

ServiceXXL

Tailored Services

Congratulations on choosing the quality and precision of METTLER TOLEDO. Proper use according to this Operating Manual and regular calibration and maintenance by our factory-trained service team ensure dependable and accurate operation, protecting your investment. Contact us about a ServiceXXL agreement tailored to your needs and budget.

We invite you to register your product at www.mt.com/productregistration so we can contact you about enhancements, updates and important notifications concerning your product.

Operating instructions

METTLER TOLEDO MultiRange

METTLER TOLEDO

Floor scales/Pit scales

MC300/MCS300

MC600/MCS600

MD600/MD1500

ME1500/ME3000

MES1500/MES3000



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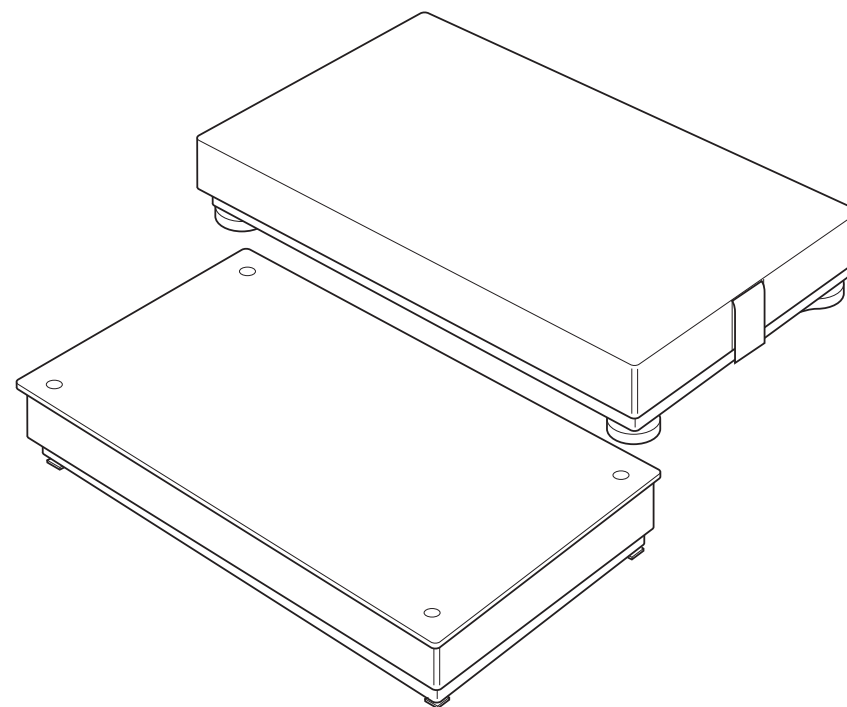
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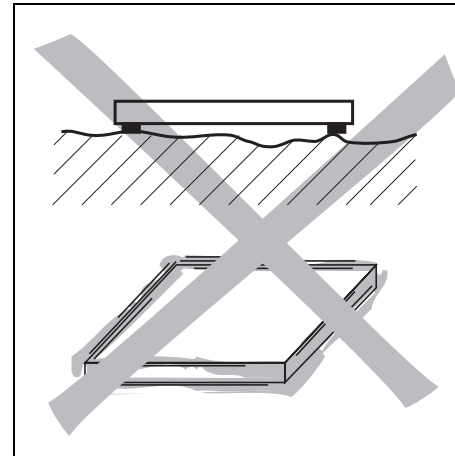
www.mt.com/support

1 General information

The weighing platform is part of a modular system. The associated components, such as terminals, application packs and the extensive range of accessories, allow you to assemble a weighing system ideally tailored to the needs of your operation.

2 Safety precautions

- ▲ The explosion-protected weighing platform is approved for operation in Zone 2 (gases) and Zone 22 (dusts) hazardous areas. There is an increased danger of injuries and damage when using the weighing platform in hazardous areas! Exercise particular care when using in such areas. The rules for behaviour are based on the concept of "Safe Distribution" established by METTLER TOLEDO.
- ▲ Explosion-protected weighing platforms may be used in hazardous areas of Zones 2 and 22 only in conjunction with weighing terminals that have the appropriate approval and interface specification.
- ▲ The connection cable may not be separated from the weighing terminal while it is energised.



