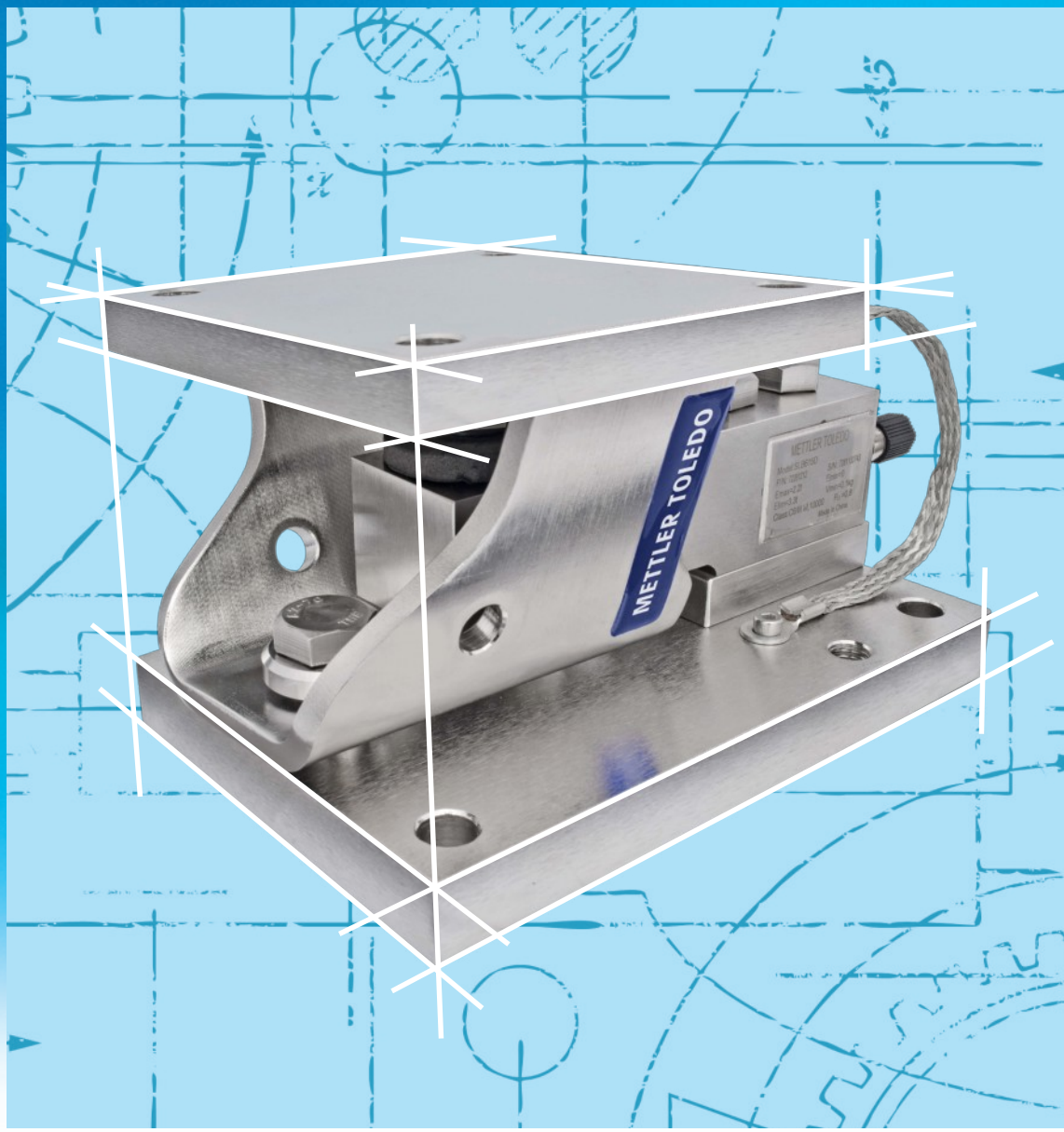
Weigh Module



Weigh Module Buying Guide

Make the Best Choice

METTLER TOLEDO

Step by Step to the Right Choice

8 Steps to Select
the Correct Weigh Module

Compression weigh modules are used to create scales when standard scale products are not available. The scales created can be customized platform or conveyor scales, tanks, hoppers or reactor vessels. Needless to say, weigh modules must be carefully chosen to provide the required accuracy over their lifetime but more importantly, they become an integral part of the scale's support structure and thus are critical to safety. This buying guide supports engineers in evaluating and selecting the correct weigh modules.

