## SITRANS Weighfeeders

### 5/2 Introduction
- 5/5 SITRANS WW100
- 5/12 SITRANS WW200
- 5/15 SITRANS WW300
- 5/18 SITRANS Weighfeeder Peripherals
Introduction

Overview

Milltronics weighfeeders from Siemens can improve the accuracy of processing, blend consistencies, accountability, and record keeping. All weighfeeders come standard with a belt weigh bridge and speed sensor. An integrator is required to complete the system.

Mode of operation

The weighfeeder is used to deliver an accurate mass flow rate of material. In the majority of applications, material is profiled by an adjustable mechanical shear gate, which fixes the correct material bed depth for a given particle size.

The feed rate is then maintained and adjusted by varying the speed of the belt. However, in some cases the belt speed is constant with rate control (if any) done by a pre-feeding device.

The system consists of three components: weight and speed sensing, integration and control, and the mechanical conveying system. Using the belt load and the belt speed signals, small incremental totals of weight per time are measured by the integrator and then the flow rate is calculated. The measured flow rate is compared against the desired flow rate and the on-board PID controller makes necessary corrections to the belt speed.

Design and Applications

SITRANS WW100

The platform weigh bridge mounts directly to a corrosion-resistant platform load cell. The direct load design eliminates all intermediate mechanical suspension and allows material weight to be directly applied to the load cell.

This design minimizes zero drift normally caused by intermediate suspension components and allows for the use of a very sensitive precision platform load cell. Load cell size and construction are chosen for each specific application.

SITRANS WW200

A stainless steel platform weighdeck with a UHMW plastic slider bar assembly mounts directly to two corrosion-resistant, sealed platform load cells. The direct load design eliminates all intermediate mechanical suspension and allows material weight to be directly applied to the load cells. The frame of the WW200 is sturdy and rigid, ensuring stable and repeatable results, maximizing resolution and weighing accuracy.

SITRANS WW300

SITRANS WW300 suspends a single weigh idler on platform load cells. Its design eliminates all moving parts in the weighing process and subsequent maintenance and replacement problems. There are no links or flexures. Two corrosion-resistant precision strain gauge load cells provide weight sensing signals to an integrator. This design feature minimizes zero drift and maximizes resolution and weighing accuracy. WW300 weighfeeders use a special version of Milltronics MSI single idler belt scale with a patented design for instantaneous reading of changes in belt loading, allowing for higher accuracy and control performance.
### Technical specifications

<table>
<thead>
<tr>
<th>Criteria</th>
<th>SITRANS WW100</th>
<th>SITRANS WW200</th>
<th>SITRANS WW300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical industries</td>
<td>Bulk chemicals, tobacco, food, water treatment</td>
<td>Bulk chemicals, tobacco, food, recycling</td>
<td>Cement, mineral processing, coal, mining, pulp and paper</td>
</tr>
<tr>
<td>Typical applications</td>
<td>High-accuracy, low-capacity for minor ingredient additives</td>
<td>Low- to medium-capacity for minor ingredient additives</td>
<td>Medium- to high-capacity for macro ingredient additives</td>
</tr>
<tr>
<td>Design rate range</td>
<td>45 kg/h ... 18 t/h (100 lbs/h ... 20 STPH)</td>
<td>0.45 ... 36 t/h (1 000 lbs/h ... 40 STPH)</td>
<td>4.5 ... 800 t/h (5 ... 880 STPH)</td>
</tr>
<tr>
<td>Belt speed</td>
<td>0.005 ... 0.36 m/s (1 ... 70 fpm)</td>
<td>0.005 ... 0.36 m/s (1 ... 70 fpm)</td>
<td>0.005 ... 0.36 m/s (1 ... 70 fpm)</td>
</tr>
<tr>
<td>Accuracy&lt;sup&gt;1&lt;/sup&gt;</td>
<td>± 0.25 ... 0.5%</td>
<td>± 0.5% or better</td>
<td>± 0.5% or better</td>
</tr>
<tr>
<td>Specified range</td>
<td>10 ... 100% based on speed</td>
<td>10 ... 100% based on speed</td>
<td>10 ... 100% based on speed</td>
</tr>
<tr>
<td>Sensing element</td>
<td>Long length platform weigh bridge Single load cell</td>
<td>Platform weigh bridge Dual load cells</td>
<td>Single idler scale Dual load cells</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE, C-TICK Meets USDA and FDA requirements for food processing</td>
<td>Meets USDA and FDA requirements for food processing</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Accuracy subject to: On factory approved installations the weigh feeder system’s totalized weight will be within the specified accuracy when compared to a known weighed material test sample. The test rate must be within the specified range of the design capacity and held constant for the duration of the test. The minimum material test sample must be equivalent to a sample obtained at the test flow rate for three revolutions of the belt or at least ten minutes running time, whichever is greater.
## Weighfeeder Application Questionnaire

