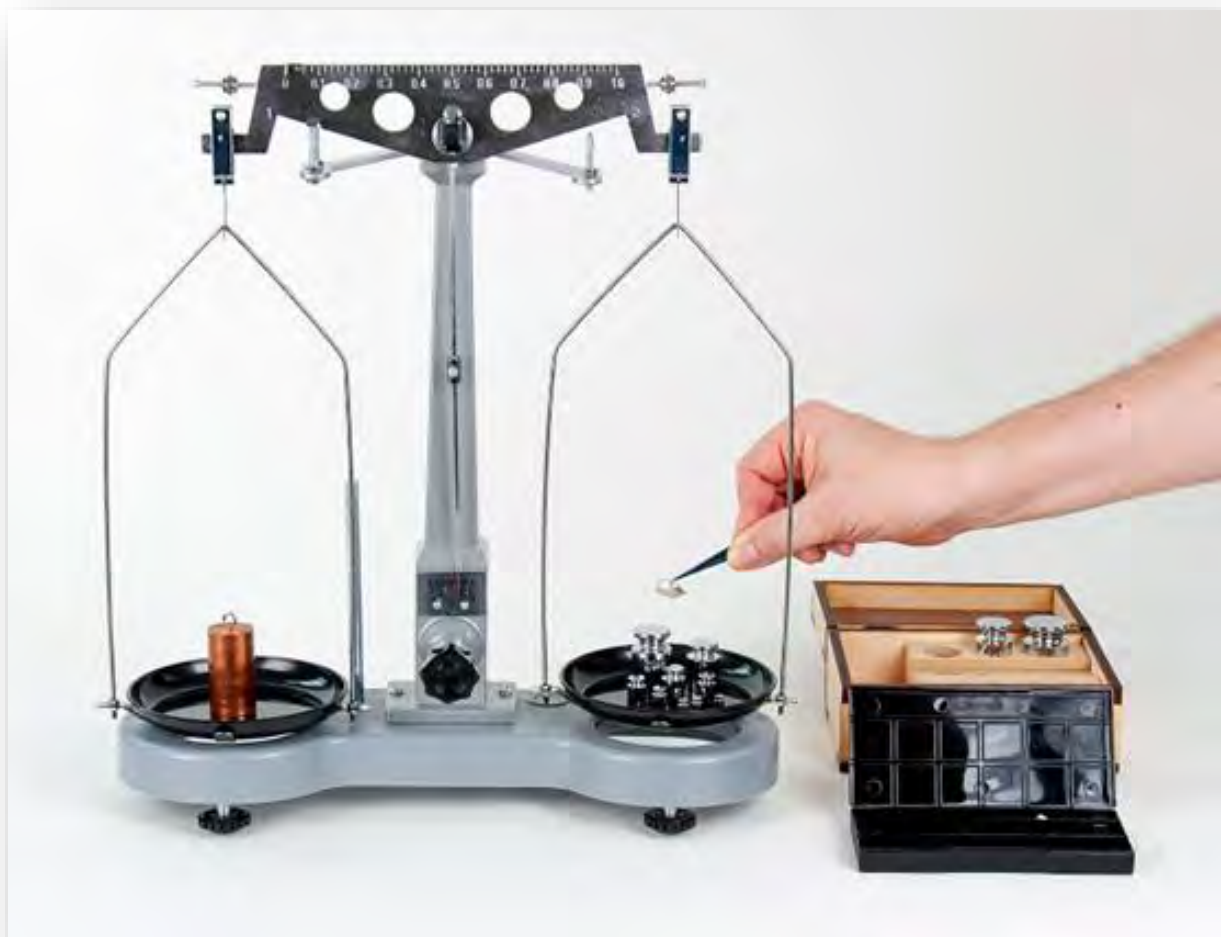




DM124-1C Two-pan balance 500 g precision

Setup and operation manual



Setup:

The individual parts of the scale are removed from the top layer of the polystyrene storage unit and placed on top:

- 2 Weighing pans plastics (12),
- 2 brackets for metal weighing pans (11)
- 2 hangers for weighing pans (9)
- 1 weighing beam (5) with pointer (2)

All individual parts of the scale must be clean. If particles from the packaging are stuck on the parts, please remove them.



