



**BUILT SMART  
BUILT TO SURVIVE**

## Model LWF-MC-V Cable Scale Loss-In-Weight Vibratory Feeder

### Features:

- Accurately measures load regardless of load position.
- Immune to support structure deflections and process vibrations.
- Inherently self aligning to gravity.
- Nulls out heavy tare loads.
- 1,000% over load capacity.
- Scale may be suspended from above or supported below.
- Immune to shock or impact loads.
- Easily accessible load cell can be re-rated to meet future capacity changes without removing the feeder.
- OCMP™ (Controller Output Compensation) & “EFT” Excitation Tracking improves and improves and enhances vibratory feeder control.

The THAYER Model LWF-MC-V low feed rate Loss-In-Weight Feeder is designed to assure uniform, non-pulsating accurate feeding of a wide range of materials, from free flowing to friable to cohesive.

### Specialized Version has Material Conditioning System.

The patented LWF-MC-V “Spiralator” version assures reliable de-hoppering and accurate feeding of caking and cohesive powders as well as interlocking particles and delicate flakes. The gentle lifting action of the slowly revolving (2 rpm) conical-coil within the hopper keeps material in a decompressed state, thereby discouraging arch formations that can cause erratic flow or complete stoppage.

### Two feed tray designs available:

(Standard) mirror finish steel tray is used for non-adhesive powders, pellets, granules, fibers and flakes.

(Optional) patented elastomer membrane insert fitted to our vibrating tray for materials that tend to adhere and build up on conveying surface.

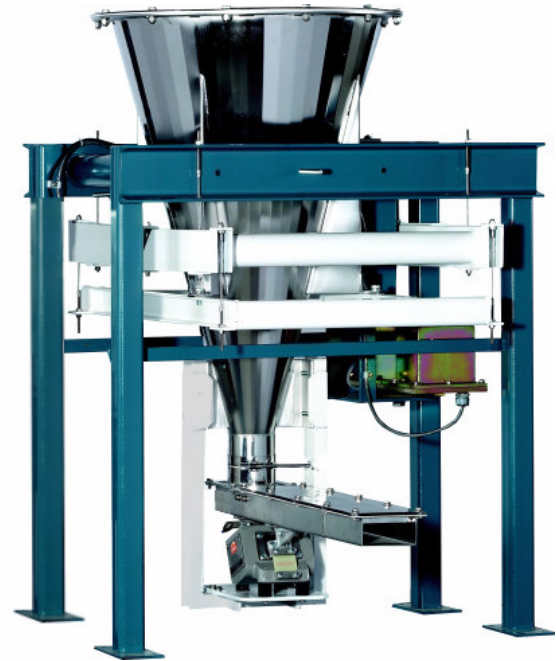
### Patented “FMSS” (Force Measurement Suspension System) Cable Scale Technology.

The Thayer Cable Scale (patented) is the most rugged and “forgiving” Load Cell Weighing System available on the market.

It can take more physical “abuse” and can tolerate more foundation distortion/deflection than all other known designs.

The exclusive Thayer Scale “FMSS” Cable Suspension design provides extremely high sensitivity.

Feeder “dead” load (feeder and weigh hopper) is mass-counterbalanced so that only material weight (*live load*) is measured. This feature helps assure excellent control in “noisy” environments.



All of the articulate parts of the scale mechanism are supported from “axially inextensible, but laterally yieldable” suspension elements (stainless steel pre-stressed aircraft cable), which are arranged to hang freely vertically throughout their lengths under all operating conditions, thereby avoiding any appreciable spring or hysteresis effects, variations in mechanical advantage, or binding due to imperfect leveling.

Because of this unique mechanical property of the force transmission system, any laterally directed forces and shocks on the scale or its supported machinery can not cause destructive shear and bending stresses to develop in the elements themselves or at the load cell junction. The system, being yieldable in the lateral direction, is therefore effectively and completely protected by using laterally placed “stops” in proximity of the weighed structure.

Weight loss is measured by a highly accurate, very sensitive, high output electronic force measurement sensor. The Thayer Series LC-137 weight resolver is a force measuring device designed specifically for use with Thayer Scale weighing systems. It is a precision-built, heavy duty device designed for long term stability and accuracy under the most demanding applications. It is initially calibrated and installed by the factory and normally requires no routine maintenance. So rugged is the “FMSS” Scale system that the LC-137 Weight Resolver is guaranteed for 15-years.