Selecting installation location

- ▲ The foundation must be capable of safely support the weight of the weighing platform at its support points when it carries the maximum load. At the same time, it should be so stable that no vibrations occur during weighing operations. These requirements also apply when the weighing platform is integrated in conveying systems and the like.
- ▲ Ensure that vibrations due to machines near the installation site are kept to a minimum.

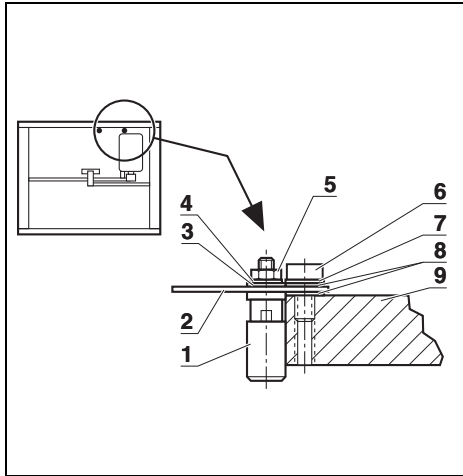
Ambient conditions

- ▲ Use powder-coated/enamelled weighing platforms only in a dry environment.
- ▲ In a damp environment, in wet operation or when working with chemicals: use stainless-steel or hot-galvanised weighing platforms.

3 Equipotential bonding

The equipotential bonding must be installed by a professional electrician when using the weighing platform in Zones 2 and 22. METTLER TOLEDO Service only has a monitoring and consulting function here.

- Connect equipotential bonding (PA) of all devices (weighing platform and service terminal) in accordance with the country-specific regulations and standards. In the process, make sure that all device housings are connected to the same potential via the PA terminals.



Equipotential bonding with MC..., MCS...

- (1) Equipotential bonding clamp
 - (2) Potential plate weighing platform
 - (3) Serrated lock washer 4.3 DIN 6798
 - (4) Washer 4.3 DIN 125
 - (5) Hexagonal lock nut M4 DIN 934
 - (6) Fillister head screw M5x12 DIN 912
 - (7) Washer 5.3 DIN 125
 - (8) Serrated lock washer 5.3 DIN 6798
 - (9) Frame bracket, thread M5 is present
- Mounting materials are enclosed with the weighing terminal.

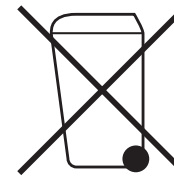
Equipotential bonding with MD..., ME..., MES...

- Secure equipotential bonding clamp to a suitable area of the base frame.
- Mounting materials are enclosed with the weighing terminal.

7 Technical data

Ignition protection type	II 3G Ex nA II T6 -10 °C ≤ T _a ≤ +40 °C II 3D T 50 °C
	The following safety-related variables must be ensured by the connected weighing terminal:
Supply circuit	U _{max} ≤ 20 V DC
Interface circuit	U _{max, CL} ≤ 27 V DC I _{max, CL} ≤ 30 mA
IP protection type	IP67
Power consumption	12 V DC ± 20 %; 125 mA; 1.8 VA

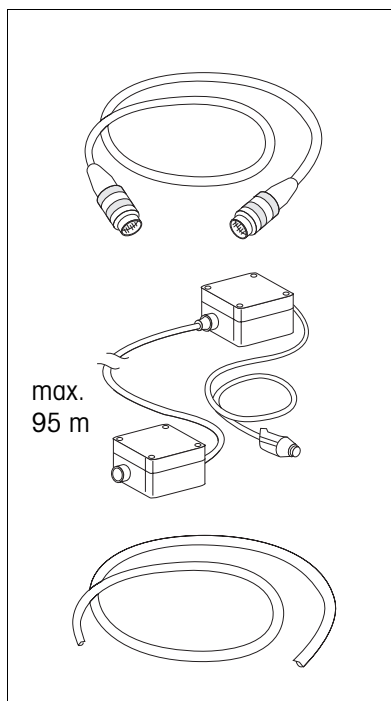
8 Disposal



In conformance with the European Directive 2002/96/ EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

- Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device. Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related. Thank you for your contribution to environmental protection.