The scale base is removed from the cardboard box and placed in the location where weighing is to take place.

With the help of the two floor-side adjusting feet (17) the scales are brought into an exactly horizontal position.



These feet are adjusted until the bubble of the bubble level is exactly centred on the base plate (in the specified circle).



Look at the bubble as vertically as possible from above.

The lever of balance is carefully placed on the scale base. It is positioned with the centre edge (4) on the support plate (3).

The graduation must be facing towards the operator.



The left-hand side of the bar is labelled '1' and the right-hand side '2'. The retaining plateau (15) is loosened and removed or tilted backwards.





The hanger, also marked '1', is placed on the edge on the left-hand '1' side of the lever.

On the bracket for weighing pans marked '1', the upper support rod is rotated by 90°.



The bracket is hooked into the lower hook of hanger '1'.

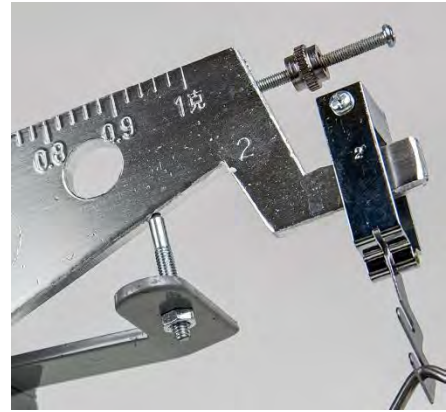
The plastic weighing pan '1' (labelled on the underside) is placed in the centre of the support rods of the bracket.



The complete two weighing pans are hung on the edge on the right two sides of the lever in the same steps as before.



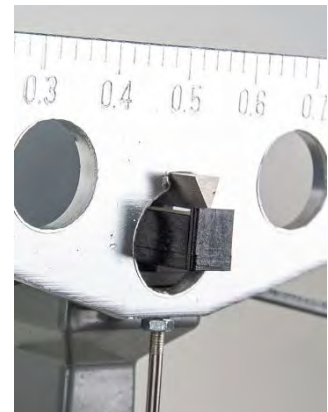
In the 'park position', the weighing beam must rest on the three bearing screws (10).



In this position, the edge of the weighing beam (4) must not rest on the cradle bearing (3).

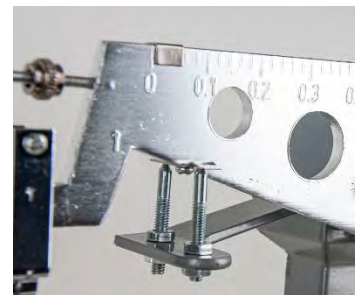
This position is pre-set at the factory.

However, if this is not the case, turn the lifting screw (13) approximately 180° anti-clockwise. In this position, the three bearing screws can be adjusted in height.



Justierung des Wiegebalkens

Das Tariergewicht (9) wird an den linken Rand geschoben.



Turn the large lifting screw (13) clockwise by about 180° (half a turn).

This should lift the weighing beam out of the bearing bolts and place the edge in the centre of the beam on the weighing bearing.

Note:

After the first stop of the lifting screw, do not continue to turn it forcibly!

The pointer (1) will oscillate slightly at first, but should point to the zero point of the scale after a short time at a standstill.

If the pointer does not point to the centre but to the right-hand side of the scale, for example, the tare screw (7) at the right-hand end of the lever must be turned outwards.

The same naturally applies to the left-hand side.

Before adjusting the tare screws, however, we return the weighing beam to the park position.

