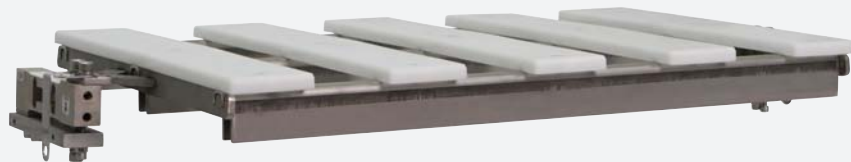


Belt Scales

Milltronics WD600

Operating Instructions · 06/2012



Milltronics

SIEMENS

Safety Guidelines

Warning notices must be observed to ensure personal safety as well as that of others, and to protect the product and the connected equipment. These warning notices are accompanied by a clarification of the level of caution to be observed.

Qualified Personnel

This device/system may only be set up and operated in conjunction with this manual. Qualified personnel are only authorized to install and operate this equipment in accordance with established safety practices and standards.

Unit Repair and Excluded Liability:

- The user is responsible for all changes and repairs made to the device by the user or the user's agent.
- All new components are to be provided by Siemens Milltronics Process Instruments.
- Restrict repair to faulty components only.
- Do not reuse faulty components.

Warning: Cardboard shipping package provides limited humidity and moisture protection. This product can only function properly and safely if it is correctly transported, stored, installed, set up, operated, and maintained.

This product is intended for use in industrial areas. Operation of this equipment in a residential area may cause interference to several frequency based communications.

Note: Always use product in accordance with specifications.

Copyright Siemens AG 2012. All Rights Reserved	Disclaimer of Liability
This document is available in bound version and in electronic version. We encourage users to purchase authorized bound manuals, or to view electronic versions as designed and authored by Siemens Milltronics Process Instruments. Siemens Milltronics Process Instruments will not be responsible for the contents of partial or whole reproductions of either bound or electronic versions.	While we have verified the contents of this manual for agreement with the instrumentation described, variations remain possible. Thus we cannot guarantee full agreement. The contents of this manual are regularly reviewed and corrections are included in subsequent editions. We welcome all suggestions for improvement. Technical data subject to change.

MILLTRONICS® is a registered trademark of Siemens Milltronics Process Instruments.

Contact SMPI Technical Publications at the following address:

Technical Publications
Siemens AG
Siemens Milltronics Process Instruments
1954 Technology Drive, P.O. Box 4225
Peterborough, Ontario, Canada, K9J 7B1
Email: techpubs.smpi@siemens.com

European Authorized Representative

Siemens AG
Industry Sector
76181 Karlsruhe
Deutschland

- For a selection of Siemens Milltronics level measurement manuals, go to: **www.siemens.com/processautomation**. Under Process Instrumentation, select *Level Measurement* and then go to the manual archive listed under the product family.
- For a selection of Siemens Milltronics weighing manuals, go to: **www.siemens.com/processautomation**. Under Weighing Technology, select *Continuous Weighing Systems* and then go to the manual archive listed under the product family.

SIEMENS

Milltronics

Belt Scales
Milltronics WD600

Operating Instructions

Introduction

1

Safety notes

2

Description

3

Installing/Mounting

4

Connecting

5

Commissioning

6

Service and maintenance

7

Technical data

8

Dimension drawings

9

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

CAUTION

with a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.

CAUTION

without a safety alert symbol, indicates that property damage can result if proper precautions are not taken.

NOTICE

indicates that an unintended result or situation can occur if the relevant information is not taken into account.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Table of contents

1	Introduction.....	5
1.1	The manual	5
2	Safety notes.....	7
2.1	General safety instructions	7
3	Description.....	9
3.1	Introduction	9
3.2	Principle of operation	10
4	Installing/Mounting.....	13
4.1	Introduction	13
4.2	Conveyor considerations	13
4.2.1	Control gates.....	14
4.2.2	Conveyor belting	14
4.2.3	Conveyor curvature.....	14
4.2.4	Belt ploughs	15
4.2.5	Stacker conveyors	16
4.2.6	Conveyor trippers.....	16
4.2.7	Skirt boards and sealing strips.....	16
4.3	Load cell handling	17
4.4	Installation precautions	18
4.5	Installation procedure.....	19
4.6	Idler alignment procedure	20
5	Connecting	23
5.1	Belt scale wiring	23

6	Commissioning	25
6.1	Calibration	25
6.2	Test Load	25
6.3	Balancing.....	25
6.4	Final calibration	26
6.5	Zero calibration	26
6.6	Span calibration	27
6.7	Material test.....	28
6.8	Re-rating.....	28
7	Service and maintenance	29
7.1	Maintenance.....	29
7.2	Replacing a load cell	30
7.3	Spare parts.....	30
7.4	Technical support.....	31
8	Technical data	33
8.1	Specifications	33
9	Dimension drawings	35
9.1	Outline dimensions.....	35

Introduction

Note

The Siemens weighing system is to be used only in the manner outlined in this manual, otherwise protection provided by equipment may be impaired.

