

Masses with double hook

8 masses: 1 g (1pc); 2 g (2pcs); 5 g (1pc);	
10 g (1pc); 20 g (1pc); 50 g (1pc);	
100 g (1pc)	1352
10 masses 10 g	1398
10 masses 25 g	1399
10 masses 50 g	1066



1352 - 1398 - 1399 - 1066

Slotted masses

9 masses 10g + holder 10g.	1309
9 masses 20g + holder 20g.	1310
9 masses 50g + holder 50g.	1311
9 masses 100g + holder 100g.	1312
9 masses: 1g (1pc), 2g (2pcs), 5g (1pc),	
10g (1pc), 20g (1pc), 50g (1pc), 100 g (1pc),	
200 g (1pc) + holder 50 g.	1353



1309 - 1310 - 1311 - 1312 - 1353

Rod for lever with stand

1354

Supplied with rectangular base, metal rod, pivot, bosshead, and 2 slotted masses code 1310.



1354

Rod for levers

1152

Aluminum rod, with holes and pivot. Length: 38 cm.

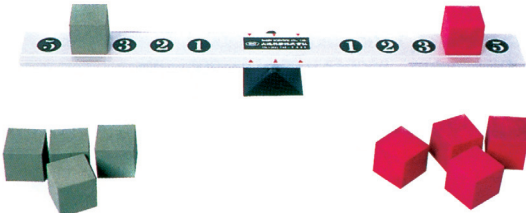


1152

Unequal-arms scale

1313

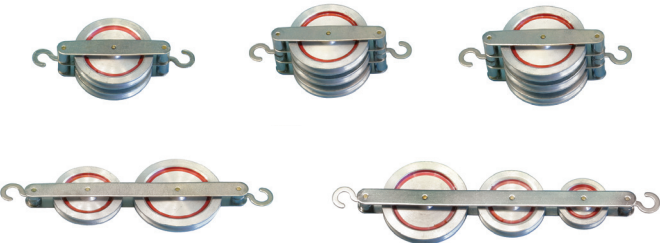
For experiments on the equilibrium of a lever. It is supplied with 10 masses.



1313

Aluminum pulleys

Simple pulley Ø50 mm	1058
Parallel of two pulleys Ø50 mm	1059
Parallel of three pulleys Ø50 mm	1060
Series of two pulleys Ø40 - 50 mm	1061
Series of three pulleys Ø30 - 40 - 50 mm	1064



1058 - 1059 - 1060 - 1061 - 1064

Plastic pulleys

Simple pulley Ø50 mm	1227
Parallel of two pulleys Ø50 mm	1160
Parallel of three pulleys Ø50 mm	1266
Series of two pulleys Ø 50 - 40 mm	1228
Series of three pulleys Ø30 - 40 - 50 mm	1127
Pulley Ø35 mm with perpendicular axes Ø6 mm	1009
Pulley Ø50mm with longitudinal axes Ø8 mm	1157



1227 - 1160 - 1266 - 1228 - 1127 - 1009 - 1157

**Force Table**
**1166**

It allows you to study vectorial forces composition.  
Graduated metal disk, 400mm diameter. Height 500mm.

**Equipment supplied**

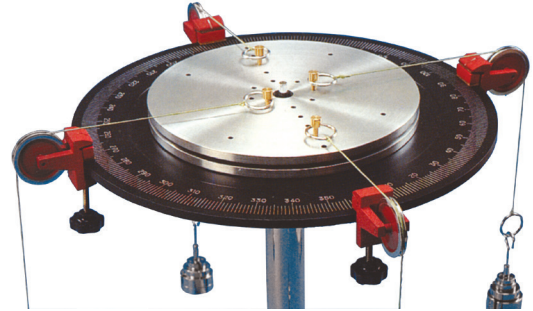
4 Pulleys	4 Slotted masses 50 g	
4 Masses holder 100 g	4 Slotted masses 20 g	4 String with rings
4 Slotted masses 100 g	4 Slotted masses 10 g	


**1166**
**Spool of thread - 50 m**
**8153**

Made of light, twisted nylon, it's thin and flexible.


**8153**
**Disk of the momenta**
**1380**

Accessory of our code 1166. It allows the study the equilibrium of the momenta.