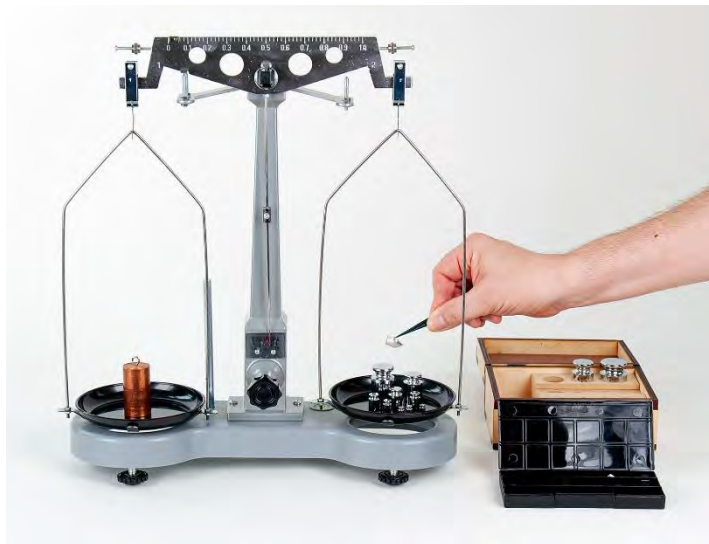


Optional setting of the sensitivity of the scale:

The pointer has a travelling weight (20), the position of which determines the sensitivity of the scale. For greater sensitivity, this weight should be mounted higher (closer to the edge of the weighing beam). However, we recommend leaving the factory setting (sensitivity) as it is.

Weighing with two weighing pans and a set of weight

The weighing beam is moved from the parking position to the weighing position by turning it 180° clockwise.



The object to be weighed is carefully placed in the left-hand weighing pan.

Gradually, the weights are carefully placed in the right-hand weighing pan. Small weights should be placed with tweezers.

As soon as the pointer is in the centre of the scale, we have an 'equilibrium'. The sum of all the weights (in the right-hand bowl) is now equal to the weight of the object (in the left-hand bowl).

After weighing, the scales are returned to the parking position.

Measuring the buoyancy in a liquid

We determine the mass of the object using our scales and a set of weights and note it down.

The object is taken out of the weighing pan and a thread is attached to it. After about 15 cm of thread, a hanging loop is tied to the thread.



The holding plateau (15) is placed on the holding bar or swivelled forwards.

It is then fixed about 1 - 2 cm above the left pan.

The plateau must not touch the weighing pan or its bracket.



A 250 ml beaker n. F. is filled 2/3 full with water and placed on the holding plateau.

The object is immersed in the water in the beaker and hung in the left hanger for the weighing pans using the thread loop.

The holding plateau is adjusted in height and positioned so that the object hangs freely in the water. Neither the bottom nor the walls of the beaker must be touched. The object must also be completely submerged.

As many masses are now taken from the right-hand weighing pan until we have an 'equilibrium'. The mass is determined again.

The difference between the two masses corresponds to the buoyancy of the body in the water.



After weighing, the scales are returned to the parking position.

Weighing pan-D: 120mm
Weighing range: 500g
Sensitivity: 50 mg
Measurements: approx. 360 x 125 x 400 mm
Mass: approx. 1,5 kg

Notes

The scale must be stored in a dry and dust-free place.

Pay particular attention to the cutting edges of the scale.

If the scale is not in use, it must be stored in the 'park position' so that the edge of the weighing beam (4) does not rest on the scale bearing (3).

The scale must not be loaded or unloaded jerkily so that the cutting edges of the weighing beam and the hanger for the weighing pans (6) are not damaged.

