

MechaTron® AI

- Ideal for volumetric or gravimetric low feed rate applications
- Quick and easy disassembly
- Dual arm external hopper agitation system for maximizing material handling versatility
- A disposable or recyclable EPDM feed hopper
- Feed rates from 0.5 to 150 kg/hour

Material Construction

Contact materials-

- White EPDM, 304 stainless steel, PTFE (Rulon 641), Black BUNA or White Silicon*.

***NOTE:** This is a complete list. Some materials may not be present in certain configurations.

Non-contact materials-

- 304 and 316 stainless steel, White EPDM, PTFE, PET-P (Ertalyte®).

Feed Rates

- Helix diameters from 0.27" (7 mm) to 1.25" (32 mm) provide feed rates from 0.5 to 150 kg./hr. (theoretical).

Feed Screws

- 304 stainless steel.
- 1.25" (32 mm) open flight and machined screw.
- 0.75" (19 mm) open flight and machined screw.
- 0.50" (13 mm) open flight and machined screw.
- 0.27" (7 mm) machined screw.
- Half pitch configurations are available in select sizes.

Disposable Feed Hopper

- Flexible EPDM feed hopper that is disposable and recyclable.
- Available in 19 mm and 32 mm trough sizes to minimize residual material.



Hopper Extensions

- 4 L, 12 L and 36 L capacities.
- Dust tight 360 degree sanitary quick release clamp mounting (bolted clamps are optional).

Motor Specifications

- Agitation Drive
 - NEMA23 frame stepper gear motor with integral motion control.
 - Gear ratio 22:1
 - 48 VDC, 2A
- Helix Drive
 - NEMA 34 frame stepper motor with integral motion control.
 - 48 VDC, 4A

Weigh Module Specifications

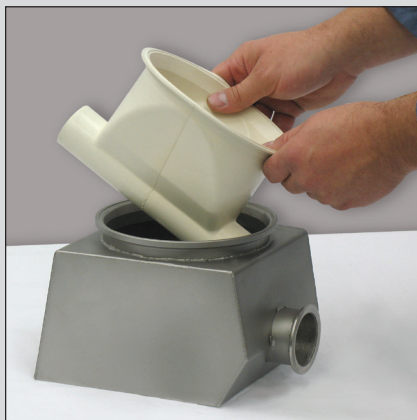
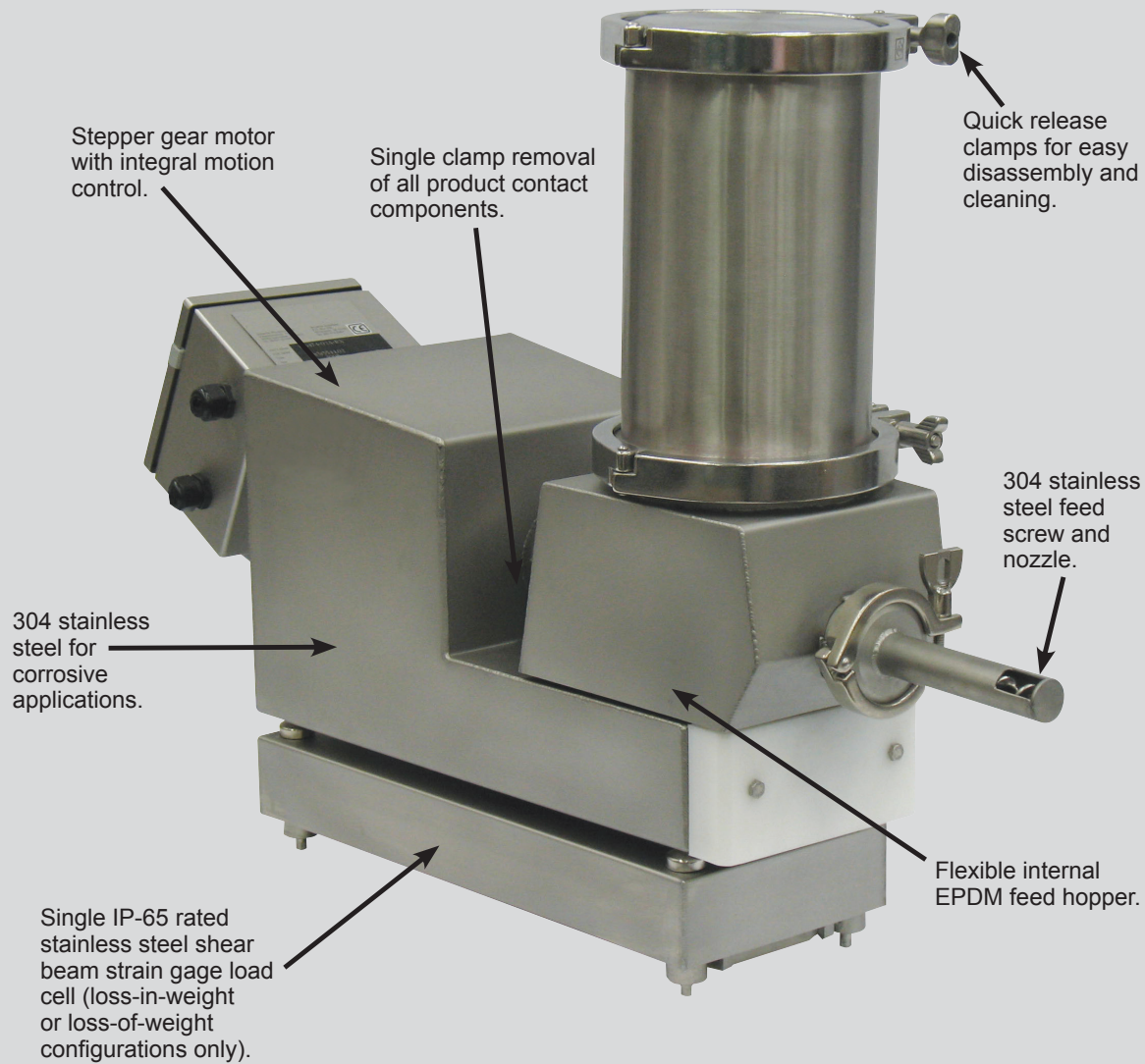
- Platform with single IP-65 rated stainless steel shear beam strain gauge load cell.
- Weigh modules available in 66 lbs. (30 kg), 132 lbs. (60 kg) and 220 lbs. (100 kg) capacities.