- It is your responsibility to read this manual before installing and starting up any component of the weighing system to which the belt scale is being applied.
-

1.1 The manual

This manual covers only belt scale installation, operation, and maintenance procedures. Integrator and speed sensor operating instructions are available for download from our website:

Siemens weighing (<http://www.siemens.com/weighing>)

Follow these operating instructions for quick, trouble-free installation, and maximum accuracy and reliability of your weighing system.

We always welcome suggestions and comments about manual content, design, and accessibility. Please direct your comments to:

Technical publications (<mailto:techpubs.smpi@siemens.com>)

Safety notes

2.1 General safety instructions

 CAUTION
--

Correct, reliable operation of the product requires proper transport, storage, positioning and assembly as well as careful operation and maintenance. Only qualified personnel should install or operate this instrument.

Note

Alterations to the product, including opening or improper repairs of the product, are not permitted.

If this requirement is not observed, the CE mark and the manufacturer's warranty will expire.

Safety notes

2.1 General safety instructions

Description

3.1 Introduction

Milltronics WD600 Belt Scale

Milltronics WD600 belt scale is a low-to-medium capacity scale for light-to-medium belt loading. It is designed to be inserted into either a flat roll idler (non-troughing) belt conveyor or a flat pan slider belt conveyor for continuous weighing of dry bulk solids. WD600 is suitable for monitoring such products as fertilizer, tobacco, animal feed pellets, and sugar.

WD600 belt scale consists of the following:

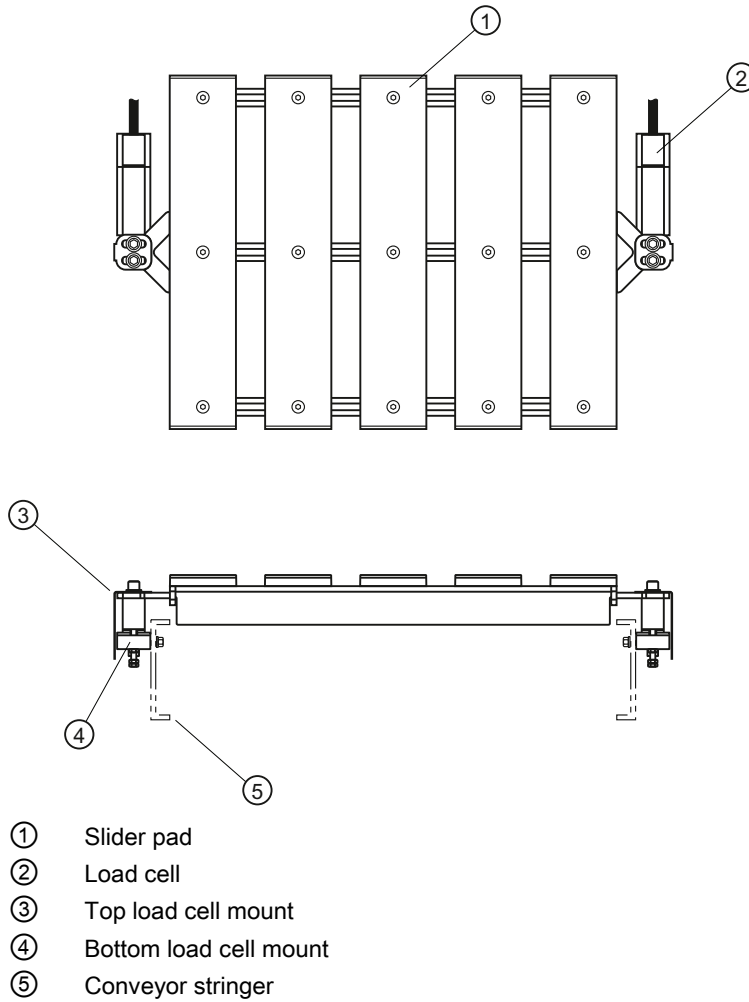
- weighbridge (slider deck)
- two precision load cells on mounting pads with weighbridge mounts

WD600 load cells output an electrical signal proportional to load, which is applied to the selected Siemens belt scale integrator. Thus, weighing is accomplished without interrupting the process and without affecting the process material.

NOTICE
WD600 is an accurate and repeatable force sensor. Its performance is ultimately dependent upon the conveyor system and the quality of the installation and accuracy of the alignment.

3.2 Principle of operation

Overview



Principle of operation

Belt scales work with an existing belt conveyor and the selected Siemens integrator. As material moving along the conveyor belt travels over the belt scale, it exerts a force proportional to the material load through the suspended weighdeck to the load cells.

The belt scale reacts only to the vertical component of the applied force. The resulting movement in each load cell is sensed by its strain gauges. When the strain gauges are excited by voltage from the electronic integrator, they produce an electrical signal proportional to weight, which is then returned to the integrator. The vertical movement of the load cells is limited by the positive overload stop incorporated into the design of the belt scale.

Description

3.2 Principle of operation

Installing/Mounting

4.1 Introduction

 CAUTION
Installation shall be performed only by qualified personnel in accordance with local governing regulations.

