

Model S Weigh Belt Module



- *Extremely Rugged.*
- *Highly Accurate.*
- *Can be customized to meet a customers unique design requirements.*
- *Over 40 years of service.*

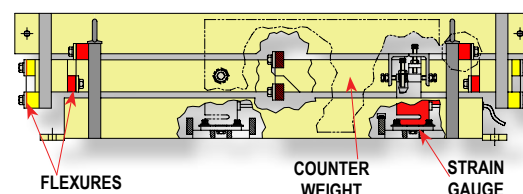
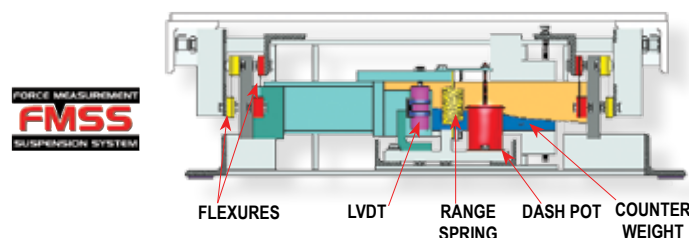


Simplified construction and calibration results from suspending a complete synchronous-speed conveyor from a THAYER Flexure Scale. The type "S" unit adapts well to existing vibratory, screw or belt conveyor installations where it has been determined that weight measurement and/or flow control is desired. Also on new installations, the combination of a suitable pre-feeder and type S unit often proves the best approach considering both cost and material handling requirements. The type "S" has been used to handle, rock wool, aluminum chips, hot rubber extrusion, glass cullet, ice, sand and petroleum coke.

Components SCALE:

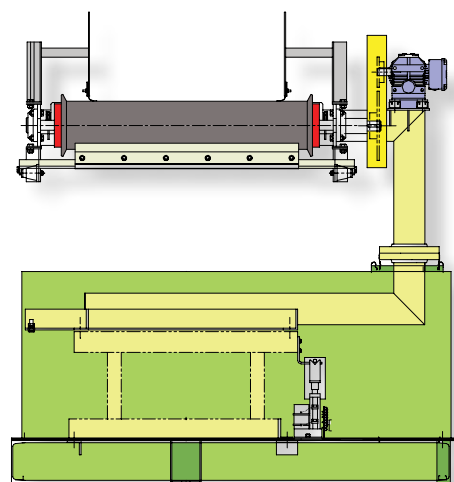
The S Weigher uses Thayer Scale's patented Model 18 precision flexure plate suspension scale with FMSS technology. The scale provides for complete mass counterbalancing of the dead load of the conveyor, permitting the load sensor to react only to the net material load. This unique system is not affected by dirt, shocks or vibration, and can withstand overloads in excess of 1,000 pounds without causing damage or affecting calibration.

The Basic THAYER Flexure-Plate Suspension system utilizes a series of steel flexure plates to transmit gravimetric loads vertically from the load receiving element through levers to the specifically selected controls. The combination of mass counterbalancing against tare loads, frictionless flexure-mounted levers and a high resolution transducer produces a force measuring system beyond compare. Of significance is the fact that infinite weighments may be made without maintenance or calibration, regardless of atmospheric or factory conditions. In many instances, THAYER Flexure Plate Suspension Systems placed in operation in 1950 are still working without maintenance or adjustment. Two scale designs are available, either LVDT or Strain Gauge.

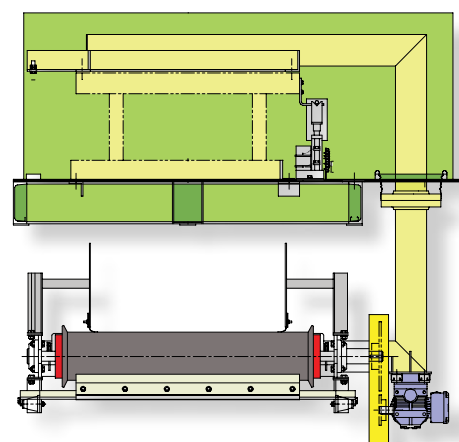


CONVEYOR:

Conveyor is heavy-duty construction, employing standard industrial idlers and pulleys. Conveyor belting is endless and is normally furnished with a molded edge flange. Side skirts are also supplied to eliminate side spillage. Since load measurements are not affected by the physical characteristics of the belting and its supporting means (belt stiffness, sliding friction, belt non-uniformity, splice effects, tension/misalignment interaction, etc.) the type of belting construction and its material can be chosen on the basis of durability and belt-tracking ability without concern for accuracy compromise. The unique cantilevered conveyor support makes it possible to replace belting without dismantling the conveyor.