Extension cable

Length 10 m, connector at both ends
for remote setup of ID terminal

Cable adapter kit for ID terminals 00 504 133

for extending connection cable to 100 m
comprising two junction boxes
Box at terminal end with connection cable of 2.5 m length

Special cable from the roll 00 504 177

used with adapter kit for ID terminals for extension of connection cable to required length

Order No.

00 504 134

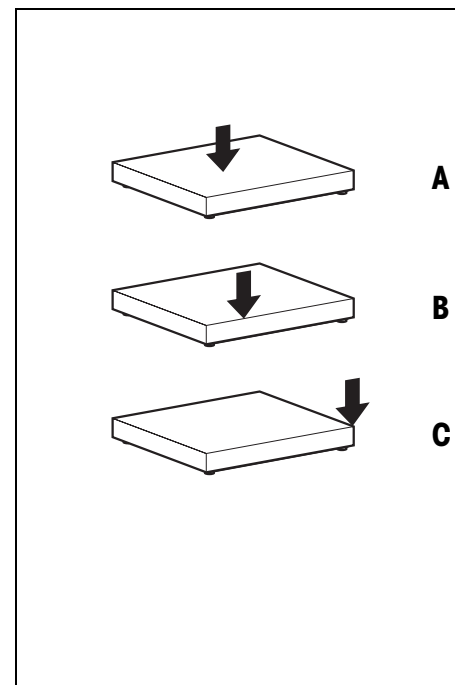
00 504 133

00 504 177

4 Operating limits

The weighing platform has such a rugged design that no damage should result if the maximum weighing capacity is occasionally exceeded.

The static load-bearing capacity, i.e. the maximum permissible load, is dependent on the type of loading (Positions A – C).



Maximum permissible load

	MC300 MCS300	MC600 MCS600
A	500 kg	1000 kg
B	330 kg	650 kg
C	165 kg	330 kg

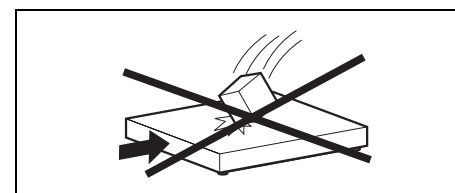
	MD600 MD1500	ME1500/3000 MES1500/3000
A	3500 kg	4500 kg
B	2300 kg	3000 kg
C	1150 kg	1500 kg

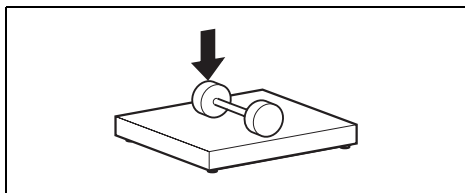
A with central load

B with side load

C with one-sided corner load

▲ Falling loads, shocks and lateral impacts must be avoided.





▲ When travelling across recessed weighing platforms with lift trucks, ensure that the axle load does not exceed the maximum side load (see above).

5 Cleaning the weighing platform

Maintenance of the weighing platform is limited to regular cleaning and subsequent oiling. The procedure depends both on the type of surface (powder-coated/enamelled or stainless steel) and on the environmental conditions prevailing at the installation location. Remove dirt and deposits at regular intervals from the outside and inside of the weighing platform.

5.1 Notes on cleaning



DANGER

Danger of injury through shutting load plate at ME...sk- and MES...sk weighing platforms!

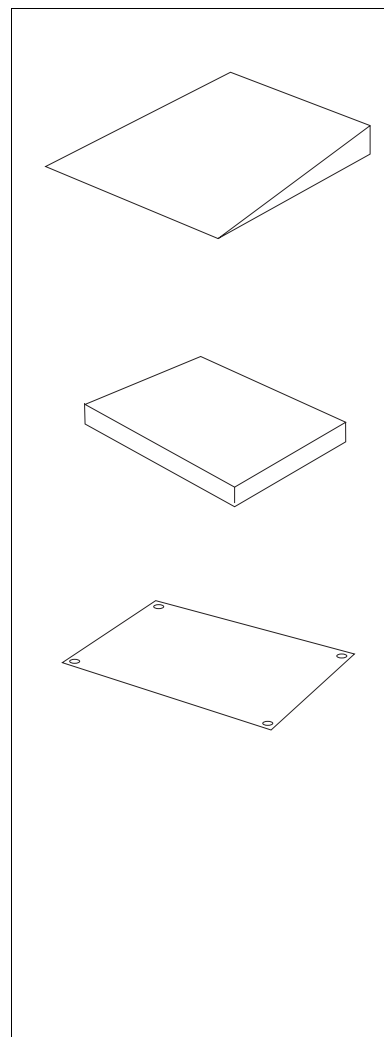
- ▲ **Only** open and close the load plate with the supplied tools!
- ▲ **Never** work under an opened unsecured load plate!