### Customer information

Contact: ___________________________  Prepared By: ___________________________
Company: ___________________________  Date: ___________________________
Address: ___________________________  Notes on the Application: ___________________________
City: ____________________  Country: ____________________
State/Province: ________  Zip/Postal Code: ________  AWV Code (required): ____________________
Phone: (______) _______ Fax: (______) _______  E-mail: ____________________

### Material

Material being measured: ___________________________  Particle size: ________ mm/inch/mesh
Bulk density: ________ Kg/m³ or lb/cu. ft. or t/m³  Moisture content: ________ %
Temperature: ________ °C/°F  Angle of repose: ________ Degrees  Surcharge angle: ________ Degrees
Material characteristic:  
- [ ] sticky
- [ ] powder
- [ ] corrosive
- [ ] highly abrasive
- [ ] fluidized

### Pre-Feed

(Supply sketch where possible) Sketch attached [ ]

Application:  
- [ ] Load, Speed, Rate and Total
- [ ] Batch control
- [ ] Ratio controlled blending

Feed type:  
- [ ] Rotary valve
- [ ] Belt
- [ ] Screw
- [ ] Vibratory pan
- [ ] Bin, Hopper, or Silo
- [ ] Other

Hopper size: ________ ft³/m³

Feed rate: ________ t/hr or kg/hr or lb/hr or LTPH or STPH  ________ min. ________ max. ________ Nominal

Accuracy required: +/- ________ %  Electrical classification at scale location: __________________

Condition of operating environment:  
- [ ] Wash down
- [ ] Sanitary
- [ ] Corrosive
- [ ] Normal

Duty cycle: ________ Hours per day  Material free fall height onto belt: __________________

### Weighfeeder

Space limitations:  
- Length: ________
- Width: ________
- Height: ________ mm/inches

Construction:  
- [ ] Open
- [ ] Enclosed

Quantity required: __________________

Access side looking in direction of belt travel:  
- [ ] Left
- [ ] Right

Inlet dimensions:  
- (L x W): ________ mm/inches
- Centerline length: ________ mm/inches

### Installation

(inform all that apply)

Power available for motor: ________ volts ________ Hz

Inputs required:  
- [ ] 4 to 20 mA
- [ ] LVDT
- [ ] Variable speed
- [ ] PID
- [ ] Load Cells (#): ________

Outputs required:  
- [ ] 4 to 20 mA
- [ ] PID
- [ ] Remote totalizer
- [ ] Relays (#): ________

Communications:  
- [ ] AB Remote I/O
- [ ] DeviceNet
- [ ] PROFIBUS DP
- [ ] RS-232 / RS-485 Modbus

Products or options recommended: __________________

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Weighfeeder Application Questionnaire
SITRANS WW100 is a high-accuracy, low-capacity weighfeeder used for minor ingredient additives.

**Benefits**
- High accuracy
- High turn down ratio 100-10% of capacity
- Corrosion resistant components
- Fast and easy belt removal for replacement or cleaning
- Simple installation, easy to clean and maintain

**Application**
SITRANS WW100 is one of the most accurate in-motion weighing systems on the market. It is specially designed for high accuracy on light loading processes. The design eliminates material build-up to ensure accurate, reliable measurement. The unique long length platform weigh bridge mounts directly to a corrosion-resistant platform load cell. An adjustable mechanical shear gate profiles the material and fixes the correct material bed depth for a given material particle size. The belt speed can be automatically adjusted to attain the correct feed rate. Standard components include the belt weigh bridge, speed sensor, and test chains supported by Milltronics BW100, BW500, or SIWAREX FTC microprocessor-based integrators for easy blending, batching and feed rate control.

