



**BUILT SMART
BUILT TO SURVIVE**

Model LWF-18L-V Spiralator™ Flexure Scale Loss-In-Weight Feeder

The **LWF-18L-V** “Spiralator” Loss-In-Weight Vibratory Feeder is designed to operate over a very wide operating range (typically 100:1), while assuring uniform, non-pulsating flow of difficult-to-discharge materials, whether they be fine cohesive powders or fragile interlocking particles of irregular shape. A slowly rotating (typically 2 rpm), non-agitating, conical wire-spiral within the hopper counteracts the material’s tendency to pack under its own weight by virtue of its “lifting” action throughout the stored material. The resulting reduction in consolidation pressures throughout the material mass assures that the stored material will not develop sufficient strength to form stable arches that can cause erratic flow or complete flow stoppage. The combination of this unique material conditioning system and a vibrating pan feeder assures that the material will be handled reliably and gently throughout the entire feeding range.

Specialized scale design assures reliable, accurate metering.

The heart of any gravimetric feeder is its scale system. The LWF-18L-V incorporates a unique flexure suspension scale designed exclusively for use on Loss-In-Weight Feeders:

- High efficiency “dead load” counterbalancing
- Non-tilting platform design
- Tolerant of shocks and overloads
- Mechanical force “summing” to a single load sensor
- Full range sensor utilization = maximized resolution
- Low mechanical resonance frequency

Conventional platform scales are NOT well suited for this service. Single point platforms are unsuitable for supporting machinery having this degree of vertical height and elevated mass. They are very vulnerable to side loading and other “tilting” disturbances. Multiple load cell platforms are unsuitable for low loading applications. They are vulnerable to concentrated overloading by forces no greater than that of an operator standing on one corner of the platform. Finally, both types of platform scales resonate at frequencies much nearer the disturbing frequency of the vibrating equipment being supported. While electronic or software filtering may smooth out signal levels, they offer no protection to the load cells.



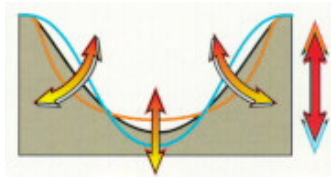
Specialized Material Conditioning System:

The THAYER Model LWF-18L-V “Spiralator” Feeder is a patented feeder system that assures uniform flow of caking and cohesive powders as well as interlocking particles and delicate flakes.

Two Feed Tray Designs:

Standard Mirror finished stainless steel tray is used for non-cohesive pellets, granules, fibers or flakes.

Optional, patented elastomer membrane vibrating tray insert for cohesive/adhesive powders.



Patented insert creates a multiple node, standing (vibrating) wave which acts to shed any material that has a tendency to adhere to the conveying surface.