Performance

- Volumetric accuracies of ± 1.5 to 2.5% of feed rate setpoint typical at 2 sigma.
- Gravimetric accuracies of ± 0.25 to 1% of feed rate setpoint typical at 2 sigma.

***NOTE:** Laboratory testing to determine specific material feeding accuracy is recommended and available from Coperion.

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Disposable, recyclable and flexible EPDM feed hopper provides simpler and shorter cleaning cycles.

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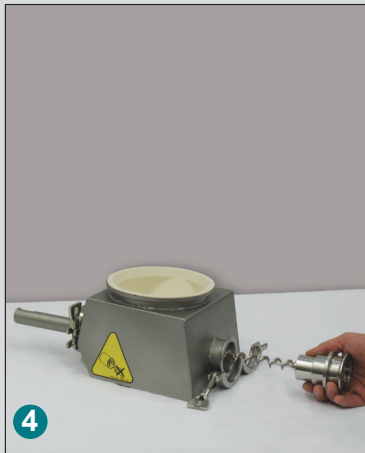
1
A single quick release clamp removes all product contact components.



2
Cover is removed by disconnecting clamp.



3
After releasing clamp the extension hopper is easily removed.



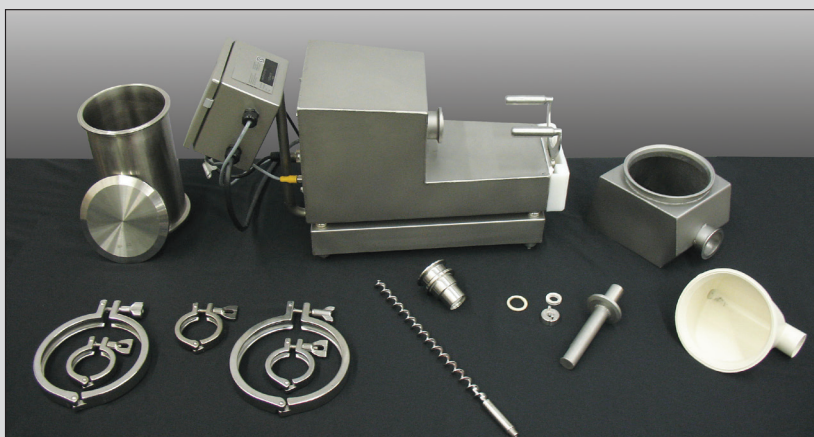
4
Helix is easily removed for quick cleaning and product changeover.



