

**TS 705****PORTABLE INSTRUMENT FOR  
DIRECT SHEAR ON ROCKS**

This shear box has been designed to receive irregularly shaped samples with surfaces measuring up to 115 x 125 mm or cores with a maximum diameter of 102 mm. The lower half of the box is connected to two hydraulic rams which generate the shearing force (in both directions) and the upper half supports the ram that applies the load at a right angle to the failure surface. The horizontal and vertical actuators are connected to two manually-operated hydraulic pumps. During the test the normal stress and the shearing stress are read on two independent dial gauges calibrated in engineering units; if the measurement of the shear deformation is required an appropriate dial gauge can be mounted on the support (see item DV 922 below).

**Shear box and fittings:**

Each unit comprises the following:

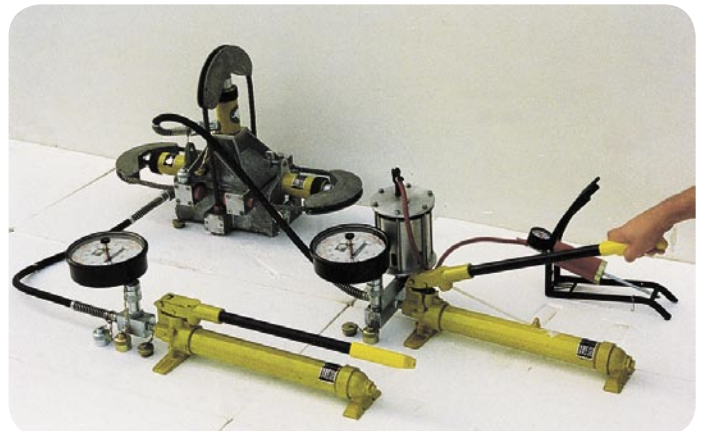
- two horizontal rams for shearing (one in each direction);
- a vertical ram;
- two standard dial gauges fitted with quick couplings, full scale 50 kN/11,000 lbf divisions every 1 kN/200 lbf;
- two manual pumps with all the necessary hydraulic parts including the adjustable device for the maintenance of a constant pressure in the vertical ram;
- attachment for a horizontal deformation gauge;
- two aluminium/Perspex moulds with relative clamps.

**Accessories and spare parts:**

All the dial gauges below are calibrated in relation to the specific thrust section of the rams, they therefore give a direct readout of the stress on the sample.

These dial gauges also have a needle that records the peak and quick couplings.

<b>TS 705/5</b>	Basic dial gauge, double scale up to 50 kN and 11,000 lbf with 1 kN/200 lbf steps
<b>TS 705/4</b>	Dial gauge with double scale up to 25 kN and 5,500 lbf, with 0.5 kN /100 lbf steps
<b>TS 705/3</b>	Dial gauge with double scale up to 11 kN and 2,500 lbf, with 0.2 kN/50 lbf steps
<b>TS 705/2</b>	Dial gauge with double scale up to 5 kN and 1,250 lbf, with 0.1 kN/25 lbf steps
<b>TS 705/1</b>	Dial gauge with double scale up to 3 kN and 750 lbf, with 0.05 kN/10 lbf steps

**TS 715****TS 705****TS 705/S****DV 908****ROCK PICK POINTED TIP (28 cm)****DV 908/Z****ROCK PICK CHISEL EDGE****DV 908/Z****DV 908****T 628/E****SHEAR DEFORMATION  
MEASUREMENT DIAL GAUGE**

Travel 30 mm, divisions 0.01 mm, including the rear attachment.

**TS 705/S****MOULD IN ALUMINIUM/PERSPEX**

For the preparation of samples. Complete with clamp.

**TS 705/A**

**SAMPLE CASTING PLASTER**  
50 kg pack of plaster for casting samples into mould assembly.