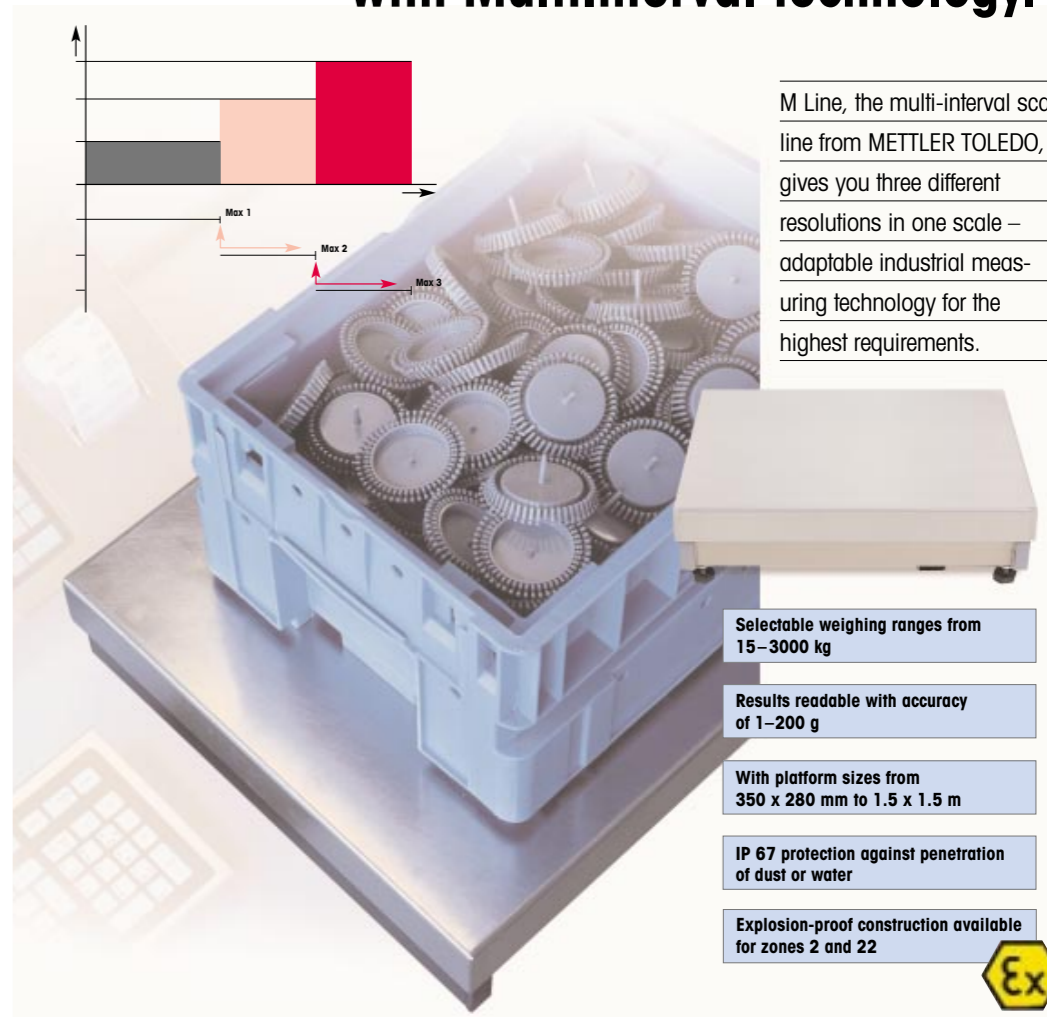


# Turn one into three – with MultiInterval technology.

M Line, the multi-interval scale line from METTLER TOLEDO, gives you three different resolutions in one scale – adaptable industrial measuring technology for the highest requirements.

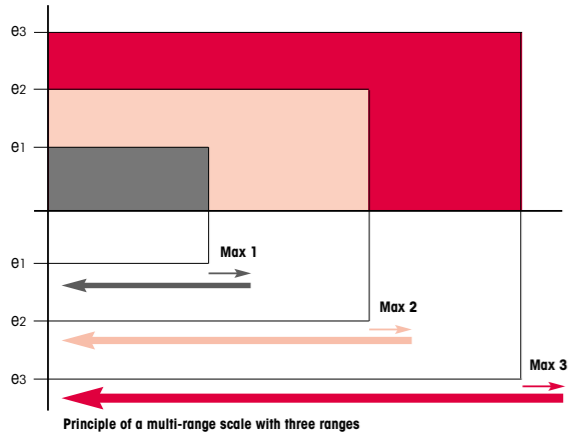


- Selectable weighing ranges from 15–3000 kg
- Results readable with accuracy of 1–200 g
- With platform sizes from 350 x 280 mm to 1.5 x 1.5 m
- IP 67 protection against penetration of dust or water
- Explosion-proof construction available for zones 2 and 22