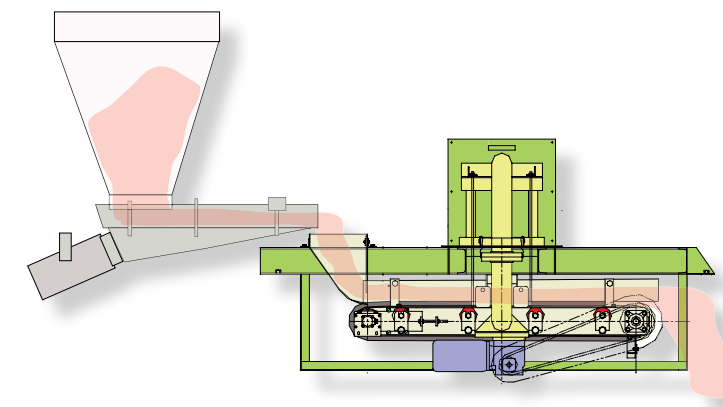
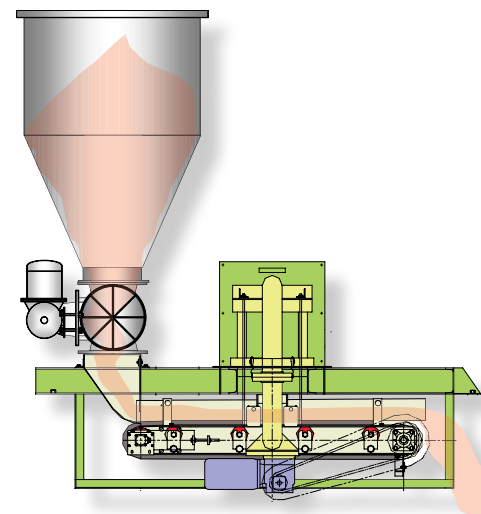
Scale Under Design



Scale Over Design

PRE-FEEDER:

Depending on material being handled, the pre-feeder can be a screw, rotary, belt, vibratory or pinch valve. Screw, rotary or pinch valve pre-feeders are normally used with fluid powders, while belt and vibratory pre-feeders are used with granular, fibrous or abrasive materials. Belt widths range from 6" up to 48".



CONTROLS:

The Series "SB" can be supplied with THAYER instrumentation and controls to function as either a process stream weigher only, or as a flow stream controller/weigher (providing the additional controller output to regulate the upstream delivery system). Thayer Scale's patented "SLC" (scale location compensation) features can also be supplied to move the point of measurement further downstream adjacent to associated or "slaved" equipment.

THAYER SERIES 5200

The simplest high precision Weigh Belt Controller/ Integrator in industry today, the SERIES 5200 is the product of a careful, well thought-out program to eliminate the fears of many scale users that electronic instruments are too complex for the average plant maintenance man.

- The SERIES 5200 Thayer Scale's new generation of operator interface for control and monitoring of any process weighing and flow control equipment.
- For use with any Strain Gauge or LVDT type load cell.
- Powerful internal 24 bit (1 part in 4,000,000) load resolution produces unparalleled system accuracy.
- Minimal customer wiring. The Scale Unit (SU-5200) mounted at the conveyor gathers load, speed and temperature data and communicates this information to the central processor (CPU) through a 2-wire RS422/485 connection.



THAYER S52i INTEGRATOR

THAYER's S52i Integrator is a full featured instrument in a single, compact package. It performs the same functions as an instrument costing many times more without sacrificing the accuracy associated with THAYER products. Simplicity of use has always been a very important factor in designing an instrument and the S52i has inherited all the time and labor saving methods THAYER has developed over the years.

The S52i Instrument can be used on most belt conveyor weigh belt systems to provide continuous information about the flow of material to its process by monitoring the load and speed. The weigh system must use a strain gauge to sense weight; however a variety of sensors can be used to sense the speed. Weight information is processed as weight per length and speed is processed as unit length per time. Integrated together, a great deal of information is available about the system, such as: flow rate; accumulated weight (total); belt loading; belt speed; etc.



PRODUCTS & MARKETS SERVED

Thayer Scale supplies the world with process measurement & control equipment with emphasis on solids flow weighing and metering. Our products include: Loss-In-Weight Feeder, Weigh Belt Feeders, Conveyor Belt Scales, Measurement & Control Instrumentation and Bin & Hopper Material Flow Aids. The markets we serve include: Forest Products, Plastics, Food, Chemicals and Cement to name a few.

