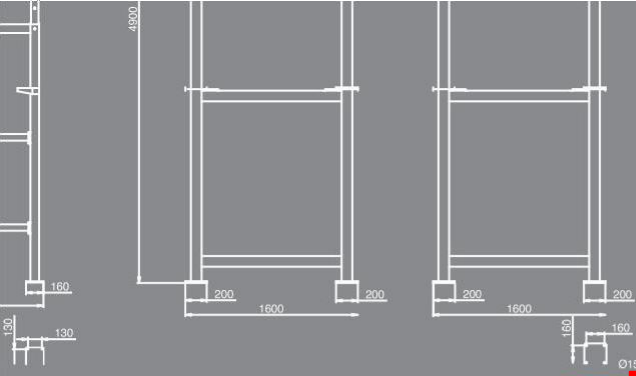




GRAVIMETRIC FEEDER AT20



DESCRIPTION

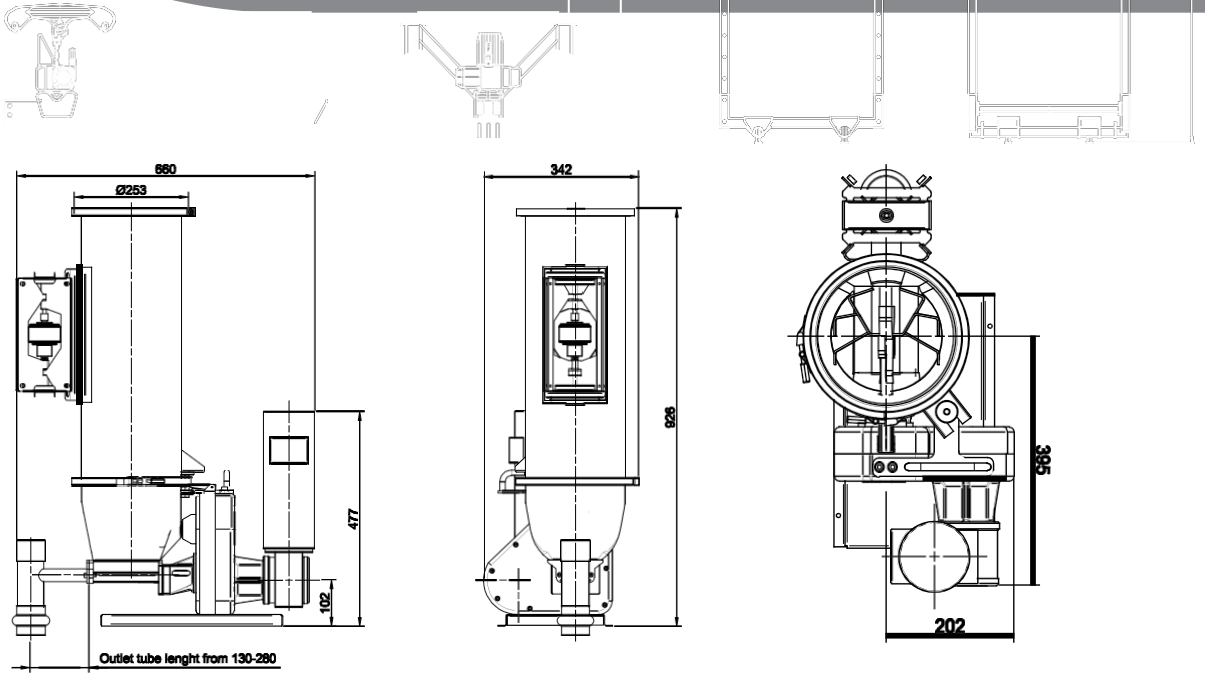
DESIGN

Orbetron feeders have been designed to have a wide range of flexibility for the different bulk solid materials, and throughput ranges.

The universal twin screw feeder AT20 is suitable for feeding granules, pellets, free and non-free flowing powders regrind materials, flakes and fibers. The feeder is designed with a multiple wing agitator ensuring full agitation of the entire ingredient compartment. The multiple wing agitator eliminates bridging and inducing free material flow and an optimum screw filling level for consistent linear mass flow. On all mechanical connections for the material inlet and outlet of the feeder it is possible to mount different accessories to reach the highest performance and precise accuracy in the desired application. The AT20 feeder can be used in a single standalone application or it can be integrated in a multiple feeding system.

- Compact feeder and gear box design
 - High modularity for easy dismantling and cleaning
 - Horizontal material outlet discharge
 - Tool free change of the feeder screw
 - Applicable for single spiral and auger screws
 - All metal parts which are in material contact are in stainless steel 1.4404 (ASI316L)
 - Mechanical gear box with lifetime lubrication
 - 370W DC motor with speed control in protection class IP 54
 - Operating and material temperature -20..60°C (-4..130°F)
 - Gear boxes in the sizes of 7:1, 15:1, 28:1
 - Weight without accessories 33 kg
 - Color outside light grey RAL7035
- Unit conforms to directives.

DRAWING



OPTIONS

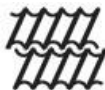


- Hopper extension modules in the sizes of 20l, 50l, 75l, 85l, 100l, 135l, 185l, special hoppers are on request available
- Removable vertical outlet tube with the size of 4"
- Counter bearing for very poor flowing or heavy materials
- Screw and outlet tube extensions up to the total screw length of 600mm
- Flexible outlet tube
- All sealing which are in material contact in silicon freestyle
- 230-460V 3PN 50-60Hz AC 370W and 750W motor with frequency inverter
- Bottom outlet for material discharge on request
- Different colors on request
- FDA certification according FDA CFR 21 #178.3570
- ATEX Zone inside 3D T140°C, 2D T140°C, 2D T140°C/2G T4, 1D T140°C/2G T4
- ATEX Zone outside 3D T140°C, 2D T140°C / 2G T4

APPLICATION

Volumetric continuous or batch
Gravimetric loss-in-weight continuous

Gravimetric loss-in-weight batch
Gravimetric gain-in-weight

The use of the different load cells and control versions are described on separate technical data sheets.

PERFORMANCE TABLE	SCREW TYPE		 TWIN CONCAVE SCREW	 TWIN AUGER SCREW	 TWIN SPIRAL SCREW
	GEAR	SPEED RPM/MIN	l/h cuft/h	l/h cuft/h	l/h cuft/h
	28:1	8 - 146	1-35 .03-1.23	1-45 .03-1.60	1-15 .03-.52
	15:1	15 - 273	2-70 .07-2.47	2-90 .70-3.17	2-25 .70-.88
	7:1	31 - 586	3-140 .10-4.94	4-180 .14-6.35	3-50 .10-1.76

The AT20 can cover a throughput range from (1 to 180l/h).(0.03 -6.35 cuft/h., measured on free flowing granules with a bulk density of 0.6kg/l 37 lb/cuft. The throughput data indicates values subject to individual testing



Carolina Material Technologies
Tel.: 704-846-3737
E-mail: info@cmtnc.com
www.cmtnc.com