5
Nozzle slides out, allowing disposable hopper to be removed.

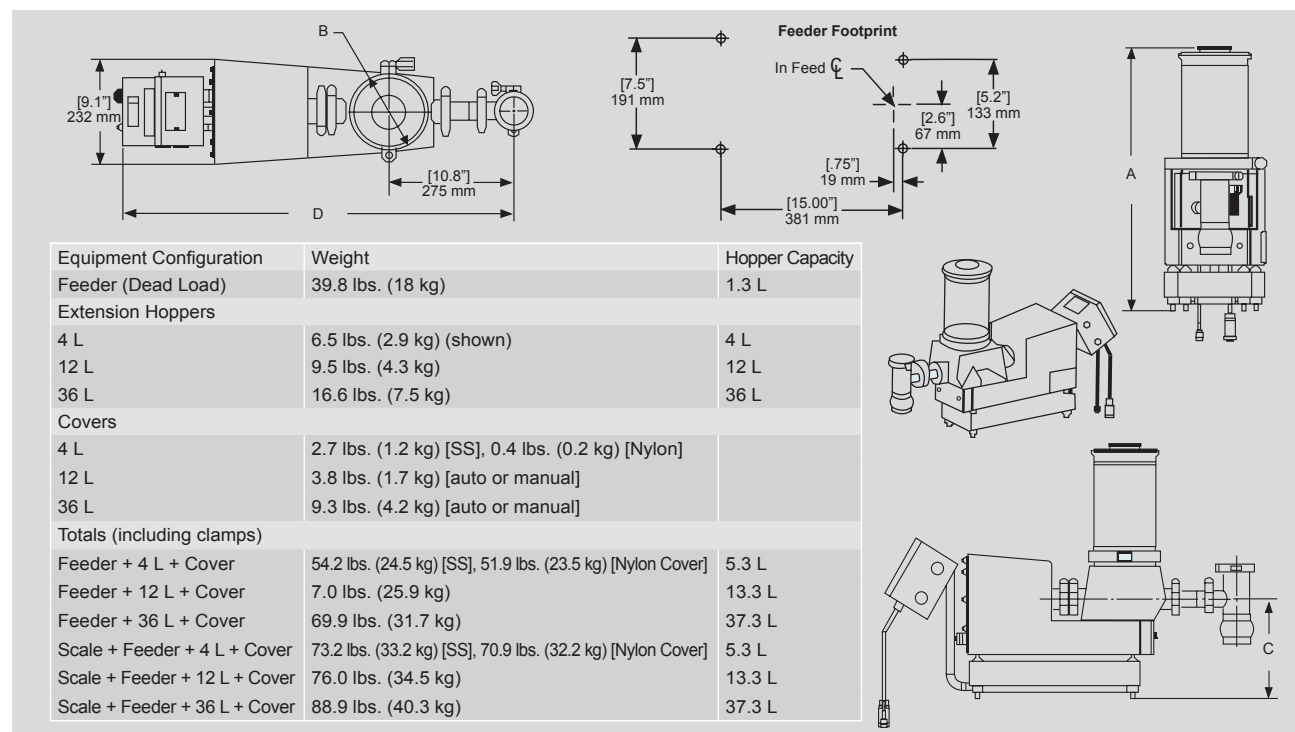


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Disposable, recyclable and flexible EPDM feed hopper is quickly and easily removed.



The MechaTron® AI feeder uses minimal components making disassembly quick and easy for routine maintenance and product changeovers.

Dimensions



NOTES:

- Standard infeed to discharge is 275 mm [10.83"]. Extensions available in 25.4 mm [1.00"] increments to a maximum infeed to discharge of 529 mm [20.83"].
- System scale capacity: 30kg, 60kg or 100kg.
- Extension hopper is available in 4 L, 12 L and 36 L sizes. Cover options include manual refill, auto refill (12 L & 36 L only), or no cover.
- Materials of construction: 304 [DIN 1.4301] stainless steel, EPDM, PTFE.
- Electrical service requirements:
240V, 1 phase, 50/60 Hz, 4 amps
120V, 1 phase, 50/60 Hz, 8 amps
- Feeder is removable from scale for cleaning.

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Extension Hopper Capacity	Dimensions - inches (mm)			
	A	B	C	D
4 L Volumetric	20.4" (518 mm)	7.0" (178 mm)	5.8" (148 mm)	26.3" (670 mm)
4 L Gravimetric	23.8" (605 mm)	7.0" (178 mm)	9.3" (235 mm)	34.0" (865 mm)
12 L Volumetric	26.0" (660 mm)	12.4" (315 mm) conical shape	5.8" (148 mm)	26.3" (670 mm)
12 L Gravimetric	29.4" (746 mm)	12.4" (315 mm) conical shape	9.3" (235 mm)	34.0" (865 mm)
36 L Volumetric	31.5" (800 mm)	19.3" (490 mm) conical shape	5.8" (148 mm)	26.3" (670 mm)
36 L Gravimetric	35.0" (889 mm)	19.3" (490 mm) conical shape	9.3" (235 mm)	34.0" (865 mm)

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