MAJOR PRODUCTS & TECHNOLOGIES

- Patented “FMSS” Force Measurement Suspension System Cable Scales
- Patented Loss-In-Weight “Differential™” Screw Feeder
- Patented “Nodal-Membrane” Vibratory Tray Feeders.
- Patented “Spiralator™” Hopper Agitator
- Patented “Rocking Flexure” Belt Scales
- Patented “PF” Volumetric Screw Feeder
- Patented “Bridge Breaker™” Bin & Hopper Dischargers.
- Low Feed Rate “Miniature” Weigh Belt & Loss-In-Weight Feeder.
- “NAR” NTEP Approved commercial grade Conveyor Belt Scales (approved for legal trade).
- “SI” Insertion Weigh Belt Feeder and Scale.
- “MFLI” Mass Flow Liquid Injection System.
- High Capacity, Heavy Industry Weigh Belts.
- Modular, Singular or Multi Feeder Continuous or Batch Control Systems

SUPPORT SERVICES

TEST FACILITIES:

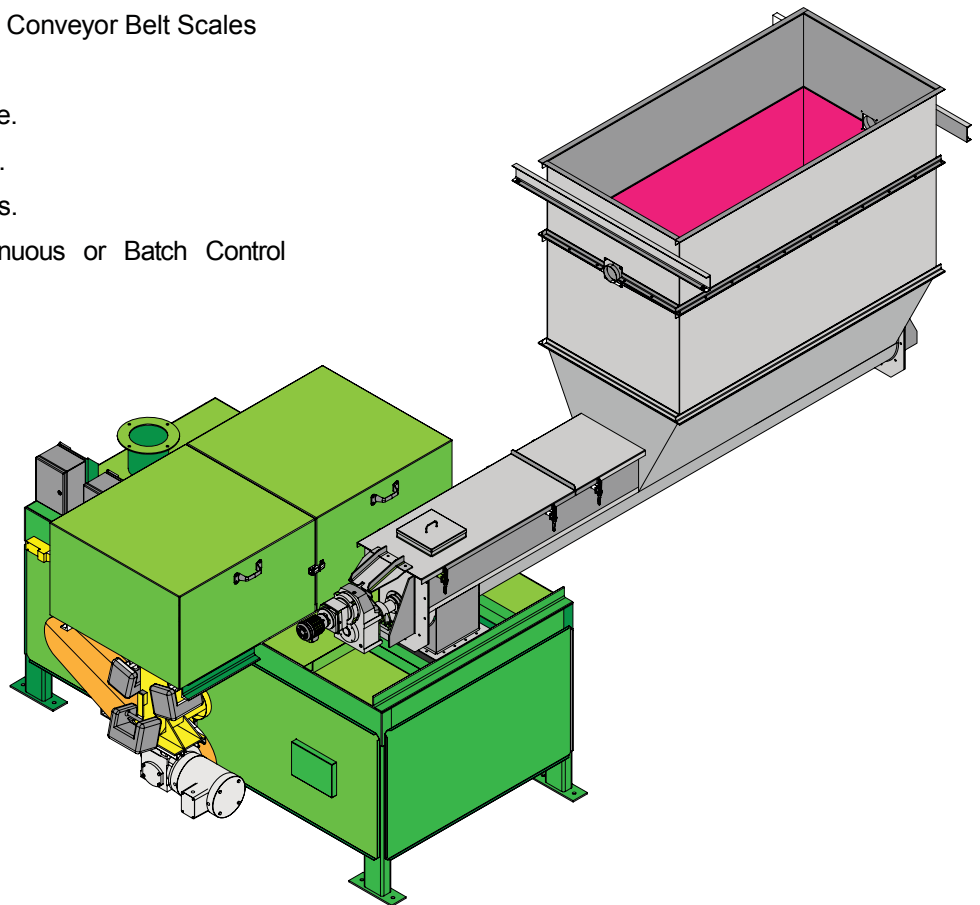
Thayer Scale operates three fully equipped dry particle test centers in a dedicated wing of our Massachusetts facility. A full time staff performs product application and performance testing with user supplied materials. These facilities are designed to duplicate as closely as possible industrial processing conditions.

SERVICE:

Thayer Scale has a well trained professional service department with an outstanding record of longevity, experience and achievement. Thayer’s technicians are available for start-up support, inspection, diagnosis and repair service, routine maintenance and material testing services.

TRAINING:

Thayer Scale offers formal training either here at the factory in Pembroke, MA or at the customer’s plant. Each training class is tailored to the specific instrumentation and mechanical equipment used in their facility.



MADE IN USA



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