1

Weighing capacity	Your Notes	
Scale Capacity SC		kg or lb
Total Dead Load TDL		kg or lb
Safety Factor (typ. 1.25)		
Number of Weigh Modules		

2

Topology	Your Notes	
Daisy-Chain Bus topology		Yes/No
Point-to-Point topology		Yes/No

3

Safety	Your Notes	
Maximum expected side force		kN or lb
Maximum expected uplift force		kN or lb
Maximum expected compression force		kN or lb

4

Accuracy	Your Notes	
Required process tolerance		%
Smallest weight		kg or lb
Legal for trade application		Yes/No

5

Hazardous Area	Your Notes	
FM Standard		Yes/No
CSA Standard		Yes/No
ATEX Standard		Yes/No
IECEx Standard		Yes/No
Area Classification		

6

Environment	Your Notes	
Weigh module material		Steel type
Hygienic design		Yes/No
IP/Nema rating		

7

*text moved from point 7 to 8:
- Jacking Too
- Cent. gage tools
- Inst. tool set

Accessories	Your Notes	
Stabilizer		1 or 2
Dead Stand		Yes/No
Dummy load cells		Yes/No
Thermal isolation pad		Yes/No
Shock/Vibration pad		Yes/No
Spacer plate		Yes/No

8

Calibration and Maintenance	Your Notes	
RapidCal™		Yes/No
Test Weight		Yes/No
Material Substitution (with test weights)		Yes/No
CalFree or CalFreePlus (w/o test weights)		Yes/No
Health Check		Yes/No
Care Contract		Yes/No
"StarterPac-Service" to verify installation and setup		Yes/No
"Ipac-Service" to verify installation and setup		Yes/No
Jacking tool		Yes/No
Centering gage tool		Yes/No
Installation tool set		Yes/No

Select the Capacity
Considering Additional Loads

METTLER TOLEDO weigh modules span the capacity range 5kg (11lb) to 300 t (660 klb) with unique and consistent mechanical features throughout. PowerMount™ weigh modules equipped with POWERCELL® digital technology come with higher accuracy and predictive diagnostic features to ensure load-cell deviations are discovered right away.

1.1. Calculate required weigh module capacity

The required weigh module capacity C depends on scale capacity, total dead load and load distribution between the weigh modules. It's customary to apply a safety factor also.

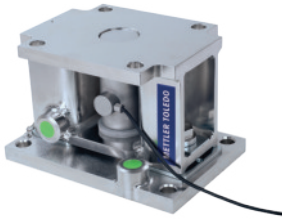
Formula for tank scales with uniform weight distribution:

C >= sf*(TDL+SC)/N

Formula for conveyor and floor scales with 4 load cells:

C >= sf*(TDL/4 + SC/2)

C = Weigh module capacity
TDL = Total dead load
SC = Scale capacity
sf = Safety factor (typ. 1.25)
N = Number of weigh modules
Seek assistance for more complicated systems

Product Range	SWC515 PinMount™	SWC615 PowerMount™
		
	Traditional analog Load Cell	Advanced POWERCELL Load Cell
More Information	www.mt.com/ind-pinmount	www.mt.com/ind-powermount
Capacity	7.5 t (16.5 klb) to 300 t (660 klb)	7.5 t (16.5 klb) to 300 t (660 klb)
OIML Approval	C3 to 100 t only	C3 (7.5 to 90 t), C4 (30 to 90 t), C1 (200 to 300 t)
NTEP Approval	III M n:5 (to 49.6 klb), IIIL M n:10 (66 to 220 klb)	III M n:5 (16.5 to 49.6 klb), IIIL M n:10 (44 to 198 klb), IIIL M n:5 (440 to 660 klb)
Weigh Module Material	Zinc plated Carbon Steel, 304 and 316 Stainless Steel	Zinc plated Carbon Steel, 304 and 316 Stainless Steel
Load Cell Material	Stainless Steel	Stainless Steel
IP rating	IP68/IP69K	IP68/IP69K
Hazardous Area Approvals	ATEX, FM, IECEx	ATEX, FM, IECEx

1.2. Consider scale's permanent dead load

Weigh modules often carry an additional permanent dead load, such as a platform, tank, vessel, hopper, feeder, conveyer or any kind of load receiver. Include also the weight of mixers, vibrators and heating/cooling fluids in the Total Dead Load.

1.3. Use a safety factor.

Additional load can result from a forklift unintentionally driving over a scale or overfilling due to malfunction of a filling device. To avoid damage, apply a safety factor of 1.25 or more.

1.4. Consider non uniform load distribution

Sometimes a tank and/or its weigh module positioning is non symmetric. Further, mixers and maintenance doors are often mounted eccentrically. This results in extra load carried by one or more of the weigh modules. Select the weigh module capacity based on the worst case position; all must be of the same capacity.

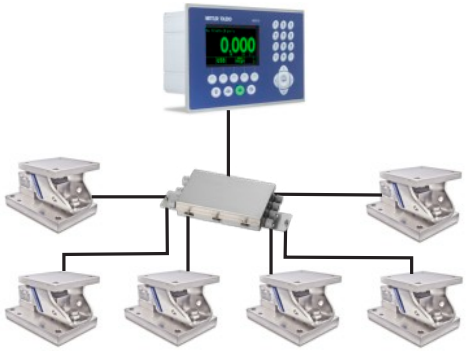
	SWB505 MulitMount™	**SWB605 PowerMount™**	**SWB805 MultiMount™**
			