**Technical specifications**

<table>
<thead>
<tr>
<th>Mode of operation</th>
<th>Measuring principle</th>
<th>Measuring accuracy</th>
<th>Measuring accuracy</th>
<th>Measuring accuracy</th>
<th>Measuring accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring principle</td>
<td>Strain gauge load cell and digital speed sensor</td>
<td>Accuracy</td>
<td>± 0.25 ... 0.5%</td>
<td>Specified range</td>
<td>10 ... 100% based on speed</td>
</tr>
<tr>
<td>Typical application</td>
<td>Control and monitor feed rates and blending in bulk chemicals, tobacco, food, and water treatment</td>
<td>Design rate range</td>
<td>45 kg/h ... 18 t/h</td>
<td>(100 lbs/h ... 20 STPH)</td>
<td></td>
</tr>
<tr>
<td>Measuring accuracy</td>
<td></td>
<td>Medium conditions</td>
<td>Operating temperature</td>
<td>-10 ... +55 °C (+10 ... +131 °F)</td>
<td></td>
</tr>
</tbody>
</table>
## Reduction Ratio Selection Table

<table>
<thead>
<tr>
<th>Reduction (X:1)</th>
<th>Speed</th>
<th>60 Hz fpm</th>
<th>60 Hz m/s</th>
<th>50 Hz fpm</th>
<th>50 Hz m/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>372.1</td>
<td>max.</td>
<td>5.54</td>
<td>0.028</td>
<td>4.59</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>min.</td>
<td>0.55</td>
<td>0.003</td>
<td>0.45</td>
<td>0.002</td>
</tr>
<tr>
<td>303.36:1</td>
<td>max.</td>
<td>8.80</td>
<td>0.035</td>
<td>5.63</td>
<td>0.029</td>
</tr>
<tr>
<td></td>
<td>min.</td>
<td>0.68</td>
<td>0.003</td>
<td>0.56</td>
<td>0.003</td>
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<tr>
<td>248:1</td>
<td>max.</td>
<td>8.31</td>
<td>0.042</td>
<td>6.89</td>
<td>0.035</td>
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<tr>
<td></td>
<td>min.</td>
<td>0.83</td>
<td>0.004</td>
<td>0.69</td>
<td>0.003</td>
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<tr>
<td>202.24:1</td>
<td>max.</td>
<td>10.19</td>
<td>0.052</td>
<td>8.45</td>
<td>0.043</td>
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<tr>
<td></td>
<td>min.</td>
<td>1.02</td>
<td>0.005</td>
<td>0.84</td>
<td>0.004</td>
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<tr>
<td>155:1</td>
<td>max.</td>
<td>13.30</td>
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<td>11.02</td>
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<tr>
<td></td>
<td>min.</td>
<td>1.33</td>
<td>0.007</td>
<td>1.10</td>
<td>0.006</td>
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<tr>
<td>126.4:1</td>
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<td>16.31</td>
<td>0.083</td>
<td>13.51</td>
<td>0.069</td>
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<tr>
<td></td>
<td>min.</td>
<td>1.63</td>
<td>0.008</td>
<td>1.35</td>
<td>0.007</td>
</tr>
<tr>
<td>93:1</td>
<td>max.</td>
<td>22.17</td>
<td>0.113</td>
<td>18.37</td>
<td>0.093</td>
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<tr>
<td></td>
<td>min.</td>
<td>2.22</td>
<td>0.011</td>
<td>1.84</td>
<td>0.009</td>
</tr>
<tr>
<td>75.84:1</td>
<td>max.</td>
<td>27.18</td>
<td>0.138</td>
<td>22.52</td>
<td>0.114</td>
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<tr>
<td></td>
<td>min.</td>
<td>2.72</td>
<td>0.014</td>
<td>2.25</td>
<td>0.011</td>
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<tr>
<td>62:1</td>
<td>max.</td>
<td>33.25</td>
<td>0.169</td>
<td>27.55</td>
<td>0.140</td>
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<tr>
<td></td>
<td>min.</td>
<td>3.33</td>
<td>0.017</td>
<td>2.76</td>
<td>0.014</td>
</tr>
<tr>
<td>50.56:1</td>
<td>max.</td>
<td>40.78</td>
<td>0.207</td>
<td>33.79</td>
<td>0.172</td>
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<tr>
<td></td>
<td>min.</td>
<td>4.08</td>
<td>0.021</td>
<td>3.38</td>
<td>0.017</td>
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<tr>
<td>46.5:1</td>
<td>max.</td>
<td>44.34</td>
<td>0.225</td>
<td>36.74</td>
<td>0.187</td>
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<tr>
<td></td>
<td>min.</td>
<td>4.43</td>
<td>0.023</td>
<td>3.67</td>
<td>0.019</td>
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<tr>
<td>37.92:1</td>
<td>max.</td>
<td>55.44</td>
<td>0.276</td>
<td>45.05</td>
<td>0.229</td>
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<tr>
<td></td>
<td>min.</td>
<td>4.37</td>
<td>0.028</td>
<td>4.50</td>
<td>0.023</td>
</tr>
<tr>
<td>31:1</td>
<td>max.</td>
<td>66.51</td>
<td>0.338</td>
<td>55.10</td>
<td>0.280</td>
</tr>
<tr>
<td></td>
<td>min.</td>
<td>6.65</td>
<td>0.034</td>
<td>5.51</td>
<td>0.028</td>
</tr>
<tr>
<td>25.28:1</td>
<td>max.</td>
<td>81.55</td>
<td>0.414</td>
<td>67.57</td>
<td>0.343</td>
</tr>
<tr>
<td></td>
<td>min.</td>
<td>8.16</td>
<td>0.041</td>
<td>6.76</td>
<td>0.034</td>
</tr>
</tbody>
</table>
### Selection and Ordering data