CAUTION

Incorrect use of cleaning agents may cause damage to the weighing platform!

- Use only such cleaning agents that do not act on the plastics used in the weighing platform.
- Be particularly careful when cleaning the measuring cell.



Order No.

Access ramp

for MC300, MCS300, MC600, MCS600

Symmetrical steel design
Loading capacity 1000 kg
Checker plate surface
hot-galvanised
stainless steel

00 503 638

00 599 204

Additional load plate

for MC300, MC600
polished stainless steel
Bell-shaped for placing over existing load plate
Surface protection for stricter hygienic requirements

00 503 629

Load plates

for MD...

enamelled
hot-galvanised
stainless steel

00 503 617

00 503 618

00 503 619

for ME...

enamelled
hot-galvanised
stainless steel

00 503 620

00 503 621

00 503 622

for MES...

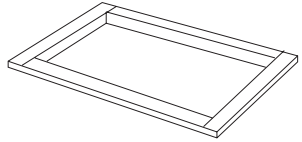
enamelled
hot-galvanised
stainless steel

00 504 504

00 504 505

00 504 506

6 Standard accessories



Pit frame

Installation kit incl. fastening materials

for MC300, MC600

hot-galvanised
stainless steel

00 503 635

00 503 636

for MCS300, MCS60

hot-galvanised
stainless steel

00 504 550

00 504 551

for MD...

hot-galvanised
stainless steel

00 504 077

00 506 399

for ME...

hot-galvanised
stainless steel

00 504 079

00 506 400

for MES...

hot-galvanised
stainless steel

00 504 512

00 506 401

for ME...sk

stainless steel

00 505 270

Pit frame with cleaning recess on both sides

Installation kit incl. fastening materials

hot-galvanised

for MD...

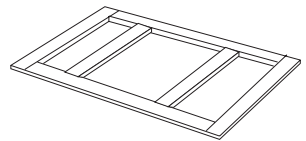
00 504 078

for ME...

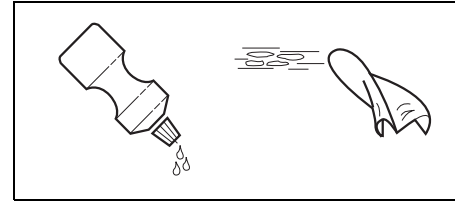
00 504 080

for MES...

00 504 513

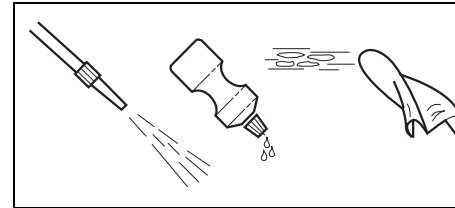


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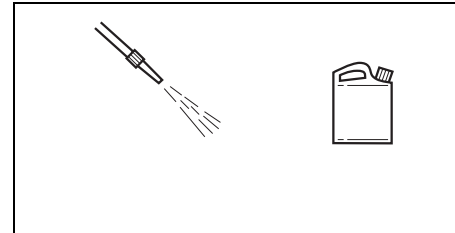
Powder-coated/enamelled version, dry surroundings

- Wipe with a damp cloth.
- Use household cleaning agents.



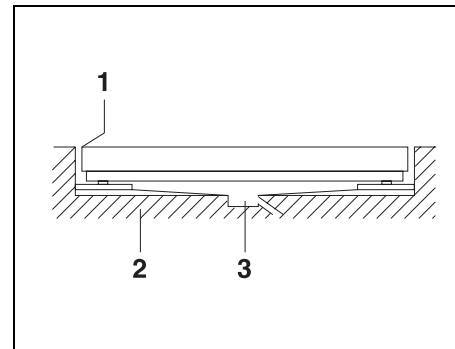
Stainless-steel and hot-galvanised versions

- Wipe with a damp cloth.
- Water jet up to 60 °C.
- Use household cleaning agents.