	Traditional analog Load Cell	Advanced POWERCELL Load Cell	Traditional analog Load Cell
	www.mt.com/ind-multimount	**www.mt.com/ind-powermount**	**www.mt.com/ind-swb805**
	5 kg to 4400 kg (11 lb to 10 000 lb)	220 kg to 4 400 kg (500 lb to 10 000 lb)	110kg to 4 400 kg (250 lb to 10 000 lb)
	3 000e / 6 000e	3 000e / 6 000e /10 000e	3 000e
	6 000d / 10 000d	6 000d / 10 000d	5 000d
	Zinc plated Carbon Steel, 304 and 316 Stainless Steel.	Zinc plated Carbon Steel, 304 and 316 Stainless Steel.	316 Stainless steel. Mirror polished and fully self-draining for fast drying to avoid bacteria accumulation.
	Stainless Steel	Stainless Steel	Stainless Steel
	IP68/IP69K	IP68/IP69K	IP68/IP69k
	ATEX, FM, IECEx	ATEX, FM	ATEX, FM

Select the Load Cell Technology and Decide Network Topology

The high degree of accuracy available with gravimetric weight control makes it an ideal measuring technology for filling, batching and dosing. Flexible connectivity, integrated digital inputs/outputs and a variety of data management solutions support easy integration into stand-alone machines as well as broader control systems.

2.1. Modern Bus-system topology without junction box

PowerMount™ weigh modules are connected in a daisy-chain network topology without a junction box.



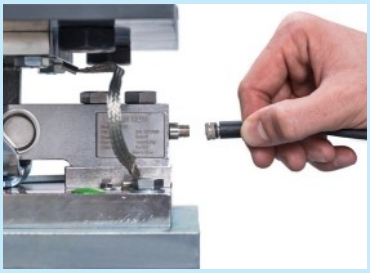
2.2. Traditional point to point topology with junction-box

A traditional installation for weigh modules with analog load cells requires a junction box and higher effort for wiring.

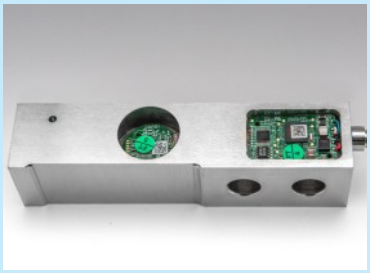
2.3. Overview on different technologies and capacities

	Capacity	Technology	Topology
SWB505 MultiMount™	5 kg (11 lb) to 4.4 t (10 klb)	Analog	Point to Point
SWB805 MultiMount™	110 kg (250 lb) to 4.4 t (10 klb)	Analog	Point to Point
SWB605 PowerMount™	220 kg (500 lb) to 4.4 t (10 klb)	POWERCELL®	Bus-System
SWC515 PinMount™	7.5 t (16.5 klb) to 300 t (660 klb)	Analog	Point to Point
SWC615 PowerMount™	7.5 t (16.5 klb) to 300 t (660 klb)	POWERCELL®	Bus-System

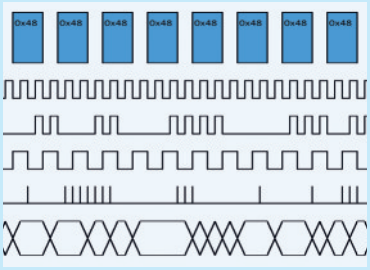
Good to Know: Advantages of POWERCELL® Bus Network Topology



POWERCELL provides fast connection for efficient installation
Maintenance and installation is fast and easy. The IP68-protected quick release connectors are designed to save time and money, facilitating quick service.



Real time status information for preventative maintenance
Traditional analog load-cell weighing systems cannot be continuously monitored. Errors, such as load-cell overload, poor communication between modules, out-of-symmetry errors and out-of-range-temperatures, can go unnoticed for long periods. The modern POWERCELL® technology provides real-time status information. This offers the opportunity for preventative maintenance to increase uptime of the weighing system.

