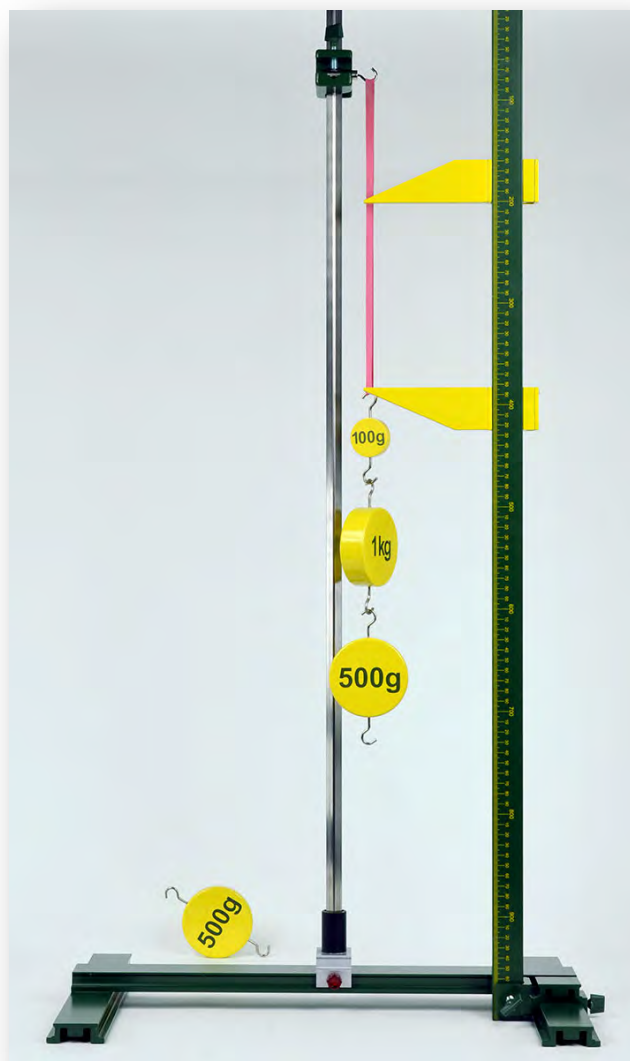


ELONGATION OF AN ELASTIC BAND

MED 02.04



Material:

Item-no.	Qty.	Description
DS101-1G	1	Support base, large, L=500 mm
DS093-04	1	Sliding saddle "Sepp", H=40 mm
DS300-75	1	Support rod, squared, L=750 mm, 12x12 mm
DS400-3K	1	Bosshead cross-pattern, Demo, green
DS203-1S	1	Support with hook
DM530-2R	1	Rubber band, wide
DS400-2R	1	Clamp on saddle
DG101-00	1	Ruler, metal, L=1000 mm
DG110-2G	1	Pointers for ruler, pair

Weights on hooks

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Purpose

To demonstrate that forces are always proportional to the masses; the corresponding expansions however are not.

Preparation

Fix the sliding saddle to the support base; afterwards insert the 75 cm rod into the sliding saddle. Fix the cross-patterned bosshead to the upper end of the support rod and insert the support with hook into the bosshead, afterward hang the rubber band on the hook.

Fix the clamp on saddle to the leg of the large support base and insert the metal ruler vertically into clamp. After this place the pointers on the ruler.

Move the sliding saddle so that the rubber band is hanging just in front of the tips of the pointers. The upper pointer is moved to the lower end of the rubber band.

Experiment

Weights on hooks are hung on the rubber band. After every weight the difference in the elongation is marked with the second pointer and read off.

At the millimetre scale of the ruler it can be checked if the elongation of the rubber band is proportional to the force.

Note

Pay attention to select suitable weights for stretching the rubber band.