<table>
<thead>
<tr>
<th>SITRANS WW100</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High accuracy solids weighfeeder for low capacity applications. Compact unit improves processing, increases efficiency and provides significant cost savings.</td>
<td>7 MH 7 1 8 0 -</td>
</tr>
</tbody>
</table>

Add order code Y71-Y73 for all models to specify design data.

### Frame and Enclosure Construction

- **Painted mild steel open style**
  - 304 stainless steel open style
  - 316 stainless steel open style
- **Painted mild steel enclosed style with painted mild steel enclosure**
  - 304 stainless steel enclosed style with painted mild steel enclosure
  - 304 stainless steel enclosed style with 304 stainless steel enclosure
  - 316 stainless steel enclosed style with painted mild steel enclosure
  - 316 stainless steel enclosed style with 304 stainless steel enclosure
  - 316 stainless steel enclosed style with 316 stainless steel enclosure

### Material Containment Construction

Add order code Y74 and plain text: "Arc radius in inches...XX.XXX" for options A-H

#### Shear gate inlet and skirtboards
- 304 stainless steel
- 316 stainless steel
- Painted mild steel with cover
- 316 stainless steel with painted mild steel with cover
- Stainless steel with painted mild steel with cover
- Painted mild steel
- 316 stainless steel
- Stainless steel

#### Speed Sensor
- 500 PPR shaft mounted optical encoder
- 1 000 PPR shaft mounted optical encoder
- 2 500 PPR shaft mounted optical encoder
- 500 PPR shaft mounted optical encoder, stainless steel
- 1 000 PPR shaft mounted optical encoder, stainless steel
- 2 500 PPR shaft mounted optical encoder, stainless steel

#### Drive configuration

**Sinamics servo motor and drive**
- 200 ... 240 V 1 ph
- 380 ... 480 V 3 ph
- 200 ... 240 V 1 ph, with 5 m (16.4 ft) communication and power cables
- 380 ... 480 V 3 ph, with 5 m (16.4 ft) communication and power cables
- 200 ... 240 V 1 ph, with 10 m (33 ft) communication and power cables
- 380 ... 480 V 3 ph, with 10 m (33 ft) communication and power cables
- 200 ... 240 V 1 ph, with 25 m (82 ft) communication and power cables
- 380 ... 480 V 3 ph, with 25 m (82 ft) communication and power cables
- 200 ... 240 V 1 ph, with 50 m (164 ft) communication and power cables
- 380 ... 480 V 3 ph, with 50 m (164 ft) communication and power cables
- 200 ... 240 V 1 ph, with 100 m (328 ft) communication and power cables
- 380 ... 480 V 3 ph, with 100 m (328 ft) communication and power cables

**Food grade AC motor without drive**
- 575 V 3 ph, 50 / 60 Hz AC
- 220 ... 240 V 3 ph 50 / 60 Hz AC
- 575 V 3 ph 60 Hz AC
- 220 ... 240 V 3 ph 50 / 60 Hz AC epoxy coated gearmotor
- 575 V 3 ph 60 Hz AC epoxy coated gearmotor