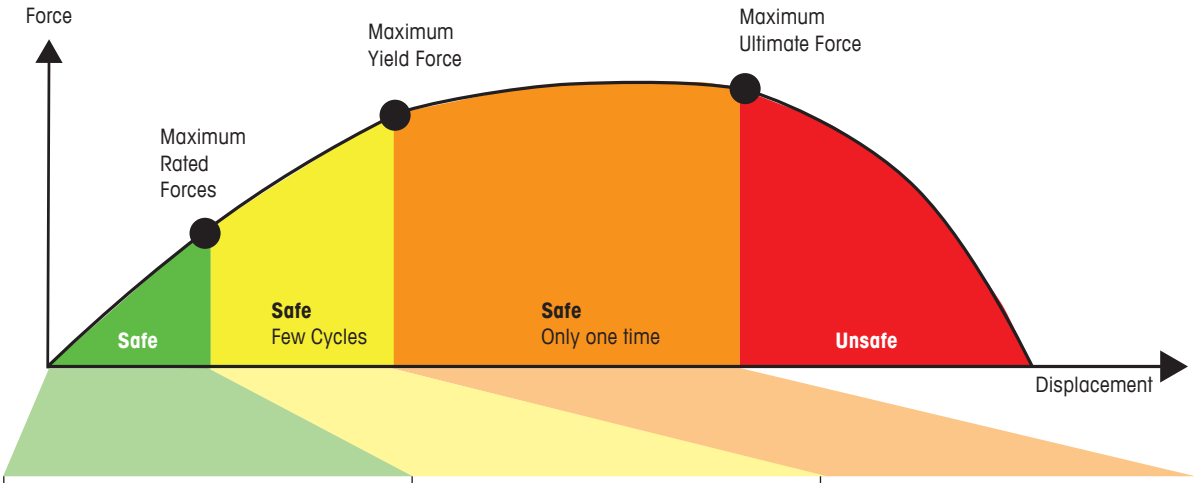


Robust electrical signal ensures safe data transfer
Digital data transfer is less sensitive to electromagnetic or radio frequency disturbances compared to analog signals. That ensures safe data transfer over long distances.

Junction box eliminated
The linear daisy chain-type network topology for connecting the load cells doesn't require a junction box, which is often the source of problems in an analog system.

Select Weigh Module Size to Ensure Mechanical Safety and Compliance

Weigh modules support scale structures that are often subjected to extraneous forces in various directions. In addition to supporting and weighing a load, weigh modules must be able to resist extraneous forces to ensure the stability and safety of the installation. For this reason, METTLER TOLEDO's datasheets provide a comprehensive set of force ratings to aid the scale designer.



3.1. Maximum rated force
If Rated Forces are not exceeded in normal day-to-day operation, the weigh module can be expected to provide long service life without degradation of performance. METTLER TOLEDO has applied a factor of safety to these specifications.

3.2. Maximum yield force
If Yield forces are not exceeded the WM can withstand rare load cases like severe storms etc. a few cycle times. Inspection of the entire system after such an event is recommended. Apply your own safety factors in the structural calculation.

3.3. Ultimate force
If Ultimate forces are not exceeded the weigh module can withstand one load case such as a severe earthquake etc. one time without breaking. Assume deformation to the structure and the need to replace the weigh module. Apply your own safety factors in the structural calculation.

CERTIFIED DIN EN 1090

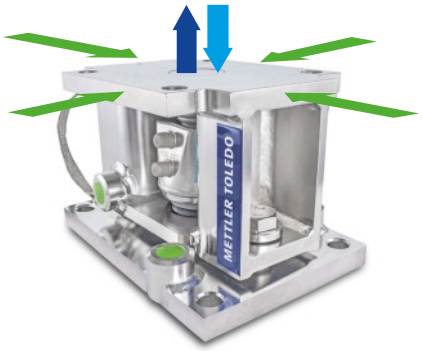
3.4. Decide if you need EN 1090 certificate
The EN 1090 is a safety standard for structural metal work design. This includes audits of all processes for design, quality control and manufacturing. METTLER TOLEDO weigh modules are available with EN certification.

SWC515 PinMount™ and SWC615 PowerMount™

Compression	Models 7.5 to 22.5 t	Models 30 to 50 t	Model 100 t	Model 200 t	Model 300 t
Maximum Rated Force [kN] (klb)	74 (16.5) - 220 (50)	290 (65) - 490 (110)	980 (220)	1960 (423)	2940 (635)
Maximum Yield Force [kN] (klb)	145 (33) - 440 (97)	505 (110) - 855 (190)	1715 (385)	3430 (740)	5150 (1543)
Maximum Ultimate Force [kN] (klb)	220 (50) - 660 (147)	883 (194) - 1470 (323)	2940 (647)	5885 (1270)	8830 (1908)

Horizontal	Models 7.5 to 22.5 t	Models 30 to 50 t	Model 100 t	Model 200 t	Model 300 t
Maximum Rated Force [kN] (klb)	74 (16.5)	100 (22)	130 (28)	260 (56)	300 (65)
Maximum Yield Force [kN] (klb)	105 (24)	135 (30)	190 (43)	360 (78)	420 (91)
Maximum Ultimate Force [kN] (klb)	210 (47)	360 (80)	430 (96)	815 (175)	895 (193)

Uplift	Models 7.5 to 22.5 t	Models 30 to 50 t	Model 100 t	Model 200 t	Model 300 t
Maximum Rated Force [kN] (klb)	62 (14)	150 (33)	190 (43)	255 (55)	400 (86)
Maximum Yield Force [kN] (klb)	85 (19)	200 (45)	265 (60)	355 (77)	560 (120)
Maximum Ultimate Force [kN] (klb)	200 (45)	390 (88)	485 (109)	710 (153)	950 (205)



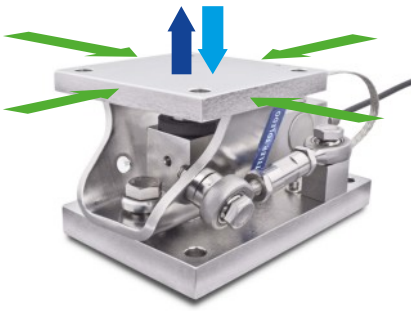
Compression Horizontal Uplift

SWB505 MultiMount™ and SWB605 PowerMount™

Compression	Models 5 to 300 kg	Models 110 to 2200 kg	Model 4400 kg
Maximum Rated Force [kN] (klb)	0.05 (11) - 3 (660)*	1.1 (250) - 21.6 (5000)*	43.2 (10000)
Maximum Yield Force [kN] (klb)	0.074 (16.5) - 4.4 (990)*	1.62 (375) - 23.3 (5120)*	50 (11200)
Maximum Ultimate Force [kN] (klb)	65 (14600)	90 (20000)	150 (33000)

