

➤ **World leading
supplier of
engineering
teaching
equipment**

HSM58 Universal Testing Machine

A robust and simple-to-operate bench top unit suitable for the following study areas:

- Young's Modulus
- Hooke's Law
- Poisson's Ratio
- Modulus of Elasticity
- Shear Modulus
- Material Hardness (Brinell Method)
- Beam Bending Theory
- Planar Moment of Inertia
- Deep Drawing



We pride ourselves on being at the forefront of engineering education and the leading quality provider in the market.

Our high-quality range of teaching equipment is built to last – providing trouble-free, repeatable usage that lowers the whole-life cost.

Strength of materials experiments

The study of strength of materials is a fundamental subject area for most engineering degrees.

The HSM58 Universal Testing Machine is a modular, flexible, compact, and safe materials tester that allows students to conduct up to eight experiments on four different materials types.

The results of these experiments allow students to gain a thorough understanding of materials properties and how the performance of these affects design. The fully enclosed unit allows safe 360 degrees viewing, maximising visibility for large class sizes and enhancing the learning experience.

Learning capabilities:

- Tensile and compression testing
- Recording of stress-strain
- Modulus of elasticity testing
- Deep draw testing*
- Three-point bending*
- Hardness testing*
- Percentage elongation
- Shear (unsymmetrical, symmetrical shear both supported and unsupported)*

*Options (at extra cost)

A number of optional extras and accessories are available.



The HSM58 base unit ships with the following items:

- Main base
- Safety guard
- Two tensile grips
- Two compression plates
- One linear displacement transducer
- One electronic extensometer
- Data acquisition system to display data relating to elongation, extension and applied force
- 40 tensile test specimens (aluminium, brass, steel and titanium)