**Standard AC motor without drive**
- Drive required for desired belt speed
- 575 V 3 ph 60 Hz AC
- 220 ... 240 V 3 ph 50 / 60 Hz AC
- 575 V 3 ph 60 Hz AC epoxy coated gearmotor

**Calibration Method**
- None
- 1 calibration chain strand 2.41 kg/m (1.62 lbs/ft)
- 2 calibration chain strands 4.82 kg/m (3.24 lbs/ft)
- 3 calibration chain strands 7.23 kg/m (4.86 lbs/ft)

**Design access side (from inlet to discharge)**
- Left hand
- Right hand
### Selection and Ordering data

**Further designs**

<table>
<thead>
<tr>
<th>Order code</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y74</td>
<td>7MH7723-1HQ</td>
</tr>
<tr>
<td>Y71</td>
<td>7MH7723-1HR</td>
</tr>
<tr>
<td>Y72</td>
<td>S110 Control Unit M</td>
</tr>
<tr>
<td>Y73</td>
<td>6SL3040-0JA00-0AA0</td>
</tr>
<tr>
<td>Y75</td>
<td>S110 Basic operator panel ( BOP) D</td>
</tr>
<tr>
<td>C11</td>
<td>6SL3055-0AA00-4BA0</td>
</tr>
<tr>
<td>Y15</td>
<td>S110 input choke 380-480 VAC C</td>
</tr>
</tbody>
</table>

**AC gearmotor reduction ratio**

- Enter reduction ratio in plain text (X:1) (see “Reduction Ratio Selection Table” on page 5/6)
- Plastic shear curtain to control dust at the infeed for floodable materials and dusty applications

- Pointek CLS100 Capacitance switch for plugged discharge chute detection
- Siemens start/stop, auto/manual, speed control, e-stop hand held operator
- Belt cleaner, stainless steel, nylon brush, mounted under belt plow, cleaning dirty side of belt
- Acceptance test certificate: Manufacturer’s test certificate M to DIN 55350, Part 18 and ISO 9000

**Stainless steel tag**

- [69 x 50 mm (2.71 x 1.97“)]: Measuring-point number/identification (max. 16 characters) specify in plain text
- Discharge dust hood, painted mild steel with de-dust port

**Operating Instructions**

- English (C)
- German (C)

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Siemens WT 10 · 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>7ML1998-5MN01</td>
<td>5/8</td>
</tr>
<tr>
<td>7ML1998-5MN31</td>
<td>5/8</td>
</tr>
</tbody>
</table>

**Spare Parts**

- 6 kg (13.2 lb) stainless steel load cell
- 12 kg (26.4 lb) stainless steel load cell
- 30 kg (66.2 lb) stainless steel load cell
- 10 kg (22 lb) nickel plated steel load cell
- 15 kg (33.1 lb) nickel plated steel load cell
- 20 kg (44 lb) nickel plated steel load cell
- 30 kg (66.2 lb) nickel plated steel load cell
- 500 PPR optical encoder
- 1000 PPR optical encoder
- 2500 PPR optical encoder
- 5000 PPR optical encoder, stainless steel (connector included)
- 1 calibration chain strand 2.41 kg/m (1.62 lbs/ft) with mount and spacers (Corrosion resistant)

**Operational Instructions**

- Belt
- Termination box stainless steel
- Termination box mild steel
- Bearing replacement kit stainless steel (includes 1 tail bearing, 2 head bearings)
- Belt contact replacement kit (includes 1 belt scraper blade, 2 belt plow blades, 2 belt guide rollers, 1 belt tension roller, belt skirtboard seal strips)
- Pulley replacement kit stainless steel (includes 1 drive pulley, 1 driven pulley)
- Pulley replacement kit 304 stainless steel (includes 1 drive pulley, 1 driven pulley)