The belt scale is shipped from the factory as a single unit packed in a container for protection. The weigh module must be removed from its package and inspected for physical damage. Be sure the conveyor design meets the installation requirements for the belt scale.

Note

- Use only approved conduit and conduit fittings or cable glands to maintain NEMA or IP rating, as applicable.
 - Adjust conveyor stringers to be rigid, straight, parallel to, and square with the belt line in the area of the scale installation.
 - Adjust pulleys to ensure that the conveyor belt tracks straight and centrally from the head to the tail pulley.
 - The idler to be used on the scale and at least the next two approach and retreat idlers, must be of the same style and manufacturer, and in good condition.
-

Prepare the site in accordance with the Siemens drawing(s) or by referring to the Belt Scale Applications Guidelines (7ML19985GA01).

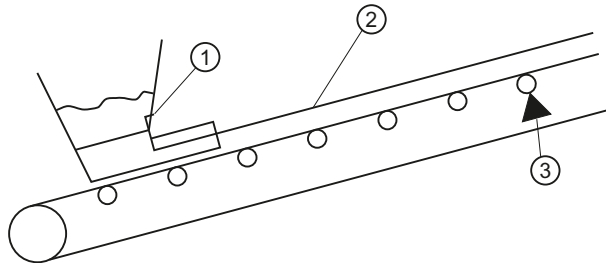
4.2 Conveyor considerations

The ideal placement of the belt scale depends on the conveyor system. This section provides guidelines to determine belt scale placement.

4.2 Conveyor considerations

4.2.1 Control gates

The installation of a material feed control gate or similar device improves uniform flow of material.



- ① Control gate
- ② Uniform material distribution
- ③ Belt scale

Note

Ensure steady and uniform material loading to the belt at or near the same speed as the conveyor belt.

4.2.2 Conveyor belting

Variations in the number of belt plies, the cover thickness and the type and number of splices in a given belt cause considerable change in the weight per unit length of the belt. During the course of zero calibrations, belt scales average the weight of the belt over one complete circuit of the belt. Large deviations from the average adversely affect the zero calibrations.

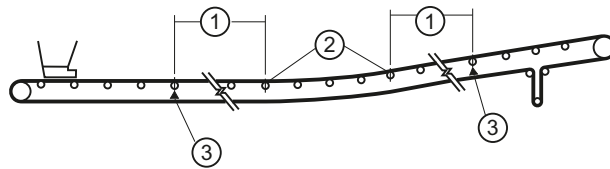
4.2.3 Conveyor curvature

Vertical curvature (varied heights on one belt) is common in conveyor design, but creates difficulties for belt scales if not dealt with correctly. The curvature, whether concave (internal) or convex (external), disturbs the idler alignment, if the scale is installed in the area of curvature. The concave curve tends to lift the belt off of the idlers in the area of curvature as belt loading decreases, adversely affecting the zero calibration.

Note

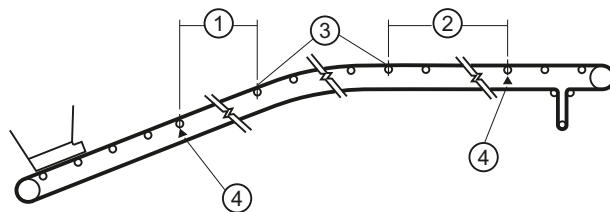
Avoid locating the scale within the tangents of scale curvature.

Concave



- ① Minimum 12 m (40 ft)
- ② Tangents
- ③ Belt scale

Convex



- ① Minimum 6 m (20 ft)
- ② Minimum 12 m (40 ft)
- ③ Tangents
- ④ Belt scale

4.2.4 Belt ploughs

Belt ploughs or any conveyor or material control device that changes the profile of the carrying belt in or near the scale area is not recommended. These devices can negatively affect the belt scale idler alignment and usually create drag on the belt which the scale senses as a material force of load.

Note

Do not install the scale within 9 m (30 ft) of belt ploughs or similar devices that contact the material or belt.

4.2 Conveyor considerations

4.2.5 Stacker conveyors

Any conveyor that is not a permanent structure, which varies in its incline, elevation or profile is not considered a good installation for an accurate belt scale. A belt scale can be used effectively in this conveyor type, but requires special setup. Siemens offers an inclinometer for use with variable incline conveyors.

4.2.6 Conveyor trippers

Note

On a conveyor with a tripper car, locate the scale under the recommendations for vertical curves, but with the tripper fully retracted.