**1380**
**Equilibrium forces composition device**
**1032**

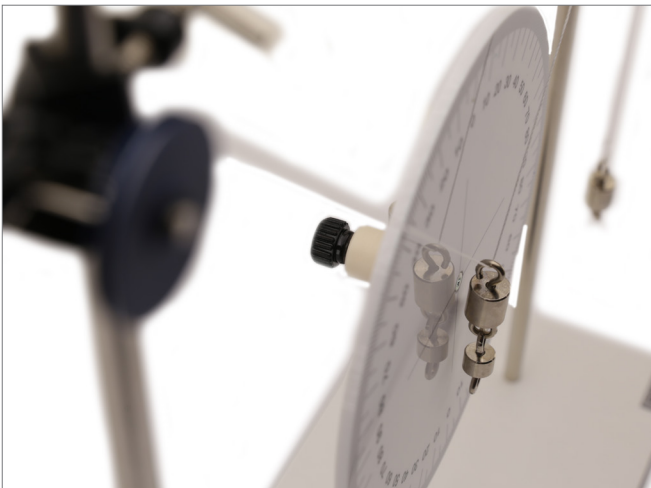
The equilibrium forces composition device allows the examination of the physics laws of concurrent forces composition - the parallelogram law and the parallel forces law.  
Dimension: 45x17x60 cm.

**Topics**

- Forces composition
- Concurrent forces
- Parallel forces

**Equipment supplied**

- 1 String
- 1 Base with rod
- 2 S-shaped hooks
- 2 Double bossheads
- 2 Fixed pulleys
- 1 Rod with holes
- 6 10 g masses with double hook
- 6 25 g masses with double hook
- 1 200 mm diam. protractor
- 2 Threaded vertical rods with washers and screws
- 1 Transversal rod with handwheels
- 1 Rectangular base


**1032**

## Levers and pulleys experiment kit

12 performable experiments

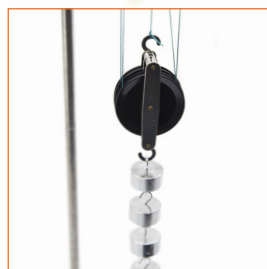
1341

### Topics

- The spring scale
- How to measure a weight or a force
- Let's learn how to use forces in a wise way
- Equilibrium of a rod pivoted on its centre
- Simple machines
- Levers
- The fixed pulley
- The mobile pulley
- Simple hoist
- Pulleys in parallel
- Pulleys in series

### Equipment supplied

- |                              |                       |
|------------------------------|-----------------------|
| 1 Rod with hook              | 1 Lever rod           |
| 1 String                     | 2 Pulleys in parallel |
| 1 Folding metal rod 70 cm    | 2 Simple pulleys      |
| 1 Pivot with wing-nut        | 2 Pulleys in series   |
| 1 Tripod base                | 1 Spring scale 250 g  |
| 1 Bosshead 13 mm             | 1 Box                 |
| 1 10 masses 50g with 2 hooks |                       |



1341

## Momenta apparatus

1167

The Momenta apparatus is composed of an aluminium disk rotating around a central pivot.

Different masses can be hung up on the disk in different positions.

Disk diameter 25 cm.

Equipment supplied: 10 masses 10 g; 10 masses 25 g; 4 strings.



1167

## Multiple pulley

1362

It is composed of a group of 4 coaxial and solidal pulleys, whose diameter is  $\varnothing 2$ ,  $\varnothing 4$ ,  $\varnothing 8$  and  $\varnothing 12$  cm. It is supplied with a support.

Rod and clamp are not included.



1362

## Precision inclined plane

1103

A spring scale (1N/0,01N) and a protractor are included in this kit. Using these instruments you can directly read inclination and force's value.

Plane dimensions: 95 x 500 mm.

### Equipment supplied

- 1 Spring scale 100 g
- 1 Glider
- 2 Masses 50 g
- 4 Masses 10 g
- 1 Inclined plane with protractor