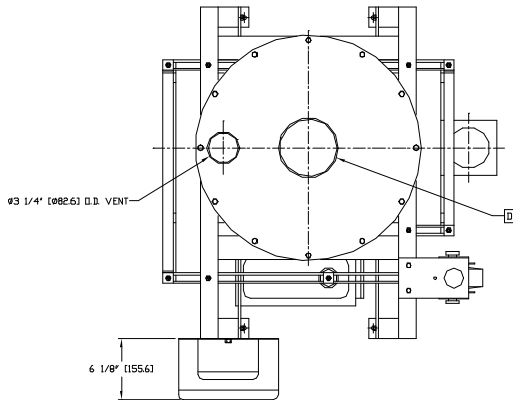
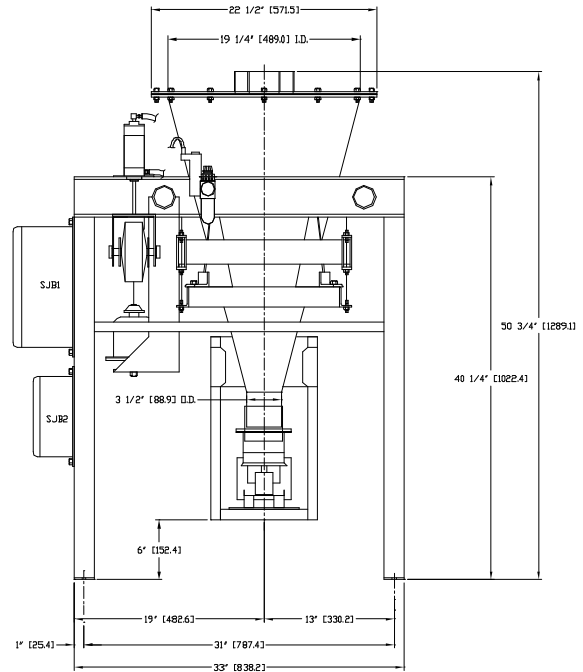
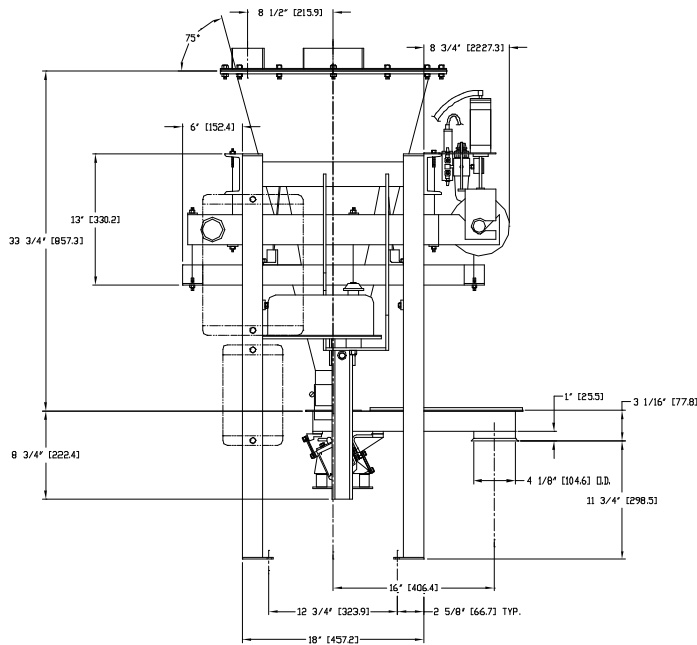
## Thayer Scale-Hyer Industries, Inc.

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# THAYER Model LWF-MC-V Loss-In-Weight Feeder



D1
6' [152.4]
8' [203.2]

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

## SPECIFICATIONS

**Feed Rate:** Up to 40 ft<sup>3</sup>/hr (1.13 m<sup>3</sup>/hr) at a material bulk density of 50 lbs/ft<sup>3</sup> (0.8 gr/cm<sup>3</sup>). 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 ft<sup>3</sup>/hr.
- 5" (127mm) wide tray, 115 VAC, up to 60 ft<sup>3</sup>/hr (Nodal-Membrane Tray).

**Scale Type:** "FMSS" Cable Scale System (dead load is mass-counterbalanced) and Model LC-137 Weight Resolver,

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

**Hopper Capacity:** 2 ft<sup>3</sup>, 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). Stainless Steel available.

**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.

**Automated Test Weight Lifter Assembly (ATWL):** Used to automatically conduct a zero and span calibration.

### Options

- Vibratory Feeder with Inter-Nodal Membrane (Not Shown).
- Spiralator™ Vertical Lift Hopper Agitator (Not Shown).
- Quick Release Vibratory Tray (Not Shown)
- Hazardous Area Modification: Consult Factory.
- Sanitary Construction.

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