Corrosive surroundings

- Water jet up to 60 °C.
- Remove corrosive substances at regular intervals.
- Only use disinfectants and cleaning agents in accordance with the manufacturer's specifications and instructions.



Cleaning a recessed weighing platform

- Ensure gap (1) between weighing platform and pit frame is always kept clear.
- Remove larger dirt deposits at pit bottom (2) at regular intervals.
- Check pit drainage channel (3) for blockage at regular intervals.

5.2 Subsequent treatment

Carry out the following subsequent treatment in order to protect the weighing platform:

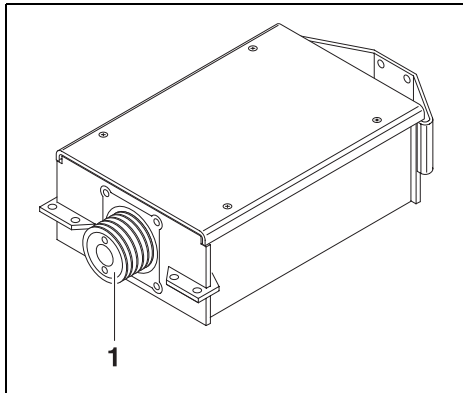
- Rinse the weighing platform with clear water.
- Dry off the weighing platform with a lint-free cloth.
- Treat the inside and outside of the weighing platform with an oil suitable for foodstuffs.

Special treatment for scales installed in the floor or a pit

- Treat all the moving parts, such as flexible bearings, knife edges and bearings, thoroughly with an oil suitable for foodstuffs after cleaning them.

5.3 Cleaning the measuring cell

The load plate has to be removed in order to clean the measuring cell. For details please refer to the next section.



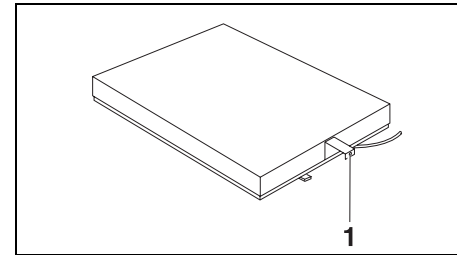
CAUTION

The measuring cell can be damaged!

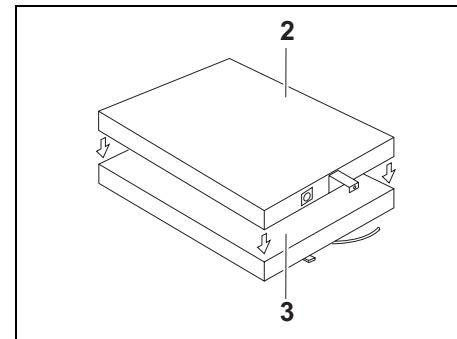
- During cleaning work, never touch, direct an airflow against or spray the rubber diaphragm (1) of the measuring cell.
- Blow out dirt or flush with a medium-power water jet.

5.4 Information on removing the load plate

MC and MCS weighing platforms

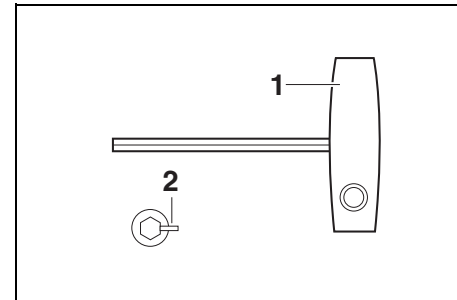


- Remove the load plate by pivoting the two side handles (1) outward.



- Replace the load plate (2) so that the symbol O is located above the level indicator. Make sure that the load supports (3) in the corners of the weighing platform are vertical.

ME...sk/MES...sk-weighing platforms



- Open the quick-release locks (2) with the special key (1) and pivot up the load plate.

CAUTION

The gas-filled springs can be damaged!

- ▲ Do not clean gas-filled springs with steam jet.
- ▲ Do not oil the piston rod.