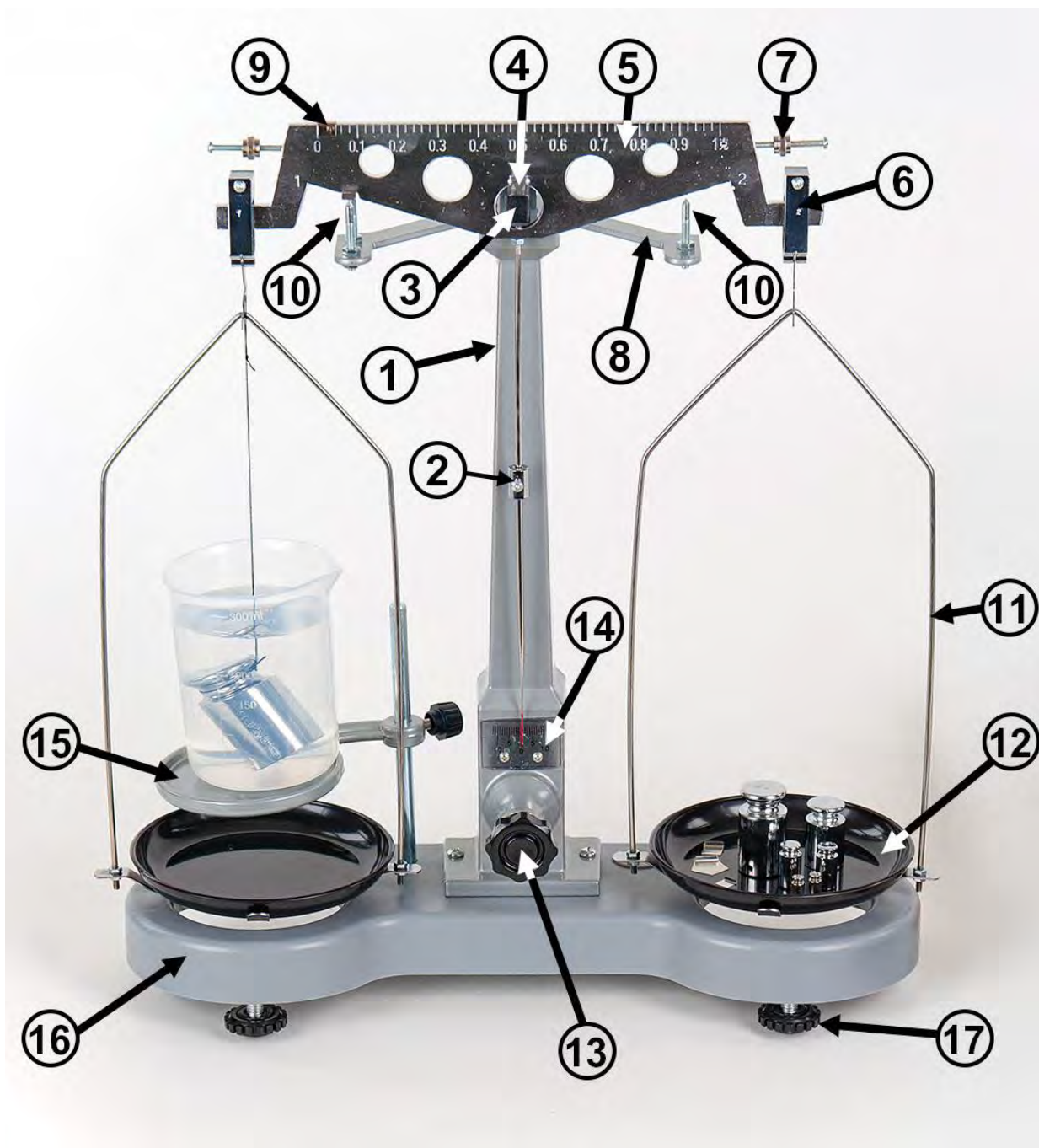
The scale must not be loaded with more than 500 g, otherwise the cutting edges or support plates could be damaged.

Objects to be measured must be free of dust and must not be damp or wet.

The parts of the scale must not be exposed to aggressive chemicals.

Tweezers should be used when applying and removing weights.

Each of these scales is assembled at the factory and the parts are numbered. The individual parts of different scales (weighing pans and hangers) cannot be interchanged at will.



- 1 Scale support
- 2 Pointer with running weight
- 3 Support plate
- 4 Cutting edge
- 5 Weighing beam
- 6 Hanger for weighing pan
- 7 Tare screw
- 8 Parking support
- 9 Tare weight

- 10 Bearing screws
- 11 Bracket for weighing pan
- 12 Weighing pan
- 13 Lifting screw
- 14 Scale
- 15 Holding plateau
- 16 Scale base plate
- 17 Adjusting foot