4.2.7 Skirt boards and sealing strips

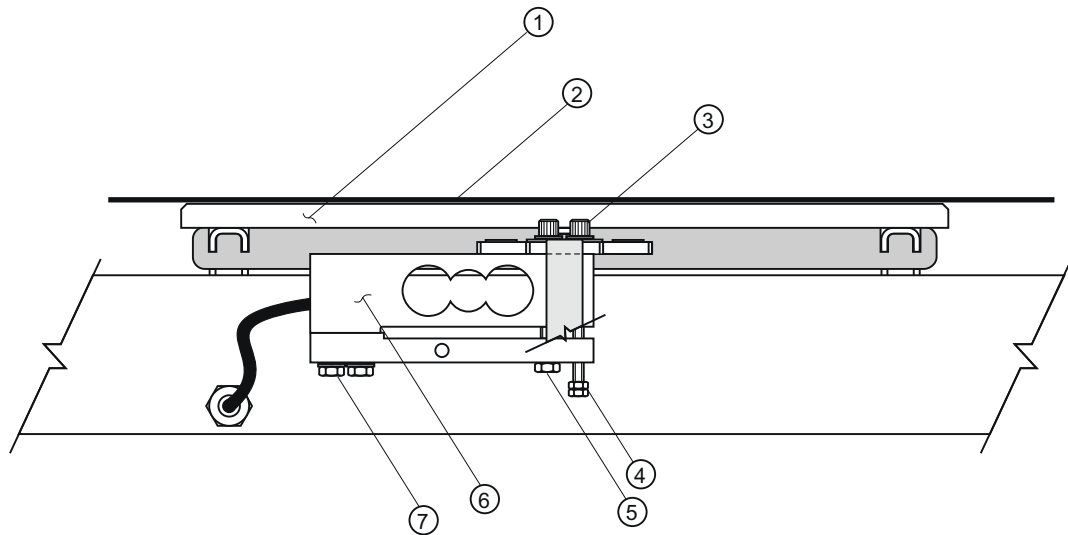
Sometimes it is necessary to extend the infeed skirt boards and sealing strips the full length of the conveyor. This can create problems in weighing accuracy if the sealing strips exert excess force when contacting the belt and indirectly upon the idlers, especially where pinching occurs. The situation adversely affects the zero calibrations.

Note

If possible, remove skirting in scale area. If not, adjust skirting so sealing strip does not put excess force on the belt or allow pinching of material.

4.3 Load cell handling

The WD600 belt scale is designed for low to medium-capacity operation and uses two load cells. Although the load cells are protected by shipping stops that keep the cells from moving, care should be taken when handling the scale to avoid damaging the cells. The stops are screws that are 38mm (1.5") long. The screw threads into the bottom of the load cell and pulls the cell against the overload stop, use a 0.5mm (.02") shim between the load cell and overload stop to prevent damage. When handling the WD600 during installation and set-up, make sure the stops remain in place. Reinstall both shipping stops during maintenance or prolonged shutdown.

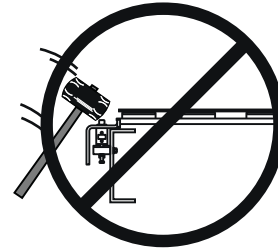
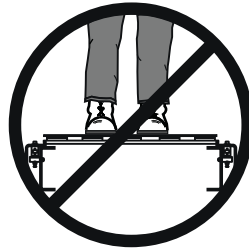
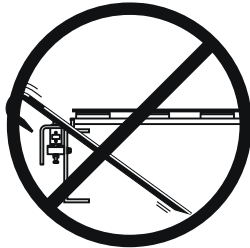


- ① Weigh deck
- ② Belt
- ③ Top load cell mount
- ④ Overload screw
- ⑤ Shipping screw
- ⑥ Load cell
- ⑦ Bottom load cell mount

4.4 Installation precautions

The following precautions should be observed when handling the scale.

- Do not pry on the idler, its mountings, or the cells directly.
- Do not stand or lean on the scale.
- Avoid shock from blows of a hammer when trying to position the scale during installation.
- Do not lift the scale by the top load cell mounting brackets.

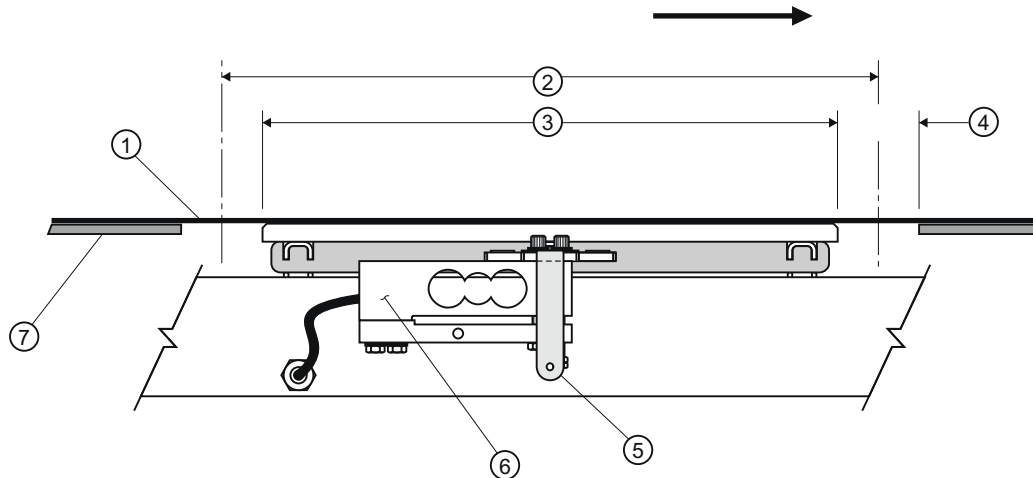


⚠ CAUTION

Arc welding

Use extreme caution when arc welding in the area of the belt scale. Ensure that no welding current can flow through the belt scale. Welding currents passing through the scale can functionally damage the load cells.

