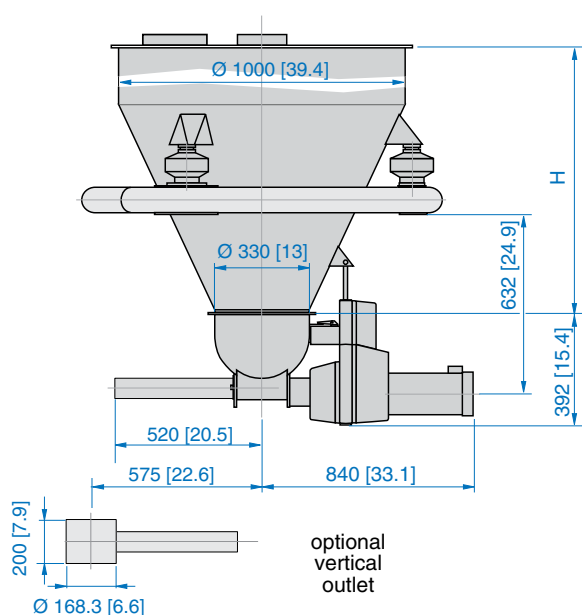
Weighing Range:

Gross weighbridge capacity (e.g. 3 x 60 = 180 kg) less total feeder weight and less 10% reserve

Temperature-Limits:

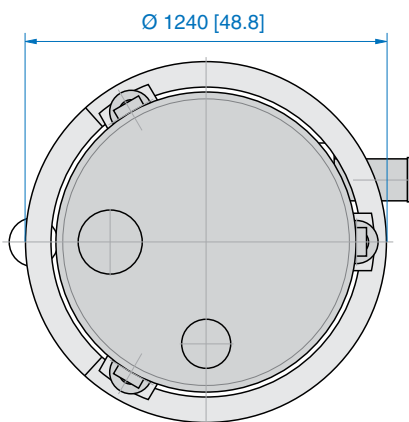
Ambient: 0 ... 40°C [32 ... 104°F]
Material: 0 ... 50°C [32 ... 122°F]
for other material temperatures contact factory

Dimensions mm (in)



Volume dm³ [ft³]	H mm [in]	D mm [in]	Weight kg [lb]
Symmetrical Hoppers			
250 [9]	732 [29]	1000 [39.4]	37 [81]
450 [15]	1086 [43]	1000 [39.4]	59 [130]
750 [26]	1450 [57]	1000 [39.4]	82 [180]
1100 [39]	1820 [72]	1000 [39.4]	106 [234]
1400 [49]	2350 [93]	1000 [39.4]	140 [308]

6D and 16D hoppers also available



Options

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

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