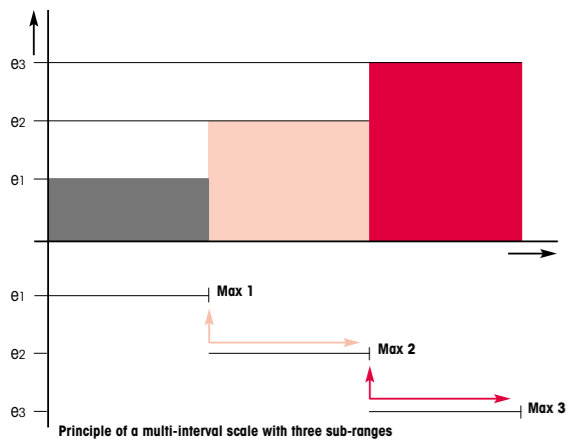


METTLER TOLEDO

**Operating principle of multi-range scales**  
On multi-range scales, each individual range is treated in the same way as on a single-range scale. Switching between weight ranges is only possible as the load increases. Changing to a range with finer resolution by taring is not possible on a multi-range scale.

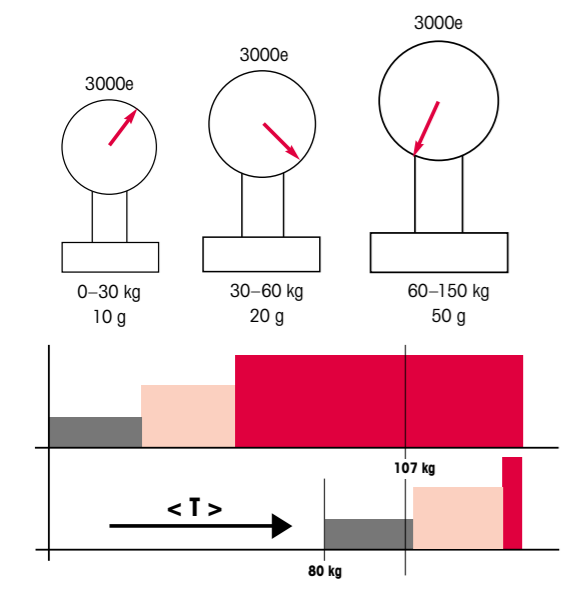


**Operating principle of multi-interval scales**  
On a multi-interval scale, the weighing range is divided into several sub-ranges with different scale divisions. As the load increases or decreases, the resolution is automatically determined by the load, i.e. the resolution is automatically changed when a specified threshold value is crossed. This makes it possible to switch from a coarser to a finer resolution by taring. Because it is possible to return to the finer resolution without completely unloading the scale, multi-interval scales give the user much greater flexibility than multi-range scales.



**Explanatory example**  
You are using a 150 kg scale to weigh a container which weighs 80 kg, and you tare its empty weight. The container contains 27 kg of a chemical substance. On a multi-range scale you are in the third weighing range, where the resolution is 50 g, since the total weight of the container is 107 kg.

On a multi-interval scale, by taring the empty weight you have reset the scale to the finest resolution of 10 g, and since the container contains 27 kg, you are in the first weighing range with a resolution of 10 g, with the weight on the scale.