Horizontal	Models 5 to 300 kg	Models 110 to 2200 kg	Model 4400 kg
Maximum Rated Force [kN] (klb)	4.5 (1010)*	7.5 (1685)*	15 (3370)
Maximum Yield Force [kN] (klb)	6.6 (1480)	9.8 (2200)	22 (4950)
Maximum Ultimate Force [kN] (klb)	17 (3800)	42 (9400)	48 (10750)

Uplift	Models 5 to 300 kg	Models 110 to 2200 kg	Model 4400 kg
Maximum Rated Force [kN] (klb)	5.5 (1230)	16 (3600)	22.2 (5000)
Maximum Yield Force [kN] (klb)	7.7 (1730)	22 (4950)	34 (7640)
Maximum Ultimate Force [kN] (klb)	22 (4590)	50 (11200)	55 (12350)



Compression Horizontal Uplift

SWB805 MultiMount™

Compression	Models 110 to 2200 kg	Models 4400 kg
Maximum Rated Force [kN] (klb)	1.1 (250) - 21.6 (5,000)*	43.2 (10,000)
Maximum Yield Force [kN] (klb)	1.62 (375) - 23.3 (5,120)*	50 (11,200)
Maximum Ultimate Force [kN] (klb)	3.2 (750) - 41 (9,225)*	110 (24,750)

Horizontal	Models 110 to 2200 kg	Models 4400 kg
Maximum Rated Force [kN] (klb)	1.1 (250) - 4.3 (968)*	13.9 (3,127)
Maximum Yield Force [kN] (klb)	1.1 (250) - 4.8 (1,080)*	19.3 (4,342)
Maximum Ultimate Force [kN] (klb)	1.1 (250) - 11 (2,475)*	34 (7,650)

Uplift	Models 110 to 2200 kg	Models 4400 kg
Maximum Rated Force [kN] (klb)	1.1 (250) - 11.8 (2,600)*	22.2 (5,000)
Maximum Yield Force [kN] (klb)	1.62 (375) - 17.1 (3,848)*	33.5 (7,537)
Maximum Ultimate Force [kN] (klb)	3.2 (750) - 26 (5,850)*	53 (11,925)

* = Smallest capacity / largest capacity

Compression Horizontal Uplift

Select Accuracy
to Comply with Process Tolerance

Accuracy is how close the reading on a scale's indicator is to the actual weight placed on the scale. A scale's accuracy is usually measured against a recognized standard, such as Certified Test Weights.

4.1 Does your application require OIML / NTEP legal for tade approval standard

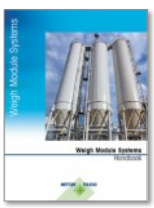
Weigh modules with legal-for-trade approvals are tested according to either the OIML Standard or according to the NTEP. These standards assure compliance with specifications for tolerances for repeatability, linearity, hysteresis and temperature drift.

4.2. Evaluate which combined error is acceptable for your application

This is a typical value for error due to the combined effect of non-linearity and hysteresis.

- **Linearity** is defined as the ability of a weigh module to follow the linear relationship between a load and the indicated value.
- **Hysteresis** indicates two different measurement values for the same sample depending on whether it is increasing or decreasing.

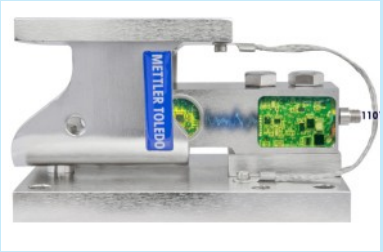
	Capacity	Technology	OIML Approval	NTEP Approval	Combined Error [%R.C.]
SWB505 MultiMount	5 kg - 4 400 kg	Analog	C3, 3 000e	III M n: 5	≤ 0.018
SWB505 MultiMount	5 kg - 4 400 kg	Analog	C6, 6 000e	III M n: 10	≤ 0.012
SWB605 PowerMount	110 kg - 4 400 kg	POWERCELL®	C3, 3 000e	III M n: 5	≤ 0.018
SWB605 PowerMount	110 kg - 4 400 kg	POWERCELL®	C6, 6 000e	III M n: 10	≤ 0.012
SWB605 PowerMount	110 kg - 4 400 kg	POWERCELL®	C10, 10 000e		≤ 0.007
SWC515 PinMount	7.5 t - 100 t	Analog	C3, 3 000e	III M n: 5	≤ 0.018
SWC615 PowerMount	7.5t - 90t	POWERCELL®	C3, 3 000e	IIIL M n: 10	≤ 0.018
SWC615 PowerMount	20 t - 90 t	POWERCELL®	C4, 4 000e		≤ 0.015
SWB805 MultiMount	110 kg - 4 400 kg	Analog	C3, 3 000e	III M n: 5	≤ 0.018



Weigh Module System Handbook for Engineers
This document with 150 pages is the most comprehensive guideline for designing customized scales.