4.5 Installation procedure



- ① Belt
- ② Weigh span
- ③ Weigh deck
- ④ Minimum 4.75" (121 mm), both sides must be equal
- ⑤ Test weight hanger bracket
- ⑥ Load cell
- ⑦ Existing slider belt support

1. Remove the existing flat roll idler (or flat slider pan) from the area selected to locate the belt scale assembly.
2. Drill four 8 mm (5/16") diameter mounting holes. This will allow clearance for 6 mm bolts.

Note

Slotting the holes vertically will permit greater adjustment capability.

3. Position the scale with the weighdeck towards the head end (discharge) of the conveyor and the load cells toward the tail end (infeed).
 - Raise the conveyor belting to provide room for the installation of the scale.
4. Insert the scale (modules) onto the conveyor.
 - Insert four M6x1 bolts through the conveyor frame and through the holes in the sides of the load cell mount pads.
 - Secure the bolts, finger tight only.

4.6 Idler alignment procedure

5. Make sure there is at least 13 mm ($\frac{1}{2}$ ") of clearance between the return belt and the WD600.
 - In some conveyors, it may be necessary to install a return idler roller adjacent to the scale to deflect the return belt past the scale.
6. Position the scale so that it is parallel to the conveyor and square to the stringer.
 - Place the weighdeck on the top load cell mount.
 - Level the weighdeck and tighten the bolts sufficiently to keep the load cell mount pads in place until final adjustment.

CAUTION
Off-center or off-square installation can result in poor belt tracking and scale inaccuracy.

4.6 Idler alignment procedure

Establishing good idler alignment is the most important part of the installation procedure. Scale accuracy is directly affected by alignment.

Note

Improperly aligned idlers could cause unwanted forces to be applied to the weighbridge, resulting in calibration and measurement errors.

1. Remove the shipping stops to free the weighing mechanism.
 - Keep the screws stored in a convenient place for use during maintenance or at other times when protection of the cells is necessary.
2. Align and level the weighbridge in the weighing area by raising or lowering the load cell mount pads in their slots.
 - The weighing area includes the scale and the approach and retreat idlers/sliders. For conventional flat idler roll conveyors, two additional idler rolls should be included in the alignment procedure.
3. Align and level the idlers (pans on a slider pan conveyor) in the weighing area by shimming the scale deck, the two approach idlers, and the two retreat idlers, until they are within ± 0.8 mm ($\frac{1}{32}$ ") of each other.
 - Be sure to check that the idlers are centered and squared to the conveyor during the shimming process.

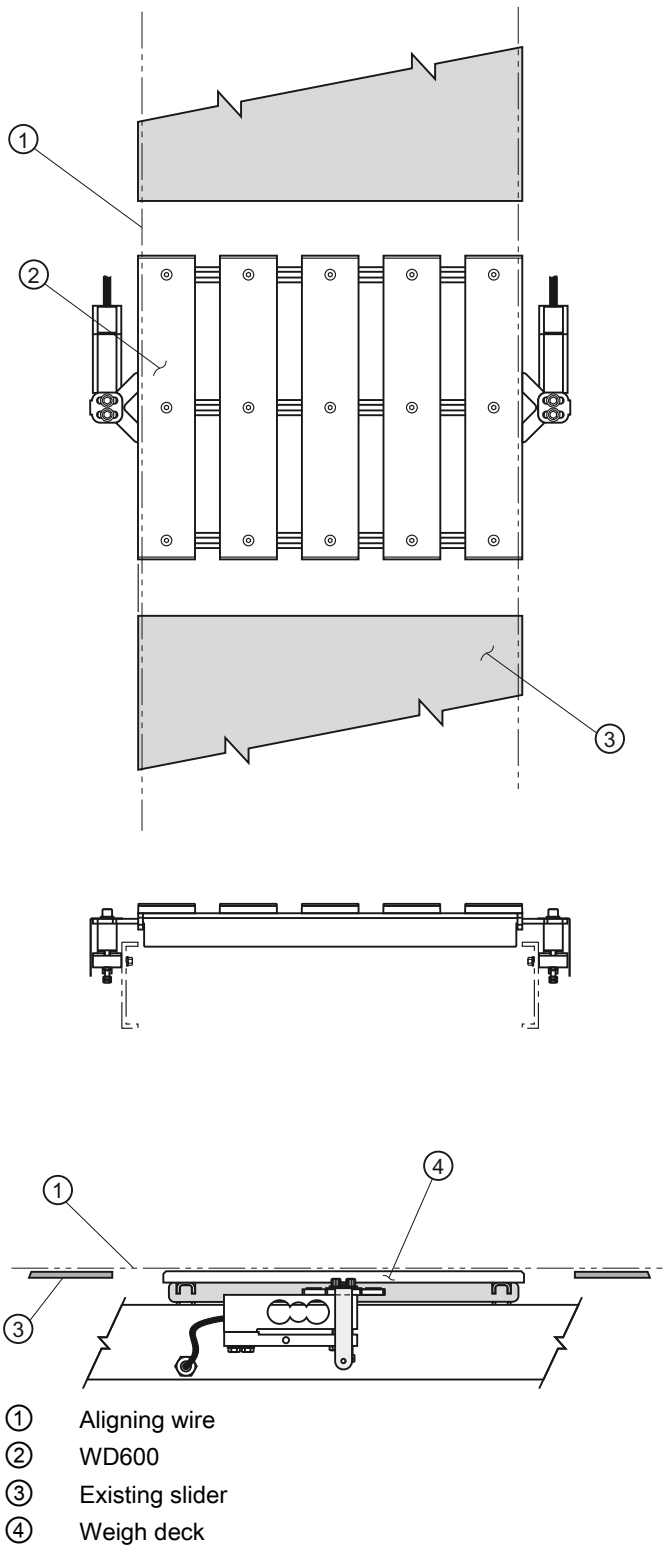
4. Check idler alignment using a good quality wire or string.
 - Stretch a line across the top surface of each idler roll (pan) in the scale area at approximately 25 mm (1") from each end of each idler roll (pan).
 - Use good quality wire [0.5 mm (1/64") diameter] or equivalent nylon line to check for alignment. The wire or string aligning lines must be able to withstand sufficient tension to eliminate sag in the line.