**Accessories**

- Connection cable extension**  
length 10 m, plug connectors at both ends, for remote location of ID terminal.  
Order no. 00 504 134
- Connection set for ID terminal**  
comprises two terminal boxes for extension of connection cable to 100 m.  
Box at terminal end has 2.5 m connection cable.  
Order no. 00 504 133
- Special cable from reel**  
for use with connection set for extension of connection cable for ID terminal.  
Order no. 00 504 177
- Bench stand**, for MB60, MCC150, MCC300  
stable frame construction, 2 feet with rollers, 1 fixed foot with adjusting screw, height approx. 560 mm.  
Order no. B size 400 x 500 mm  
– Enameled 00 503 631  
– Stainless steel 00 503 632  
Order no. CC size 800 x 600 mm  
– Enameled 00 504 853  
– Stainless steel 00 504 854
- Pillar support**, for MB60, MCC150, MCC300  
to fasten terminal ID1 Plus, ID3 or ID7 to bench stand, incl. fastening material.  
Order no.: – Enameled 00 504 127  
– Stainless steel 00 504 128
- Scale stand**, for MA15, MA32s, MB60  
to fasten terminal ID1 Plus or ID3 to the weighing platform. Completely non-corroding.  
Order no. 00 504 439
- Roller track**  
steel-clad rollers, motion lengthwise.  
Order no. B size 400 x 500 mm  
– Corrosion protected 00 503 640  
– Stainless steel 22 001 647  
Order no. CC size 800 x 600 mm  
– Corrosion protected 00 504 852  
– Stainless steel 22 001 648
- Approach ramp**, for MC300, MCS300, MC600, MCS600,  
symmetrical steel construction with hot-galvanized chequer plate surface, 1000 x 800 mm, maximum safe load 1000 kg.  
Order no. 00 503 638
- Additional load plate**, for MC300, MC600  
stainless steel, polished. To place over existing load plate, providing surface protection for especially high hygienic requirements.  
Order no. 00 503 629
- Load plates**  
for MD: – enameled 00 503 617  
– hot-dip galvanized 00 503 618  
– stainless steel 00 503 619  
for ME: – enameled 00 503 620  
– hot-dip galvanized 00 503 621  
– stainless steel 00 503 622  
for MES: – enameled 00 504 504  
– hot-dip galvanized 00 504 505  
– stainless steel 00 504 506
- Pit frames**  
Pit frame kit incl. fastening material  
for MC300, MC600: – hot-dip galvanized 00 503 635  
– stainless steel 00 503 636  
for MCS300, MCS600: – hot-dip galvanized 00 504 550  
– stainless steel 00 504 551  
for MD...: – hot-dip galvanized 00 504 077  
– stainless steel 00 506 399  
for ME...: – hot-dip galvanized 00 504 079  
– stainless steel 00 506 400  
for MES...: – hot-dip galvanized 00 504 512  
– stainless steel 00 506 401  
for ME...sk: – stainless steel 00 505 270  
for MES...sk: – stainless steel 22 007 261
- Pit frames with cleaning recess both sides**  
Pit frame kit incl. fastening material, hot-dip galvanized  
for MD... 00 504 078  
for ME... 00 504 080  
for MES... 00 504 513

**Weighing platform dimensions (mm)**

Model	W	D	H
MA	350	280	117–130
MB	500	400	123–148
MC	1000	800	115–140
MCC	800	600	130–155
MCS	800	800	115–140
MD	1250	1000	180–205
ME	1500	1250	182–207
MES	1500	1500	197–222

**Quality assurance certificate.**  
Development, production and testing of these scales to ISO9001/EN29001 (DQS/SQS-certificate)

Sales/service:

**«Conformité Européenne»**  
This symbol offers the assurance that these scales conform to the latest EC guidelines and can be supplied ready-certified.

## M Line – the complete line of weighing platforms for industrial environments.



### This new line of scales brings you all these important advantages:

- One of the many different platform sizes is sure to suit your application
- Very rugged industrial-grade construction
- High-performance strain gauge measuring cell technology with 10 updates/second of measured values
- Plug-and-weigh with IDNet interface
- Approved resolution 3 x 3000e Multinterval or 7500e SingleRange
- Allows variable setting of preload and zero point
- Wide range of accessories (bench stand, roller track stand, etc.)



### Three scales in one! M Line – the multi-interval scale line for loads from 15 kg to 3000 kg

Three resolutions in one scale – that's the advantage the multi-interval function of M Line weighing platforms gives you. The increment size is adjusted automatically whenever the measured value crosses a specified limit value. Next time you tare, you start again with the finest resolution – sensible and convenient.

The M Line contains numerous different platform sizes and models, so we can offer you a model to suit your industrial weighing application. All M Line weighing platforms are certified according to Directive 94/9/EC (ATEX) Category 3, so they can be used in explosive atmospheres in zones 2 and 22.

The torsionally rigid load frame and rugged measuring cell with strain gauge technology guarantee you precise weighing results over a long service life.

Stringent regulations in the food, chemicals, and pharmaceuticals industries are no problem for the M Line! The M...s models are manufactured entirely from chrome-nickel steel (1.4301/AISI 304), which guarantees high resistance to corrosion. The raisable load plate makes cleaning the ME...sk and MES...sk models extremely simple, even when installed in a pit.



