

# Continuous weighing for consistent performance

## Milltronics MBS

- Installation is quick and easy – installs with only 4 bolts, reducing downtime
- High performance parallelogram-style aluminum strain gauge load cells, provide instant response to vertical loading and are unaffected by uneven belt loading or belt speeds up to 3 m/s (600 fpm)
- Fits most conveyor widths and standard idlers due to modular design with no cross bridge
- Milltronics MBS is supplied ready for installation – no assembly of weighing modules required
- Compatible with Milltronics BW100 and BW500 offering indication of flow rate, totalized weight, belt loading, and belt speed, complete with patented electronic load cell balancing



# reliable

Belt scales help maximize the use of raw materials, control inventories, and assist in manufacturing consistency. Milltronics MBS is a basic, modular, medium-duty belt scale providing dynamic weighing information for process indication. Milltronics MBS is ideally suited to the aggregates, dry food processing and roofing production industries. With a successful track record in harsh industries, Milltronics conveyor belt scales offer reliable, continuous weighing.



# SIEMENS

[www.siemens.com/continuous-weighing](http://www.siemens.com/continuous-weighing)

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# Technical Specifications

| Milltronics MBS                        |   |
|--|---|
| Mode of operation                      |   |
| Measuring principle                    | Heavy-duty strain gauge load cells measuring load on belt conveyor idlers   |
| Typical applications                   | <ul style="list-style-type: none"> <li>■ Monitor fractionated stone, feed rates of sand, animal feeds, grains</li> <li>■ Track daily production totals</li> </ul>   |
| Performance                            |   |
| Accuracy                               | ± 1% of totalization over 3:1 operating range, application dependent  |
| Medium conditions                      |   |
| Max. material temp.                    | 70 °C (158 °F)  |
| Belt design                            |   |
| Belt width                             | Standard duty up to 1000 mm (CEMA width up to 42")  |
| Belt speed                             | Up to 3 m/s (600 fpm)   |
| Capacity                               |   |
|  | Up to 1500 t/h (1650 STPH) at maximum belt speed  |
| Conveyor incline                       |   |
|  | <ul style="list-style-type: none"> <li>■ ± 20° from horizontal, fixed incline</li> <li>■ Up to ± 30° with reduced accuracy</li> </ul>   |
| Idlers                                 |   |
| Idler profile                          | Flat to 35°, to 45° with reduced accuracy   |
| Idler diameter                         | 50 to 150 mm ( 2 to 6")   |
| Idler spacing                          | 0.6 to 1.5 m (2.0 to 5.0 ft)  |
| Load cell                              |   |
| Construction                           | Aluminum  |
| Excitation                             | 10 V DC nominal, 15 V DC max.   |
| Output                                 | 2 ± 0.02 mV/V excitation at rated load cell capacity  |
| Non-repeatability                      | 0.01% of rated output   |
| Non-linearity                          | 0.02% of rated output   |
| Hysteresis                             | 0.02% of rated output   |
| Capacity                               | 30, 50, 100 kg (66, 110, 220 lbs)   |
| Overload                               | 150% of rated capacity, ultimate 200% of rated capacity   |
| Temperature                            | -30 to 70 °C (-22 to 158 °F) operating temperature<br>-10 to 40 °C (-15 to 105 °F) compensated  |
| Weight                                 |   |
|  | 12 kg (26 lbs), 6 kg (13 lbs) per side  |
| Interconnection wiring (to integrator) |   |
|  | <ul style="list-style-type: none"> <li>■ &lt; 150 m (500 ft) 18 AWG (0.75 mm<sup>2</sup>) 6 conductor shielded cable</li> <li>■ &gt; 150 m (500 ft) to 300 m (1000 ft) 18 to 22 AWG (0.75 to 0.34 mm<sup>2</sup>) 8 conductor shielded cable</li> </ul> |
| Hazardous locations                    |   |
|  | With use of intrinsically safe barrier strips   |
| Approvals                              |   |
|  | CE  |

**For more information:** 1-800-964-4114

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| Siemens Energy & Automation, Inc.<br>Process Solutions Division,<br>Process Instrumentation<br>734 W. North Carrier Parkway<br>Grand Prairie, TX 75050 USA<br>Phone: 1-972-522-4500 | Siemens Energy & Automation, Inc.<br>Process Solutions Division<br>Process Instrumentation<br>1201 Sumneytown Pike, P.O. Box 900<br>Spring House, PA 19477 USA<br>Phone: 1-215-646-7400 |
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## Million in one

### Weighing technology with field experience

Siemens instruments come with extensive field experience with a million instruments in industrial applications.

Designed to withstand the sustained rigors of heavy primary industries, these products have proven their reliability in a wide range of harsh applications including the mining, mineral processing and cement industries. They are also used extensively in wet and dry food processing and chemical industries.

With this experience, we understand the importance of reliability, and we know what it takes to make a trusted and accurate instrument for demanding applications.

### Basic scale package for dynamic weighing applications at minimal cost



**Milltronics MBS** is a basic, modular, medium-duty belt scale providing dynamic weighing information for process indication.

**Milltronics BW100** offers indication of flow rate, totalized weight, belt loading, and belt speed for process control, as well as a programmable analog output and one programmable contact relay.

**Milltronics TASS** is a compact, low-profile, wheel-driven return belt speed sensor.



Specifications are subject to change without notice.  
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