Note

Although the accepted tolerance for idler alignment is ± 0.8 mm (1/32"), the scale-mounted idler should never be lower than the adjacent idlers.

5. Carefully lower the conveyor belt onto the scale and fixed idlers (pans).
Run the conveyor for at least fifteen minutes to limber the belt prior to calibration.

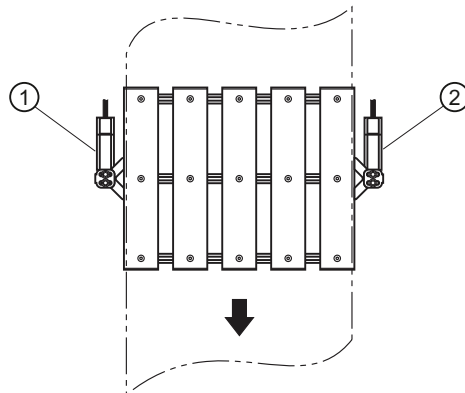
4.6 Idler alignment procedure



5

Connecting

5.1 Belt scale wiring



- ① Load cell B
② Load cell A

Load cell	WD600	Milltronics Integrator	SIWAREX FTC
A	RED	+ EXC	+ EXC
	BLK	- EXC	- EXC
	WHT	- SIG 'A'	- SIG
	GRN	+ SIG 'A'	+ SIG
	SHIELD	SHIELD	SHIELD
B	RED	+ EXC	+ EXC
	BLK	- EXC	- EXC
	WHT	- SIG 'B'	- SIG
	GRN	+ SIG 'B'	+ SIG
	SHIELD	SHIELD	SHIELD

Connecting

5.1 Belt scale wiring

6

Commissioning

6.1 Calibration

After all parts of the weighing system (belt scale, speed sensor, integrator) have been properly installed and connected, the weighing system and integrator must be calibrated. The calibration is initially done using the test weight(s), however material tests are recommended to achieve the greatest accuracy. Refer to the integrator operating instructions for programming and calibration details and for information about material tests. All operating instructions are available for download at our web site:

Siemens weighing (<http://www.siemens.com/weighing>)

6.2 Test Load

The test load value is required for calibration of the integrator. Enter the calculated value into the associated programming parameter of the integrator in kilograms per meter or pounds per foot.

The test load value is calculated as follows:

$$\text{Test load} = \frac{\text{Total weight of all test weights}}{\text{Idler spacing}} \quad \left(\frac{\text{Kg}}{\text{m}}\right) \text{ or } \left(\frac{\text{lb}}{\text{ft}}\right)$$

6.3 Balancing

For applications where the conveyor loading does not repeat in locations across the width of the belt, such as side-to-side loading, electronic balancing of the two load cells is recommended. Balancing is completed during the initial start-up, but should be repeated if either load cell is reinstalled or replaced. Refer to the associated integrator manual to complete the balancing procedure.

When balancing load cells, apply a test weight to the extreme sides (side A or B), as required.

6.4 Final calibration

Program the belt scale integrator as suggested in its operating instructions and with parameters suitable for the application. With programming complete, the system is ready for calibration.

A zero calibration can be performed after sufficient running of the conveyor allows the belt to limber up and take its natural formation. A zero calibration is performed in accordance to the belt scale integrator operating instructions with the conveyor running empty.