### The large range of platforms is matched by the wide selection of terminals – one is always right!



- Up to three scale bases (e.g. ID7) can be connected to one terminal.
- Different data interfaces are available. For example, possibilities offered by the ID7 terminal are CL, RS 232, RS 485, Ethernet, Profibus.
- Wide selection of options and accessories.

### M Line – the wide range of scales



Model designation	MA15s	MA30s	MB60/s	MCC150/s	MCC300/s	MCS300/s	MCS600/s	MC300/s	MC600/s	MD600	MD1500	ME1500/sk	ME3000/sk	MES1500/sk	MES3000/sk	
Construction type	Bench scale			Stand scale			Floor/pit scale									
Platform size (mm)	350 x 280		500 x 400		800 x 600		800 x 800		1000 x 800		1250 x 1000		1500 x 1250		1500 x 1500	
Scale height (mm)	117–130		123–148		130–155		115–140		115–140		180–205		182–207		197–222	
Material (scale)	Chrome-nickel steel			Powder-coated or chrome-nickel steel						Hot galvanized		Hot galvanized or chrome-nickel steel				
Material (load plate)	Chrome-nickel steel					Hot galvanized or chrome-nickel steel					Enameled, hot galvanized or chrome-nickel steel					
Connecting cable length (m)	2.5	2.5	2.5	2.5	2.5	5	5	5	5	5	5	5	5	5	5	
<b>Weighing range</b>																
Maximum capacity (kg)	15	30	60	150	300	300	600	300	600	600	1500	1500	3000	1500	3000	
Readability I (kg/g):	0...3/1	0...6/2	0...15/5	0...30/10	0...60/20	0...60/20	0...150/50	0...60/20	0...150/50	0...150/50	0...300/100	0...300/100	0...600/200	0...300/100	0...600/200	
Readability II (kg/g):	3...6/2	6...15/5	15...30/10	30...60/20	60...150/50	60...150/50	150...300/100	60...150/50	150...300/100	150...300/100	300...600/200	300...600/200	600...1500/500	300...600/200	600...1500/500	
Readability III (kg/g):	6...15/5	15...30/10	30...60/20	60...150/50	150...300/100	150...300/100	300...600/200	150...300/100	300...600/200	300...600/200	600...1500/500	600...1500/500	1500...3000/1000	600...1500/500	1500...3000/1000	
<b>Taring/preload range</b>																
Zero setting range (kg ±)	0.3	0.6	1.2	3	6	6	12	6	12	12	30	30	60	30	60	
Preload range (kg)	2.7	5.4	10.8	27.0	54.0	54.0	108.0	44.0	108.0	70.0	270.0	270.0	540.0	270.0	540.0	
<b>OIML certification data</b>																
Accuracy class	III	III	III	III	III	III	III	III	III	III	III	III	III	III	III	
Verification scale interval (kg)	0.001	0.002	0.005	0.01	0.02	0.02	0.05	0.02	0.05	0.05	0.1	0.1	0.2	0.1	0.2	
Minimum weight (kg)	0.02	0.04	0.1	0.2	0.4	0.4	1	0.4	1	1	2	2	4	2	4	
Temperature range	-10° to +40°C		-10° to +40°C			-10° to +40°C			-10° to +40°C		-10° to +40°C		-10° to +40°C			
<b>Max. static safe load</b>																
With central load (kg)	50	50	120	500	500	500	1000	500	1000	3500	3500	4500	4500	4500	4500	
With side load (kg)	40	40	80	300	300	330	650	330	650	2300	2300	3000	3000	3000	3000	
With corner load (kg)	30	30	40	150	150	165	330	165	330	1150	1150	1500	1500	1500	1500	
<b>Weighing accuracy</b>																
Repeatability (g)	0.2	0.4	1	2	4	4	8	4	8	20	40	40	80	40	80	
Linearity (g±)	1	2	2	4	8	8	16	8	16	50	100	100	200	100	200	
<b>Result discrepancy at</b>																
1:2000 inclination (g±)	1	2	1	5	5	5	10	5	10	50	100	100	200	100	200	
Sensitivity drift (g/°C ±)	0.1	0.2	0.5	1	2	2	5	2	5	6	15	15	30	15	30	
Minimum reference weight	10 g	20 g	50 g	100 g	200 g	200 g	500 g	200 g	500 g	2 kg	4 kg	4 kg	10 kg	4 kg	10 kg	