Download the handbook
▶ **www.mt.com/ind-system-handbook**

Achievable accuracy for scales with weigh modules



POWERCELL® load cell inside weigh module with integrated micro processor.

A customized weighing systems' accuracy is determined by a combination of factors, including the weight indicator, load cells, mounting hardware, scale design, foundation, piping connections and environmental influences. True system accuracy can therefore be determined only after the entire weighing system has been installed by adding test weights or other material up to the full capacity of the scale. That will eliminate any built-up stresses and allow the system to settle. Once the system has settled, run several tests from zero to full capacity to determine resulting system performance.

POWERCELL® Technology

METTLER TOLEDO offers MultiMount™ and PinMount™ weigh modules with traditional analog load cells and PowerMount™ weigh modules with modern digital POWERCELL® load cells. The POWERCELL® load cells incorporate a microprocessor with Analog/Digital conversion and provide digital output via a bus system. Measurement errors caused by temperature, creep, non-linearity, and hysteresis are compensated digitally in POWERCELL® and allow for better accuracy and tighter tolerances.

Weigh Modules including modern POWERCELL® weighing technology provide an excellent accuracy and achieve an approval of C10 with a readability of 10,000e according to OIML standard and 10,000d according to NTEP standard.

Best practice to achieve high accuracy for tank weighing

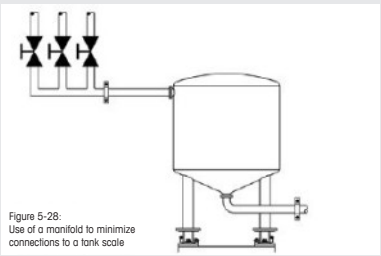


Figure 5-28:
Use of a manifold to minimize connections to a tank scale

Reduce number of in-feed pipes. Collect several with a manifold.

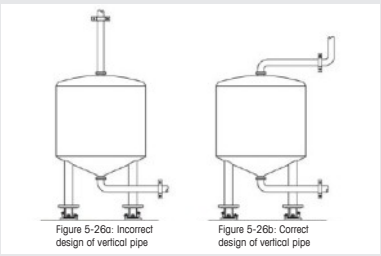


Figure 5-26a: Incorrect design of vertical pipe

Figure 5-26b: Correct design of vertical pipe

Correct execution of piping and wiring connections are relevant for accuracy.