6.5 Zero calibration

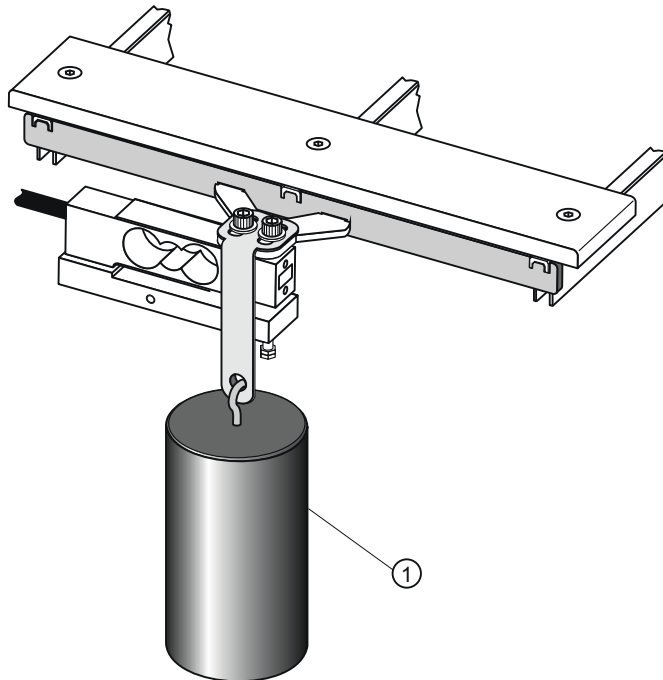
Perform the zero calibration as described in the Calibration section of the integrator operating instructions.

After the completion of the zero calibration, a span calibration, as described in the belt scale integrator operating instructions, can be performed with the test weight(s) applied. Be sure to stop the conveyor when applying and removing the test weight.

6.6 Span calibration

The span reference (test load) is simulated using the test weight.

1. Hang the calibration test weight from the hole in the top load cell mount.
2. Perform the span calibration as described in the Calibration section of the integrator operating instructions.



① Calibration test weight

After completing the span calibration, remove the test weight(s) and store them. With a successful zero and span calibration, and with the test weight(s) removed from the belt scale, the belt scale system is ready for operation. Ensure that the belt scale integrator is left in RUN mode.

6.7 Material test

To achieve accuracy with respect to absolute values, perform material tests. Refer to the associated integrator manual for instructions on material testing.

6.8 Re-rating

Consult your Siemens representative for any significant change in rate, speed, and/or idler spacing from original design specifications to maintain proper design parameters.

Service and maintenance

7.1 Maintenance

Keep the weighing equipment clean. Accumulation of material between the fixed support frame (static) and the live frame (dynamic) as well as around each load cell could affect the scale accuracy.

Periodically check the alignment of the stringers and idlers in the weighing area.

When a problem arises in the conveyor, it is possible that the scale will be affected. Therefore, periodic conveyor maintenance is important to proper scale operation which should include:

- lubrication of all pulleys and idlers
- proper belt tracking and training
- proper belt cleaning and scraping
- proper take up operation
- proper material feeding and spillage control

You can observe the integrity of the load cells by performing zero and span calibrations. If the zero and span deviations display a continuous unidirectional drift or the system cannot be calibrated for any apparent mechanical reason, the load cells may be damaged.

7.2 Replacing a load cell

 CAUTION
--

Re-install the shipping stops during maintenance or any other time when protection of the load cells is required.

Note

The load cell stop is set at the factory to allow the load cell to deflect up to 150% of its design load (30 mV at 10 V DC excitation). The overload gap for a replacement load cell should be set by mV readings.

1. Support the belt from above or below.
2. Remove the deck assembly.
3. Remove hardware from the dynamic (moving) parts.
4. Remove hardware from the static support.
5. Remove the existing load cell from the belt scale.
6. Replace with a new load cell fastening to static support then dynamic (moving structure).
7. Replace deck assembly.
8. Remove belt support.
9. Adjust deck alignment if necessary.
10. Perform balance, zero, and span calibrations.

7.3 Spare parts

The only spare parts recommended for the belt scale are the load cell and the Delrin slider pads. Refer to the load cell nameplate for the proper size and model number. Re-balance any load cell that has been replaced.

7.4 Technical support

If you have any technical questions about the device described in these Operating Instructions and do not find the right answers, you can contact Customer Support:

- Via the Internet using the **Support Request:**

Support request (<http://www.siemens.com/automation/support-request>)

- Via Phone:

- Europe: +49 (0)911 895 7222
- America: +1 423 262 5710
- Asia-Pacific: +86 10 6475 7575

Further information about our technical support is available on the Internet at

Technical support (<http://support.automation.siemens.com/WW/view/en/16604318>)

Service & Support on the Internet

In addition to our documentation, we offer a comprehensive knowledge base online on the Internet at:

Service & Support (<http://www.siemens.com/automation/service&support>)

There you will find:

- The latest product information, FAQs, downloads, tips and tricks.
- Our newsletter, providing you with the latest information about your products.
- Our bulletin board, where users and specialists share their knowledge worldwide.
- You can find your local contact partner for Industry Automation and Drives Technologies in our partner database.
- Information about field service, repairs, spare parts and lots more under "Services."