**Order No.**

- 7MH7723-1HQ
- 7MH7723-1HR
- 6SL3040-0JA00-0AA0
- S110 Control Unit M
- 6SL3055-0AA00-4BA0
- S110 Basic operator panel ( BOP) D
- 6SE6400-3CC00-2AD3
- S110 input choke 380-480 VAC C
- 6SL321-01SE11-3UA0
- S110 power module 380-480 VAC 3 PH L
- 7MH7723-1JH
- 6FX500-22DC10-1AF0
- S110 communications cable to servo gearmotor, 5 m (16.4 ft)
- 6FX50-025CG01-1BA0
- S110 power cable to servo gearmotor, 5 m (16.4 ft)
- 6FX50-022DC10-1BA0
- S110 communications cable to servo gearmotor, 5 m (32.8 ft)
- 6FX50-025CG01-1C0F
- S110 power cable to servo gearmotor, 5 m (82 ft)
- 6FX50-22DC10-1C0F
- S110 communications cable to servo gearmotor, 5 m (82 ft)
- 6FX50-25CG01-1FA0
- S110 power cable to servo gearmotor, 5 m (164 ft)
- 6FX50-22DC10-1FA0
- S110 communications cable to servo gearmotor, 100 m (328 ft)
- 6FX50-025CG01-2AA0
- S110 power cable to servo gearmotor, 100 m (328 ft)
- 6FX50-22DC10-2AA0
- S110 Control Unit M
- 1FK7032-5AK71-1UU5-Z E07 + G57 + H11 + Q90
- S110 Basic operator panel ( BOP) D
## Selection and Ordering data

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start stop controller</td>
<td>7MH7723-1JA</td>
</tr>
<tr>
<td>E-stop push button enclosed style</td>
<td>3SB38010DF3</td>
</tr>
<tr>
<td>24 V Power supply, 4 A</td>
<td>6EP13321SH51</td>
</tr>
<tr>
<td>Discharge dust hood Mild steel for open style units only</td>
<td>7MH7723-1JB</td>
</tr>
<tr>
<td>Discharge dust hood 304 stainless steel for open style units only</td>
<td>7MH7723-1JC</td>
</tr>
<tr>
<td>Discharge dust hood 316 stainless steel for open style units only</td>
<td>7MH7723-1JD</td>
</tr>
<tr>
<td>CLS100 plugged discharge chute retrofit kit</td>
<td>7MH7723-1JE</td>
</tr>
<tr>
<td>(includes CLS100, material hood)</td>
<td></td>
</tr>
<tr>
<td>Siemens, MM420, 0.5 HP/0.37 KW, 380-480 V-3P-50/60 Hz</td>
<td>J) 6SE6420-2UD13-7AA1</td>
</tr>
<tr>
<td>Siemens, MM440, 1 HP/0.75 KW, 500-600 V-3P-60 Hz</td>
<td>J) 6SE6440-2UE17-5CA1</td>
</tr>
<tr>
<td>Siemens, MM420/440, Bop keypad</td>
<td>F) 6SE6400-0BP000AA0</td>
</tr>
</tbody>
</table>

1) Available with Frame Construction options 0A to 0D only  
2) Communication and power cables required  
3) Available with open style construction options 0A to 0D  
4) Available with Material Containment options A to H only

A) Subject to export regulations AL: 91999, ECCN: EAR99H.  
C) Subject to export regulations AL: N, ECCN: EAR99.  
D) Subject to export regulations AL: N, ECCN: EAR99H.  
F) Subject to export regulations AL: 91999, ECCN: N.  
J) Subject to export regulations AL: 91999, ECCN: EAR99.  
L) Subject to export regulations AL: N, ECCN: 3A991X.  
M) Subject to export regulations AL: 91999, ECCN: EAR99APP.
SITRANS WW100 dimensions
SITRANS WW100 dimensions
SITRANS WW200 is a low- to medium-capacity weighfeeder used for minor ingredient additives.

Benefits
- High accuracy
- Ideal for low- to medium-capacity loads
- Fast installation, easy to clean and maintain
- Flexible, rugged design allows configurations to suit many applications
- Quick delivery on custom units

Application
SITRANS WW200 has been field tested and proven in hundreds of applications. The unit can be customized to meet exact application needs. Stainless or mild steel units are available in open or enclosed styles. Custom lengths, belt types, inlet configurations, drives, and other options are available to meet your requirements. The MS (mild steel) model is ideal for use with chemicals, powders, or any granular product in applications not requiring wash-down. The SD (sanitary duty) model is designed for the food industry where high pressure washdown is required. It meets all USDA and FDA requirements. Its cantilevered mechanical design provides for quick belt removal and easy maintenance. It is designed to eliminate material build-up, ensuring high accuracy and reliability. The unique weigh system reduces dead load and applies live load directly to two platform load cells. Load cells are externally mounted for easy access and maintenance. Standard components include the belt weigh bridge, speed sensor and test weights, supported by Milltronics BW100, BW500, or SIWAREX FTC microprocessor-based integrators for easy blending, batching and feed rate control.