1103

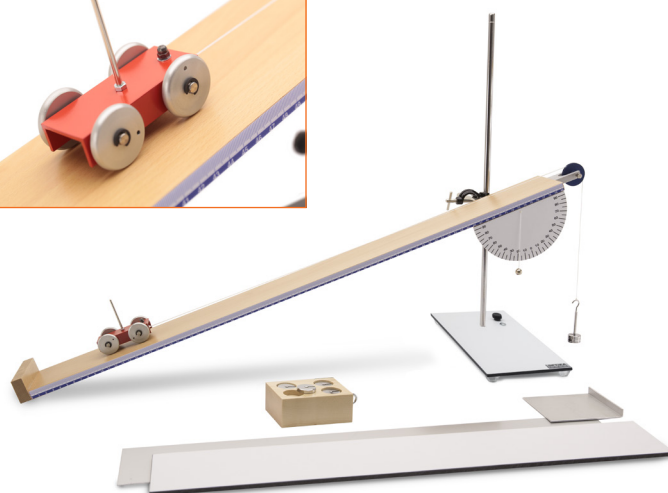
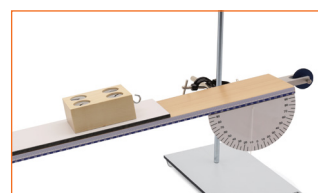
## Friction inclined plane

1291

The Friction inclined plane apparatus enables investigation of the physics laws of equilibrium forces, the laws of sliding friction and also the determination of its coefficient. Plane dimension: 800 x 100mm.

### Equipment supplied

- 1 Metal rod 50 cm
- 1 String
- 1 Bosshead
- 1 Linear ruler
- 9 slotted masses 10g + holder 10g
- 9 slotted masses 20g + holder 20g
- 1 Base
- 1 Inclination protractor
- 1 Wooden plane with pulley
- 1 Aluminium plate
- 1 Fibreboard panel
- 1 Aluminium plane with angle
- 1 Low-friction glider
- 1 Wooden block



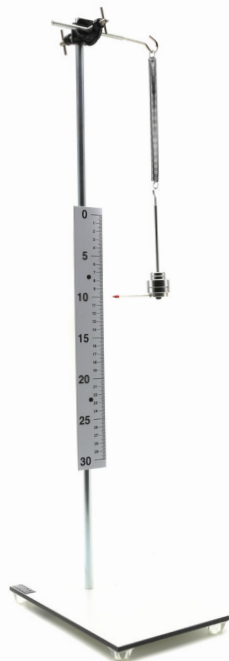
1291

**Hooke's law apparatus**
**1111**

It allows you to verify that, within specific limits, the lengthening of a spring is proportional to the intensity of the applied force. The graduated scale has 1 mm division and the perfectly balanced masses-holder has an index which can rotate to consent the perfect alignment with the graduated scale.

**Equipment supplied**

1 Rod with hook  
1 Bosshead  
1 Spring  $\varnothing$  20 mm  
1 Base for rod  
1 Metric rod  
4 Slotted masses 50 g  
4 Slotted masses 10 g  
1 Masses holder with position indicator  
1 Spring  $\varnothing$  10 mm; L = 75 mm  
1 Spring  $\varnothing$  10 mm; L = 60 mm  
1 Spring  $\varnothing$  10 mm; L = 50 mm  
1 Spring  $\varnothing$  20 mm; L = 60 mm  
1 Linear rule


**1111**
**Flexible parallelepiped**
**1077**

It consists of an aluminium framework with flexible corners; in this way it maintains parallel bases as it undergoes deformation. By using the plumb-line it is possible to verify the equilibrium conditions of solid bodies standing on a plane.


**1077**
**Instrument used to study equilibrium states**
**1078**

The equilibrium forces of physics can be demonstrated by moving the two lateral masses in this device. The center of gravity of the system can be moved to different positions, demonstrating how the equilibrium depends on the position of the center of gravity with respect to the basement point.  
Dimensions: 20x28 cm.


**1078**
**Set of 5 springs with index**
**8179**

Features:

1° K= 2,4 N/m;	capacity: 0,5N
2° K= 5 N/m;	capacity: 1N
3° K= 9,8 N/m;	capacity: 2N
4° K= 14,5 N/m;	capacity: 3N
5° K= 39,2 N/m;	capacity: 5N


**8179**
**Set of 4 springs and 1 elastic band**
**8155**

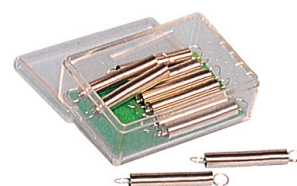
Suitable for perform experiments on Hooke's law and on elastic oscillations. Two of the springs have the same features in order to be used in series or in parallel.


**8155**
**Bodies center of gravity**
**1195**

Thanks to the plumb line, it is possible to determine the vertical passing through the suspension point. Repeating the experiment in several points you will find the center of gravity of the figures supplied.


**1195**
**Set of 10 springs**
**8158**

With the same elastic constant and same length.  
Elasticity constant: K= 6,5 N/m.


