MERRICK MODEL 450 HEAVY DUTY WEIGH FEEDER

ACCURATE AND EASY TO MAINTAIN

TAKE-UPS
- Screw take-ups are provided for belt tracking and tensioning

IDLERS
- Single roller, 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

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

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, take-ups, idlers and bearings

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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FAMILY OF COMPANIES
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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.

**RUGGED AND RELIABLE**

- 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

**STANDARD DESIGN**

**STANDARD FEATURES**

- Belt Tracking Switches
- Belt Tracking Guide Idlers
- Weigh Suspension
- Idlers
- Frame Supports
- Infeed
- Pulleys
- Speed Sensor
- Take-ups

**DIMENSIONS & SPECIFICATIONS**

<table>
<thead>
<tr>
<th>BELT WIDTH (MAX 120”)</th>
<th>STANDARD INLET OPENING</th>
<th>STANDARD LENGTH INFEED TO DISCHARGE</th>
<th>RATED CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>18”</td>
<td>10” x 30”</td>
<td>7’-0”</td>
<td>75 STPH</td>
</tr>
<tr>
<td>24”</td>
<td>14” x 30”</td>
<td>7’-0”</td>
<td>150 STPH</td>
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<td>30”</td>
<td>20” x 30”</td>
<td>7’-0”</td>
<td>210 STPH</td>
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<td>36”</td>
<td>26” x 30”</td>
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<td>275 STPH</td>
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<td>42”</td>
<td>32” x 30”</td>
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<td>335 STPH</td>
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<td>48”</td>
<td>36” x 30”</td>
<td>7’-0”</td>
<td>500 STPH</td>
</tr>
<tr>
<td>54”</td>
<td>42” x 42”</td>
<td>9’-0”</td>
<td>750 STPH</td>
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<tr>
<td>60”</td>
<td>48” x 48”</td>
<td>9’-0”</td>
<td>850 STPH</td>
</tr>
<tr>
<td>72”</td>
<td>60” x 60”</td>
<td>9’-0”</td>
<td>1000 STPH</td>
</tr>
</tbody>
</table>

* Based on 100 PCF material with 60 FPM belt speed.