Technical specifications

| Measuring accuracy | ± 0.5% or better |
| Specified range    | 10 ... 100% based on speed |
| Design rate range  | 0.45 ... 36 t/h (1 000 lbs/h ... 40 STPH) |

Medium conditions
- Operating temperature: -10 ... +55 °C (+14 ... +131 °F)
- Material: Mild steel or stainless steel [304 (1.4301) or 316 (1.4401)]
- Load Cells: Two corrosion-resistant platform type with mechanical overload protection [nickel plated alloy steel or 17-4 PH (1.4568) stainless steel construction]
- Non-linearity: ± 0.03%
- Non-repeatability: ± 0.02 %
- Speed Sensor: • C-flange mounted magnetic pulse generator, adapted between motor flange and reducer input flange
  • Optical encoder (optional)
- Framework: • Precision machined, stainless [304 (1.4301) or 316 (1.4401)] or mild steel
  • Cantilevered design for easy belt replacement
- Pulleys: 152 mm (6") diameter with 6 mm (¼") neoprene lagging
- Belt support: Edge of flatbars eliminates material buildup
- Belting: • Polyester carcass with polyurethane top cover and static control with vulcanized endless finger splice for maximum weighing consistency (standard)
  • Variety of different belts for specific applications (optional)
- Belt tension: Screw type, telescope module with 150 mm (6") travel - mild or stainless steel 304 (1.4301)
- Belt cleaning: • UHMW blade type with spring tensioning at head pulley
  • Return plow
- Drive motor: • 0.19 kW (0.25 HP), TEFC/TENV, 208/230/380/460/575 V AC, three phase or, 90/180 V DC permanent magnet, both with flange mounted gear reducer
  • Larger motors available
- Shipping weight: 280 kg (600 lbs) minimum
- Approvals: Meets USDA and FDA requirements for food processing

1) Accuracy subject to: On factory approved installations the weigh feeder system’s totalized weight will be within the specified accuracy when compared to a known weighed material test sample. The test rate must be within the specified range of the design capacity and held constant for the duration of the test. The minimum material test sample must be equivalent to a sample obtained at the test flow rate for three revolutions of the belt or at least ten minutes running time, whichever is greater.
### Selection and Ordering data

<table>
<thead>
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<th>Order No.</th>
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<tr>
<td>Low- to medium-capacity weighfeeder used for minor ingredient additives.</td>
<td>Contact factory for ordering information</td>
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#### Operating Instructions

- **English**
- **German**

Note: The operating instructions should be ordered as a separate item on the order.

This device is shipped with the Siemens Milltronics manual CD containing the complete operating instructions library.

C) Subject to export regulations AL: N, ECCN: EAR99.
SITRANS WW200

Dimensional drawings

Open Construction

Enclosed Construction

SITRANS WW200 dimensions

<table>
<thead>
<tr>
<th>Open Unit</th>
<th>A (nominal)</th>
<th>Belt Width</th>
<th>B (nominal)</th>
<th>C (nominal)</th>
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<td>1626 mm (64&quot;)</td>
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SITRANS WW300 is a medium- to high-capacity weighfeeder used for macro ingredient additives.

Benefits
- Rugged, durable design for heavy-duty applications
- Handles medium- to high-capacity loads
- Standard mild steel open or enclosed construction
- Heavy-duty 102 mm (4") diameter idlers
- Large 203 mm (8") minimum diameter head and tail pulleys for maximum traction
- New line, patented design
- Easy to replace endless belt
- Gravity tensioned belt cleaner
- Fast installation, easy to clean and maintain

Application
SITRANS WW300 is designed for industrial applications such as mining, cement, chemical processing, pulp and paper, and other heavy-duty industries.

Field tested and proven in hundreds of applications, it enhances profitability by ensuring accuracy, enhancing blend consistency, reducing downtime, and improving accountability and record keeping. The unique weigh system reduces dead load and applies live load directly to load cells for accurate measurement. The dual load cells are externally mounted for easy access and maintenance.