Additional Support

Please contact your local Siemens representative and offices if you have additional questions about the device

Find your contact partner at:

Local contact person (<http://www.siemens.com/automation/partner>)

Technical data

8.1 Specifications

Accuracy

± 0.5% or better of totalization over 25 to 100% operating range

Accuracy subject to: On factory approved installations the belt scale systems 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.

Load Cell

construction	nickel plated alloy steel or 17-4 PH (1.4568) stainless steel
degree of protection	IP66 rated (nickel plated) IP68 rated (stainless steel)
excitation	10 V DC nominal, 15 V DC maximum
output	2 mV/V excitation at rated load cell capacity
non-linearity	0.02% of rated output
hysteresis	0.02% of rated output
non-repeatability	0.01% of rated output
capacity	nickel plated maximum ranges: 10, 15, 20, 30, 50 kg stainless steel maximum ranges: 6, 12, 30 kg
overload	150% of rated capacity ultimate 300% of rated capacity
temperature	-40 to +65 °C (-40 to +150 °F) operating range -10 to +40 °C (-15 to +105 °F) compensated

Belt width

300 to 1200 mm (12 to 48")

Refer to Outline dimensions (Page 35)

Technical data

8.1 Specifications

Belt speed

up to 2.0 m/s (400 fpm)

Contact Siemens application engineering for consideration of higher belt speeds.

Capacity

up to 100 t/h (110 STPH) at maximum belt speed

Conveyor incline

$\pm 20^\circ$ from horizontal, fixed incline

up to $\pm 30^\circ$ with reduced accuracy

Conveyor idler

flat

Interconnection (to integrator)

< 150 m (500 ft) 18 AWG 6 conductor shielded cable

> 150 m (500 ft) to 300 m (1000 ft.) 20 AWG 8 conductor shielded cable

Approvals

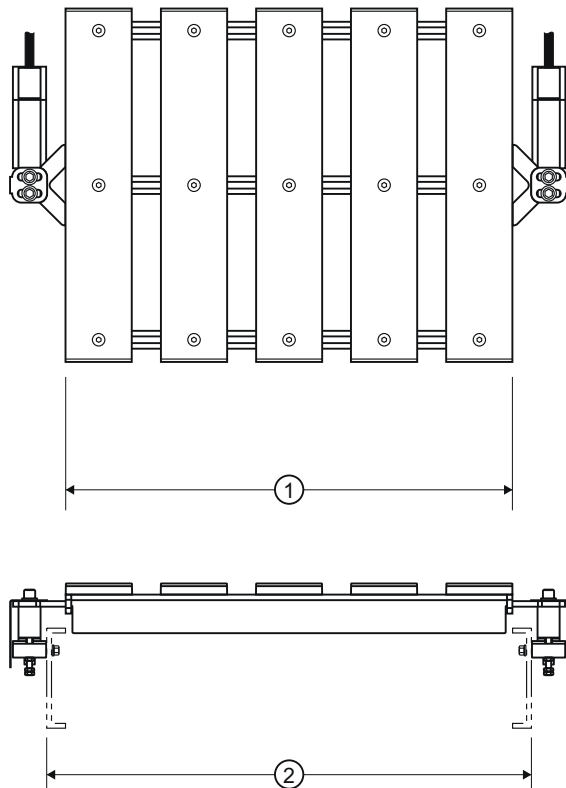
General

CE, C-TICK

Milltronics WD600 with stainless steel load cell options meets FDA and USDA requirements for food processing.

Dimension drawings

9.1 Outline dimensions



Belt width	①	②	
		minimum	maximum
12" (300 mm)	14.25" (362 mm)	15" (381mm)	16.5" (419 mm)
18" (450 mm)	20.25" (514 mm)	21" (533 mm)	22.5" (572 mm)
24" (600 mm)	26.25" (667 mm)	27" (686 mm)	28.5" (724 mm)
30" (750 mm)	32.25" (819 mm)	33" (838 mm)	34.5" (876 mm)
36" (900 mm)	38.25" (972 mm)	39" (991 mm)	40.5" (1029 mm)
42" (1000 mm)	44.25" (1124 mm)	45" (1143 mm)	46.5" (1181 mm)
48" (1200 mm)	50.25" (1276 mm)	51" (1295 mm)	52.5" (1334 mm)

Dimension drawings

9.1 Outline dimensions

For more information

www.siemens.com/level

www.siemens.com/weighing

Siemens AG
Industry Sector
1954 Technology Drive
P.O. Box 4225
Peterborough, ON
Canada K9J 7B1
email: techpubs.smpi@siemens.com

Subject to change without prior notice
7ML19985KM03 Rev. 3.1

© Siemens AG 2012



7 M L 1 9 9 8 5 K M 0 3

Printed in Canada

www.siemens.com/processautomation