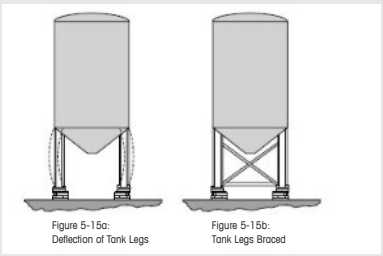


Figure 5-15a:
Deflection of Tank Legs

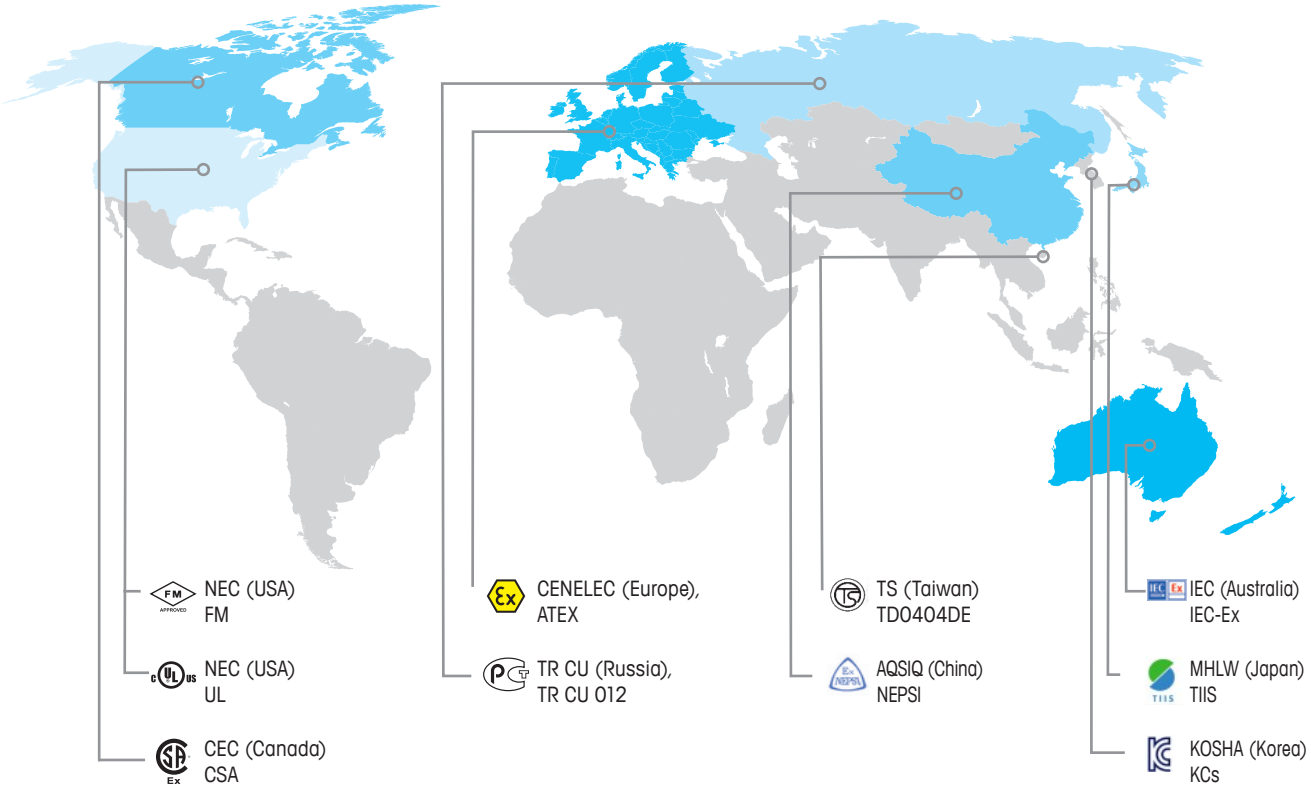
Figure 5-15b:
Tank Legs Braced

Solid non-deflecting under-structure and floor are relevant for accuracy.

Ensure Safety in Hazardous Areas
To Avoid Injury and Damage

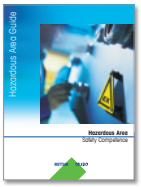
Globally, explosion protection is regulated by the legislatures of the individual countries. National differences in technical requirements and the required approvals for explosion protected equipment make significant demands, primarily on global players.

Guidelines and Standard



* ATEX and IEC-EX are also accepted by other countries

	ATEX	FM/UL	IEECx
SWB505 MulitMount™	Zone 1/21, 2/22	Div 1/2	Zone 1/21, 2/22
SWB605 PowerMount™	Zone 2/22	Div 2	-
SWB805 MultiMount™	Zone 1/21, 2/22	Div 1/2	-
SWC515 PinMount™	Zone 1/21, 2/22	Div 1/2	Zone 1/21, 2/22
SWC615 PowerMount™	Zone 2/22	Div 2	In preparation
Junction Box	Zone 1/21, 2/22	Not required	-



More about standards and regulations under:

Download the guide:

▶ **www.mt.com/ind-hazguide**

Environmental Considerations
Ensure Uptime and Accuracy

Select weigh module material to resist corrosive materials.

	Capacity	Material Weigh Module	Material Load Cell	IP Protection Load Cell"	Hygienic Design Guidelines
SWB505 MultiMount	All models	Zinc plated carbon steel / 304 / 316 stainless steel electropolished	Stainless Steel	IP68 NEMA 6/6P	
SWC515 PinMount	7.5 t - 22.5 t				
SWC615 PowerMount	7.5 t - 300 t 7.5 t - 90 t 7.5 t - 22.5 t	Zinc plated carbon steel 304 stainless steel 316 stainless steel	Stainless Steel	IP68 NEMA 6/6P	
SWB605 PowerMount	All models	Zinc plated carbon steel / 304 / 316 stainless steel electropolished	Stainless Steel	IP68 NEMA 6/6P	
SWB805 MultiMount	-	304 / 316 stainless steel mirror polished steel electropolished	Stainless Steel mirror polished	IP68 / 69k NEMA 6/6P	EHEDG, NFS
SWC515 PinMount	30 t - 300 t 30 t - 100 t	Zinc plated carbon steel 304 stainless steel	Stainless Steel	IP68 NEMA 6/6P	

Zinc plated carbon steel
Zinc coatings prevent oxidation of the protected metal by forming a barrier and by acting as a anode if this barrier is damaged. Zinc oxide is a fine white dust that does not cause a breakdown of the substrate's surface integrity as it is formed.

304 Stainless steel DIN 1.4301
This is the most commonly used stainless steel. It is not very electrically or thermally conductive and is non-magnetic. It is considered resistant to potable water with up to about 200 mg/L chlorides at ambient temperatures, reducing to about 150 mg/L at 60 °C.

316 Stainless steel DIN 1.4404
This is the second most commonly used austenite stainless steel. It is used for food processing, chemical storage and transport, textile dying equipment, and oil refining equipment as well as some medical implants. It can be used in applications where a non-magnetic metal is required.

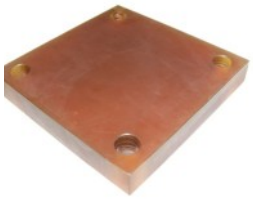
Accessories and Installation Tools
To Ensure Accuracy and Safety

Jacking tools
These tools can be used with models SWB505/605 to jack up an empty tank quickly and safely to remove SafeLockTM parts or to replace a load cell.

