Stand equipment for simple, easily understood and stable experiment set-ups, e.g. for investigating mechanical oscillations and waves using sensors from the Sensors “Mechanical Oscillations” set, 230 V, 50/60 Hz (1012850) or 115 V, 50/60 Hz (1012851).

Includes the SW base plate as a secure base that will not tip, with three specially threaded sockets for attaching stand rods with external and internal threads in such a way that they cannot lean over and with the capability of being extended using a second rod with external thread. Two double clamps are provided for attaching the SW cross bar or additional stand rods of 10 mm diameter.

The SW cross bar acts as a multi-functional mounting piece to be placed between rods screwed into the base plate and designed for setting up a Wilberforce pendulum, a physical pendulum or a string pendulum in conjunction with the dynamic force sensors from the sensors set.
2. Contents
1 SW base plate
2 Stand rods with internal and external thread
2 Stand rods with external thread
2 SW double clamps
1 SW cross bar

3. Technical data

<table>
<thead>
<tr>
<th>Component</th>
<th>Dimensions</th>
<th>Weight</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base plate</td>
<td>345 x 245 x 15 mm</td>
<td>2.1 kg</td>
<td>Steel sheet, 2 mm, coated</td>
</tr>
<tr>
<td>Stand rods</td>
<td>400 mm x 10 mm diam.</td>
<td>0.25 kg</td>
<td>Stainless steel, non-magnetic</td>
</tr>
<tr>
<td>Cross bar</td>
<td>275 x 75 x 20 mm</td>
<td>0.18 kg</td>
<td>Stainless steel sheet, 2 mm</td>
</tr>
<tr>
<td>Double clamps</td>
<td>60 x 20 x 20 mm</td>
<td>0.064 kg</td>
<td>Aluminium, anodised</td>
</tr>
</tbody>
</table>

4. Operation

4.1 Set-up without sensors
The following additional equipment is necessary in order to set up a coil spring pendulum:
1 Stand rod, 280 mm, 10 mm diam. 1012848
1 Coil spring, 1 weight

- Screw the stand rods with both external and internal threads into the outer threaded sockets of the base plate.
- Extend both rods by screwing rods with external thread only onto the ends of them.
- Attach double clamps near the top of both stand rods and turn them to point inwards.
- Set up stand rod, 280 mm, 10 mm diam.
- Suspend a coil spring and weight from the top.

4.2 Set-up for mechanical pendulums with sensors
The following additional equipment is necessary in order to carry out the experiments:
1 Sensors “Mechanical Oscillations” @230V 1012850
or @115V 1012851
1 USB Oscilloscope 2x 50 MHz 1017264
1 PC, operating system Win XP, Vista, Win 7 or
1 Analogue oscilloscope 2x 30 MHz 1002727
1 Supplementary Kit “Wilberforce Pendulum” 1012844
or 1 Supplementary Kit “String Pendulum” 1012854
or 1 Supplementary Kit “Physical Pendulum” 1012853

Notes on assembly:
See instruction manuals for the pendulums listed.

5. Disposal

- Packaging and components should be disposed of, where necessary, at local recycling centres.
Fig 2 Set-up for a Wilberforce pendulum with sensors