**8158**



## Equilibrium, forces, momenta and machines

1123

Set for experiments on solid statics.

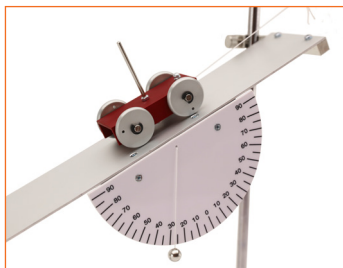
*15 feasible experiments*

### Topics

- Composition of concurrent forces
- Decomposition of a force
- Composition of parallel concurring forces
- Composition of parallel discording forces
- The center of gravity
- Hooke's law
- Equilibrium of a bar
- Equilibrium of momenta
- Levers
- Fixed pulley
- Mobile pulley
- Simple hoist
- Hoist with a couple of pulleys in parallel
- Hoist with a couple of pulleys in series
- Inclined plane

### Equipment supplied

- |                                 |                                  |
|---------------------------------|----------------------------------|
| 4 Bosshead 6 mm                 | 1 Glider                         |
| 10 Modular metal rods 35 cm     | 1 Mobile pulley                  |
| 2 Hooked rod                    | 2 Couple of pulleys in series    |
| 2 Spring                        | 1 Spring scale 250 g – 2.5 N     |
| 2 S shaped hook                 | 2 Series of 10 g masses          |
| 3 Bosshead                      | 1 Series of 20 g masses          |
| 3 Fixed pulley                  | 1 Momenta disc with pin          |
| 1 Centre of gravity foil        | 1 Metal rod 50 cm with reduction |
| 1 Spiral spring                 | 1 Protractor with pin            |
| 1 Linear ruler                  | 1 Inclined plane with protractor |
| 1 Rod for levers with pin       | 2 Bases for frame                |
| 2 Couple of pulleys in parallel | 1 Holder for frame               |



1123

## Static kit for magnetic board

1328

Equipment to perform experiments on solid statics.

Blackboard not included. We recommend the purchase of the code 1329.

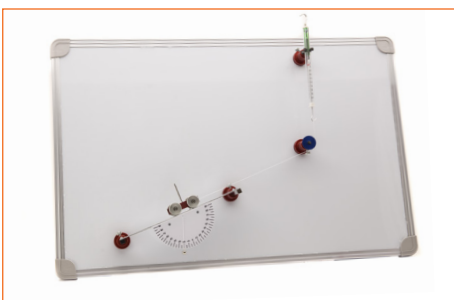
*20 feasible experiments*

### Topics

- Composition of concurrent forces
- Composition of parallel forces
- Decomposition of a force
- Elastic forces
- Hooke's law
- The centre of gravity
- Equilibrium of a pivoted rod
- Equilibrium of momenta
- Levers
- Inclined plane
- The grazing friction
- Pulleys
- Pulleys in parallel
- Pulleys in series
- Combinations of simple machines

### Equipment supplied

- |   |                                     |
|---|-------------------------------------|
| 4 Magnetic holders                          | 1 "S"-shaped hook                   |
| 3 Rods with hook                            | 1 Spring scale 200 g                |
| 2 Mobile pulleys                            | 2 Fixed pulleys                     |
| 2 Series of slotted masses 10 g with holder | 1 Protractor 360°                   |
| 2 Slotted masses 50 g                       | 1 Slotted masses 20g with holder    |
| 1 Rod for levers with pivot                 | 1 Metal sheet for center of gravity |
| 1 Spring with index                         | 2 Triple pulleys in series          |
| 1 Moments' disk                             | 1 Linear ruler                      |
| 2 pulleys in series                         | 1 Bosshead for spring scale         |
| 3 pulleys in series                         | 1 Inclined plane with protractor    |
| 1 Wooden block                              | 1 Glider                            |
| 2 Strings                                   | 1 Box                               |



1328

## Magnetic board with stand

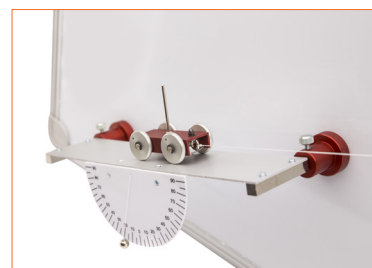
1329

With white board surface in order to draw diagrams and write formulas.

It can be assembled on a table in vertical position.

Dimensions: 90x60 cm.

Ideal complement for the statics kit (code 1328).



1329