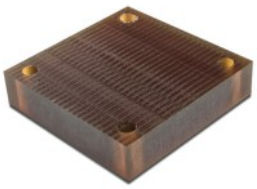
Centering gage tools
Centering gages are used with models SWB505/605 to align the load cell when it is being inserted into the weigh module.

Installation tool set
This service case contains jacking tools, centering gages and spare SafeLock™parts for models SWB505/605.

Stabilizer
As the name implies, stabilizers are used to stabilize scales with large mixers that would otherwise cause the scales to vibrate or nutate.



Thermal isolation pad
Thermal isolation pads are used to isolate weigh modules from hot tanks, suitable for use at temperatures up to 170 C.



Shock/Vibration pad
These pads are used protect weigh modules from shock loading of the scale and to dampen vibrations that might be transmitted from scale to weigh module.

Spacer plate
Spacer plates are used with models SWC515/615 to eliminate the need to raise the scale for load cell replacement, especially on scales with rigid piping.

Dead Stand
Dead stands are dimensionally identical to weigh modules but are completely rigid. At the end of a long construction project, the weigh modules are installed in their place.

Dummy load cells
The mechanical clones of the load cell prevent damage during installation or they can be used in level detection systems where the scale is only partially mounted on load cells.

Calibration Method and Maintenance
Ensuring Accuracy and Traceability

A calibration with certified test weights ensures your tank, silo, hopper or vessel scale is performing properly and is in compliance with regulations. METTLER TOLEDO's experts consult and provide you with the ideal calibration method for your particular equipment and application.

RapidCal™
Calibration force is applied by hydraulic cylinders, and measured by high accuracy reference load cells in series. The reference load cells are factory-calibrated with test weights, making the calibra-tion traceable. The tank scale and the foundation must be equipped with anchor points to host the calibration equipment. The tank scale can be calibrated when close to empty. Calibration equip-ment attached only on the outside, tank content is not exposed to the environment in any way. Rapid-Cal™ accounts for piping effects and flexible foundation.

Test weights
Add test weights to the scale, tak-ing a reading for each new weight that is added up to the full capacity of the scale. Repeat procedure as you remove the test weights. This is the most accurate method.

Test Weights and material substitution
For large tank scales, it is often physically impossible to hang test weights equal to the tank's full ca-pacity. In those cases, you can use a combination of test weights and a material (such as water) to cali-brate the scale.

Material transfer
When test weights cannot be used, you can calibrate a scale with ma-terial transfer. Instead of hanging test weights, weigh a material (such as water) on another scale and transfer it to the tank scale that is being calibrated.

CalFreePlus with PowerCell
CalFree™ Plus calibrates automati-cally by reading PowerCell load cell parameters. No cables or junction box impact the accuracy. This is the most accurate method without the use of test weights.

CalFree™ Pre-Calibrated Load cells
The CalFree™ program is another option for calibrating a scale with-out using test weights. It relies on factory calibrated load cells that are entered in the weighing terminal. However, it doesn't verify the scale's performance nor adjust pip-ing connections.

Professional Installation and Setup for Weigh Modules
METTLER TOLEDO offers Starter-Pacs and IPacs a service products for weigh modules to ensure peak performance and thoroughly docu-mented compliance with internal standards and external regulations.

▶ **www.mt.com/ind-tank-service**

Health Check
Preventing tank scale problems is always less trouble than fixing them later. A tank scale health check is a proactive way to prevent expensive emergency service calls.

Care Contract
Care Contracts provide the peace of mind you need by ensuring your installed equipment performs as expected on an ongoing basis.

Know How to Make your Decisions
For Performance and Uptime

Datasheets, CAD data and installation instructions

- ▶ **www.mt.com/ind-multimount**
- ▶ **www.mt.com/ind-powermount**
- ▶ **www.mt.com/ind-pinmount**
- ▶ **www.mt.com/ind-hygienic-WM**

Comparing PowerMount™ technology with analog weigh modules

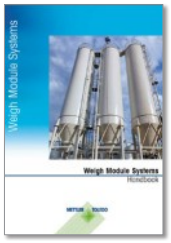
The white paper discusses advantages of modern weigh modules using load cells with an incorporated micro-processor.

- ▶ **www.mt.com/ind-wp-powermount**

Safety-related force ratings compression weigh modules

The white paper explains in every details all safety ratings relevant for building customize scales with weigh modules.

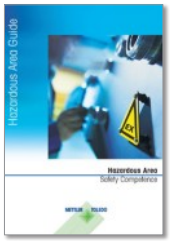
- ▶ **www.mt.com/ind-wp-safety**



Weigh module system handbook for engineers

The document with 150 pages is the most comprehensive guideline for designing customized scales.

- ▶ **www.mt.com/ind-system-handbook**



Hazardous safety competence guide

This guide explains standards, regulations and methods of equipment protection. It also explains how to correctly install and maintain equipment in hazardous areas.

- ▶ **www.mt.com/ind-hazguide**

www.mt.com

For more information

Mettler-Toledo GmbH
Industrial Division
CH-8606 Nänikon, Switzerland
Tel. + 41 44 944 22 11

Local contact: **www.mt.com/contacts**