

MechaTron® FB Feeder

- Modular loss-in-weight (LIW) feeder system for high capacities
- Optimized for light, fluffy materials like flakes, fibers and other, organic or inorganic, virgin or recycled materials
- Full stainless steel construction with internal agitation
- Modular system with various helix and hopper options



Application

The MechaTron® FB (Flat Bottom) Feeder is a high capacity stainless steel, LIW feeder platform for light, fluffy materials like plastic flakes, cellulose, hemp, glass or carbon fibers and other virgin or recycled materials.

It is mainly used in plastic film extrusion and compounding applications.

The volumetric version of the feeder can be used as a refill system or surge bin for smaller LIW feeders.

Functions

The flat bottom design with vertical hopper walls and bottom driven agitator provides excellent mass flow and utilizes the maximum inlet area of the auger to support feeding of cohesive materials.

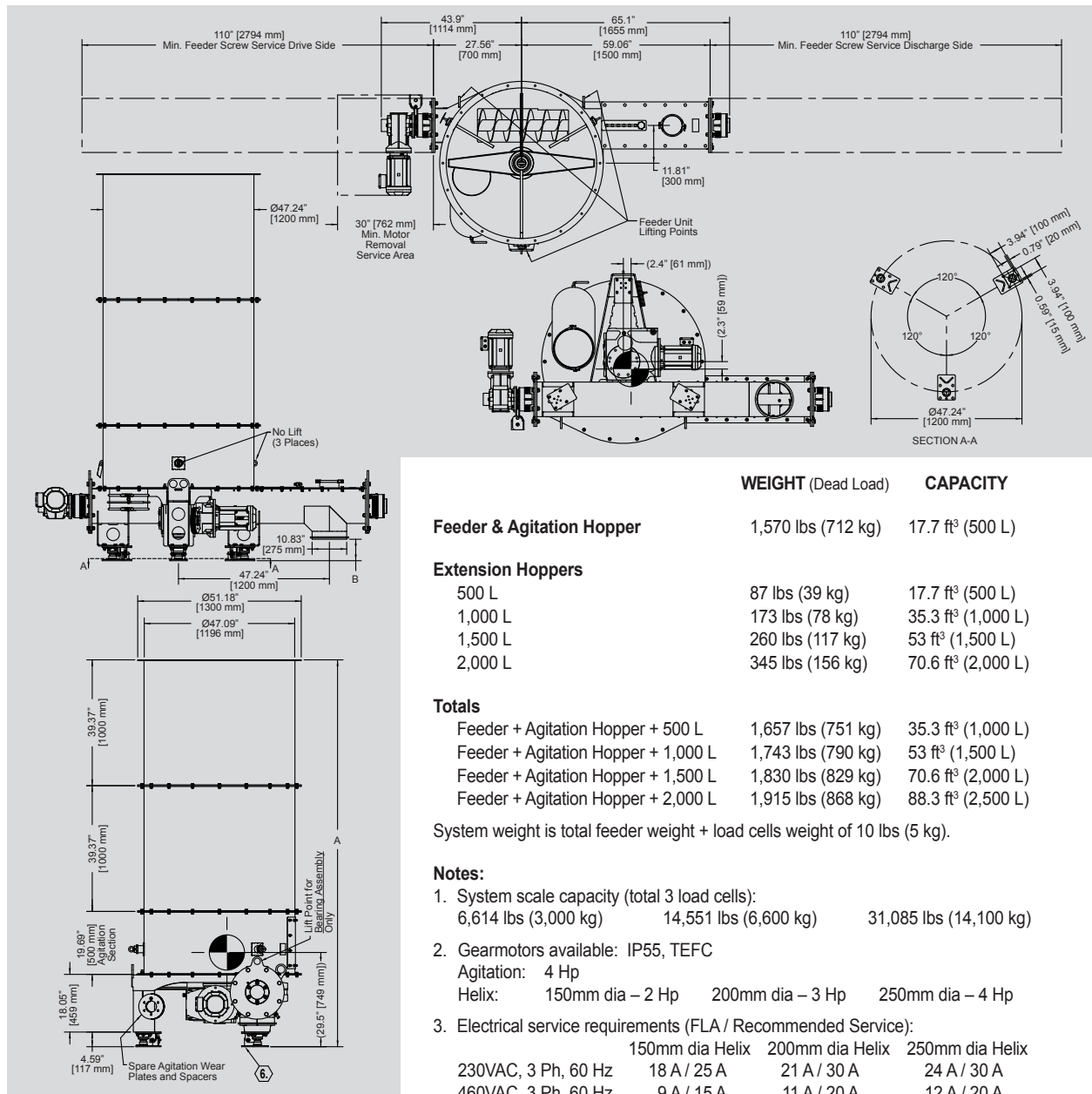
The bottom driven agitator supports low center of mass and maximum access to the inlet area for refilling and venting purposes.

The progressive, double wound helix supports material expansion and minimization of pulsation at low speeds.

Features

- Robust center rod helixes with end bearing and a packed seal arrangement for heavy duty applications.
- Modular concept with many shared and alternative components to support feed rate changes.
- Double flanged, vertical discharge tube to protect flexible connection from wear (tube in tube concept).
- Discharge on left or right side.

Dimensions



	WEIGHT (Dead Load)	CAPACITY
Feeder & Agitation Hopper	1,570 lbs (712 kg)	17.7 ft³ (500 L)
Extension Hoppers		
500 L	87 lbs (39 kg)	17.7 ft³ (500 L)
1,000 L	173 lbs (78 kg)	35.3 ft³ (1,000 L)
1,500 L	260 lbs (117 kg)	53 ft³ (1,500 L)
2,000 L	345 lbs (156 kg)	70.6 ft³ (2,000 L)
Totals		
Feeder + Agitation Hopper + 500 L	1,657 lbs (751 kg)	35.3 ft³ (1,000 L)
Feeder + Agitation Hopper + 1,000 L	1,743 lbs (790 kg)	53 ft³ (1,500 L)
Feeder + Agitation Hopper + 1,500 L	1,830 lbs (829 kg)	70.6 ft³ (2,000 L)
Feeder + Agitation Hopper + 2,000 L	1,915 lbs (868 kg)	88.3 ft³ (2,500 L)

System weight is total feeder weight + load cells weight of 10 lbs (5 kg).

Notes:

- System scale capacity (total 3 load cells):
6,614 lbs (3,000 kg) 14,551 lbs (6,600 kg) 31,085 lbs (14,100 kg)
- Gearmotors available: IP55, TEFC
Agitation: 4 Hp
Helix: 150mm dia – 2 Hp 200mm dia – 3 Hp 250mm dia – 4 Hp
- Electrical service requirements (FLA / Recommended Service):
150mm dia Helix 200mm dia Helix 250mm dia Helix
230VAC, 3 Ph, 60 Hz 18 A / 25 A 21 A / 30 A 24 A / 30 A
460VAC, 3 Ph, 60 Hz 9 A / 15 A 11 A / 20 A 12 A / 20 A

Feeder & Extension Hopper Dimensions

Capacity	Dim "A"
17.7 ft³ (500 L)	42.3" (1075mm)
35.3 ft³ (1,000 L)	62.0" (1575mm)
53 ft³ (1,500 L)	81.7" (2075mm)
70.6 ft³ (2,000 L)	101.4" (2575mm)
88.3 ft³ (2,500 L)	121.1" (3075mm)

Discharge Dimensions

Helix Size	Dim "B"
150mm dia	8.70" (221mm)
200mm dia	7.72" (196mm)
250mm dia	6.72" (171mm)

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