It is available in a variety of lengths from 1.6 m (63"), belt widths from under 0.5 m (18") to 1.8 m (72"), several different inlet configurations and materials of construction. It can be configured to suit various applications.

Standard components include the belt weigh bridge, speed sensor and test weights, supported by Milltronics BW100, BW500, or SIWAREX FTC microprocessor-based integrators for easy blending, batching and feed rate control.

### Overview

### Benefits

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- Handles medium- to high-capacity loads
- Standard mild steel open or enclosed construction
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Standard components include the belt weigh bridge, speed sensor and test weights, supported by Milltronics BW100, BW500, or SIWAREX FTC microprocessor-based integrators for easy blending, batching and feed rate control.

### Technical specifications

#### Mode of operation
- Measuring principle: Strain gauge load cells and digital speed sensor
- Typical application: Industrial and process applications in feeding, blending or ratioing in gypsum manufacturing

#### Measuring accuracy
- Accuracy1): ± 0.5% or better
- Specified range: 10 ... 100% based on speed
- Design rate range: 4.5 ... 800 t/h (5 ... 880 STPH)

#### Medium conditions
- Operating temperature: -10 ... +55 °C (+14 ... +131 °F)

#### Design
- Material: Mild steel with stainless steel [304 (1.4301) or 316 (1.4401)] or abrasion resistant contact parts optional
- Load Cells: Two corrosion-resistant platform type with mechanical overload protection [nickel plated alloy steel or 17-4 PH (1.4568) stainless steel construction]
- Non-linearity: ± 0.03 %
- Non-repeatability: ± 0.02 %
- Speed Sensor: Industrial duty, digital optical encoder, tail shaft mounted
- Framework: Painted structural steel
  - Cantilevered mild steel structural frame for quick and easy belt replacement
- Pulleys: 200 mm (8") minimum, 508 mm (20") maximum, pulley diameter crowned with 6 mm (¼") rubber lagging on drive pulley for maximum traction
- Idlers: Heavy-duty 100 mm (4") CEMA C with precision ground ball bearings and triple labyrinth seals for longer life, CEMA D,E IMPACT where required
- Belt speed: 0.005 ... 0.36 m/s (1 ... 70 fpm)
- Belt tension: Screw type, telescoperv module with 150 mm (6") minimum travel
  - Gravity tensioned self-steering belt tracker (optional)
- Belt cleaning: Gravity tensioned UHMW blade at head pulley
  - Return plow at tail pulley

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### SITRANS WW300

**Drive motor**
- 0.19 kW (0.25 HP), TEFC/TENV, 208/230/380/460/575 V AC, three phase or 90/180 V DC permanent magnet – both with flange mounted gear reducer
- Larger/other motor sizes and voltages available

**Shipping weight**
- 410 kg (900 lbs) minimum

**Approvals**
- For use in hazardous rated areas, consult factory

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1) Accuracy subject to: On factory approved installations the weigh feeder system’s totalized weight will be within the specified accuracy when compared to a known weighed material test sample. The test rate must be within the specified range of the design capacity and held constant for the duration of the test. The minimum material test sample must be equivalent to a sample obtained at the test flow rate for three revolutions of the belt or at least ten minutes running time, whichever is greater.

### Selection and Ordering data

<table>
<thead>
<tr>
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<tbody>
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<td>Medium- to high-capacity weighfeeder used for macro ingredient additives.</td>
<td>Contact factory for ordering information.</td>
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</table>

**Operating Instructions**
- English: 7ML1998-5MQ01
- German: 7ML1998-5MQ31

Note: The operating instructions should be ordered as a separate item on the order.

This device is shipped with the Siemens Milltronics manual CD containing the complete operating instructions library.

C) Subject to export regulations AL: N, ECCN: EAR99.
SITRANS WW300

Dimensional drawings

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<th>D</th>
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## Selection and Ordering data

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### Nickel plated

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<th>Weight (kg)</th>
<th>Pounds</th>
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### Stainless steel

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<td>7MH7725-1CV</td>
<td>Nickel plated</td>
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### Stainless steel load cell

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<th>Pounds</th>
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1) For aluminum model, use nickel plated alloy steel

C) Subject to export regulations AL: N, ECCN: EAR99