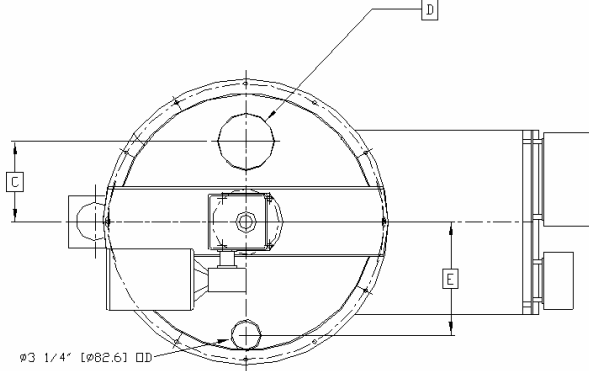
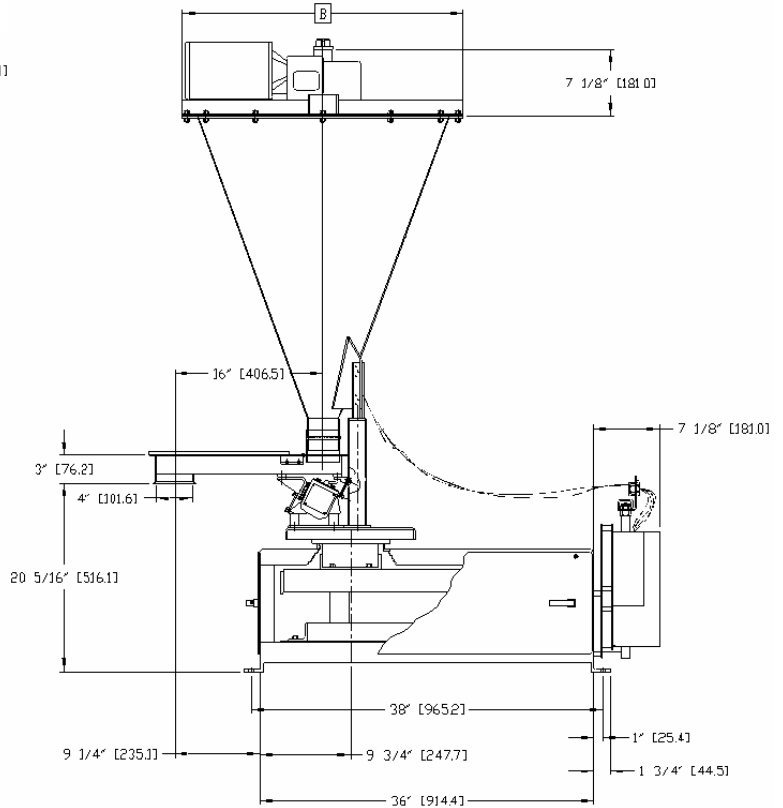
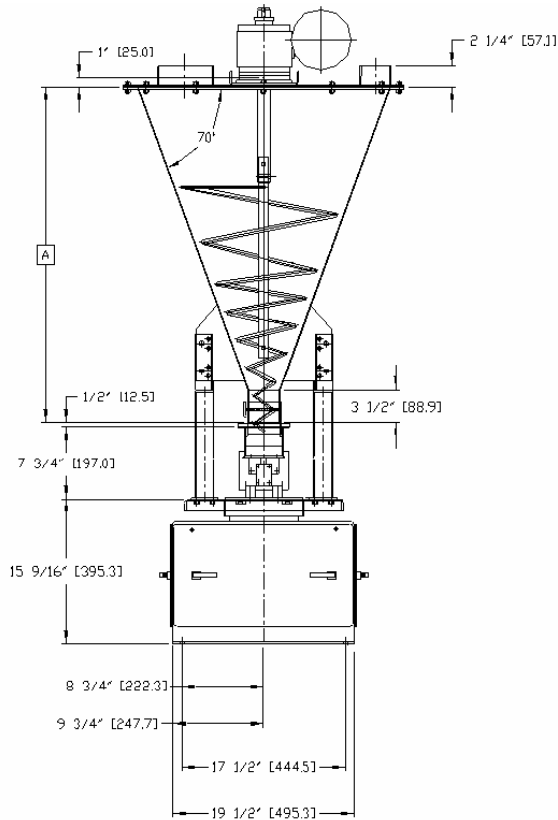
Thayer Scale-Hyer Industries, Inc.

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THAYER Model LWF-18L-V "Spiralator" Loss-In-Weight Feeder



*DIMENSIONS

	A	B	C	E	F
2 C.F. [055 CM]	27 7/8' [708]	24 1/4' [616]	7' [177.8]	9' [228.6]	38 1/8' [968.4]
4 C.F. [111 CM]	36 1/8' [917.6]	30 1/4' [768.4]	8 1/2' [215.9]	12' [304.8]	45 5/8' [1158.9]
6 C.F. [171 CM]	40 15/16' [1040]	33 3/4' [857.2]	9 1/4' [235]	13 3/4' [349.8]	51 1/8' [1298.6]

D	DD
6'	[152.4]**
8'	[203.2]**
10'	[254.0]**

*All dimensions are subject to change, for reference only.

SPECIFICATIONS

Volumetric Capacity: Up to 80 ft³/hr (2.26 m³/hr) product dependent. Turn down 100:1 Consult factory for higher feed rates.

Vibrating Feeder Drive: Electromagnetic Drive
 -4" (104 mm) wide tray, 115 VAC, up to 40 ft³/hr.
 -5" (127mm) wide tray, 115 VAC, up to 60 ft³/hr (Nodal-Membrane Tray).
 -7" (178 mm) wide tray, 115 VAC, up to 80 ft³/hr.

Scale Type: "FMSS" Flexure Scale System (dead load is mass-counterbalanced) and LVDT Weight Sensor.

Scale Capacity (live load): variable Up to 500lbs (226 kg).

Hopper Capacity: 2, 4, & 6 ft³, consult factory for larger sizes.

Material Contact Surface: Electro-polish (material contact parts) or mill finish 304 and 316 Stainless Steel, other finishes available.

Non-Material Contact Surfaces: Carbon steel painted with primer and industrial grade enamel paint (special coatings and stainless steel available upon request).

Temperature: 32°F (0°C) to 130°F (55°C) standard. Consult factory for other temperatures.

Accuracy: 0.25% to 1% of set rate ±2 sigma based on thirty 1 minute samples or 1.0% of weigh hopper storage capacity, whichever is greater.

Options:

- Vibratory Feeder with Inter-Nodal Membrane.
- Spiralator™ Vertical Lift Conditioner.
- Quick Release Vibratory Tray.

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