# MERRICK MODEL 450 HEAVY DUTY WEIGH FEEDER

# **ACCURATE AND EASY TO MAINTAIN**



# **WEIGH SUSPENSION**

- Single idler scale system
- No moving parts, the design is maintenance free
- Provides totalized weight readings of ±0.25% of test weight

### **TAKE-UPS**

Screw take-ups are provided for belt tracking and tensioning

### **IDLERS**

- Single roll, flat carrying, steel idlers with sealed for life bearings
- Idler stands are open ended to allow for quick change, without tools

### **ENCLOSURES**

- Panel doors are provided with quick release latches
- All interior components are accessible through the panel sections
- Drag cleanout and spill hoppers optional

### **BELT CLEANER**

- Counter-weighted rubber blade cleaner is mounted at the head pulley
- V-plow belt cleaner is mounted on the return side of the belt before the tail pulley

# MERRICK SIGNATURE SLACK BELT DESIGN



- Oversized pulleys allow for low belt tension with no slippage
- Low tensioned belt reduces belt reaction errors and provides highest weighing accuracy
- Eliminates the need for tension or tracking devices that cause influences in the weigh area
- Covered screw take-ups provide positive tracking and low belt tension in the weigh area
- Low tension extends the life of the belt, pulleys, takeups, idlers and bearings



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# DYNAMIC INNOVATIONS SINCE 1908 WEIGHING, FEEDING, CONTROLS & ENVIRONMENTAL SOLUTIONS

# MODEL 450 HEAVY DUTY WEIGH FEEDER



FROM THE LEADER IN CONTINUOUS WEIGHING TECHNOLOGY



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# **RUGGED AND RELIABLE**

Introducing the MERRICK Model 450 Weigh Feeder. Whether you are weighing coal, minerals, limestone, alternative fuels, ores or a variety of other bulk materials, the Model 450 is designed to handle them in the toughest application environment. Durability is assured, over years of continuous service, through the use of oversized components and the most sturdy construction.

Durability is only part of the picture. Benefiting from over 100 years of research and development, the Model 450 continuously controls feed rate, measures totalized weight and maintains set point with the highest degree of accuracy and reliability.



Model 450 Weigh Feeder

# STANDARD DESIGN

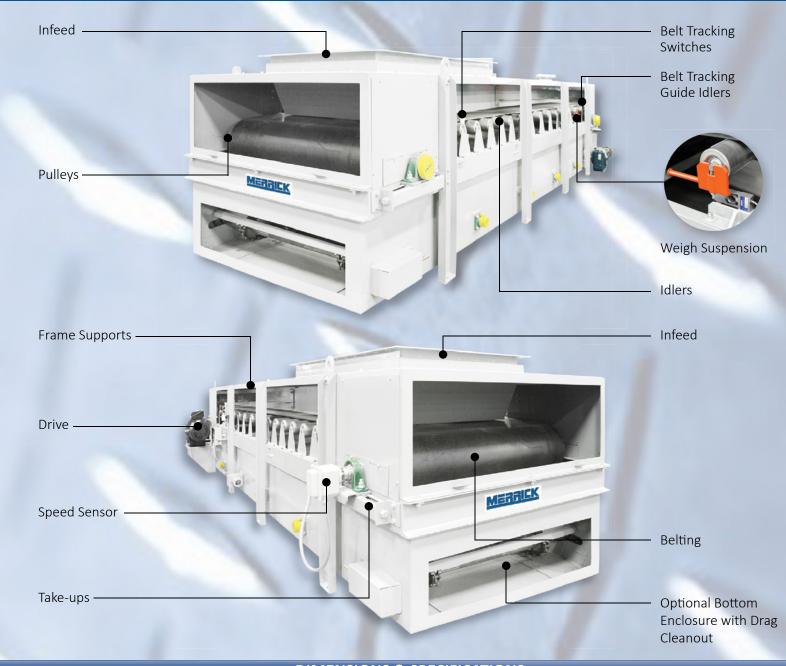
- Heavy Duty Channel Frame
- Custom Flanged Infeed Section with Manually Adjustable Shear Gate for Setting Material Depth on Belt
- Dual Load Cell Weigh Suspension with No Moving Parts
- High Resolution Tail Pulley-Mounted Speed Sensor
- Dust Confining Enclosure with Removable Access Panels on All Sides. Includes Flanged Dust Collection Port Over Feeder Discharge
- 4" Flanged Sidewall, Vulcanized Endless Conveyor Belt Rated at 212° F (100° C)
   \*Other Options Available
- 4" Diameter, Flat Belt Style Carrying Idlers with Sealed for Life Bearings
- Crowned Head Pulley with Vulcanized Rubber Lagging. Bare Tail Pulley
- Screw Take-ups
- Anti-Friction Head and Tail Pulley Pillow Blocks, Fully Self-Aligning Ball Bearing Type, Provided with Lubrication Fittings
- Counter-Weighted Scraper at Head Pulley and Plow Scraper on the Return Side of Belt
- Calibration Test Weights

# GENETIX® PROCESS CONTROLLER

The Genetix® process controller for scales and weigh feeders is a powerful single-board controller for a range of applications: from small single-scale installations to large multi-feeder blending systems. It does not require an operator display to function and can be connected to most modern PLC systems using Devicenet™, Controlnet™, Profibus®, Ethernet, and other industrial interfaces.

Genetix® is a registered trademark of MERRICK Industries, Inc. All other trademarks are the property of their respective owners.

# STANDARD FEATURES



# **DIMENSIONS & SPECIFICATIONS**

BELT WIDTH (MAX 120")	STANDARD INLET OPENING	STANDARD LENGTH INFEED TO DISCHARGE	RATED CAPACITY *
18"	10" x 30"	7'-0"	75 STPH
24"	14" x 30"	7'-0"	150 STPH
30"	20" x 30"	7'-0"	210 STPH
36"	26" x 30"	7'-0"	275 STPH
42"	32" x 30"	7'-0"	335 STPH
48"	36" x 30"	7'-0"	500 STPH
54"	42" x 42"	9'-0"	750 STPH
60"	48" x 48"	9'-0"	850 STPH
72"	60" x 60"	9'-0"	1000 STPH



