

A sturdy bench top mounted unit for studying the effect of creep on different material test specimens. Necked test specimens are held vertically in position on special clamps, which do not induce bending during loading.

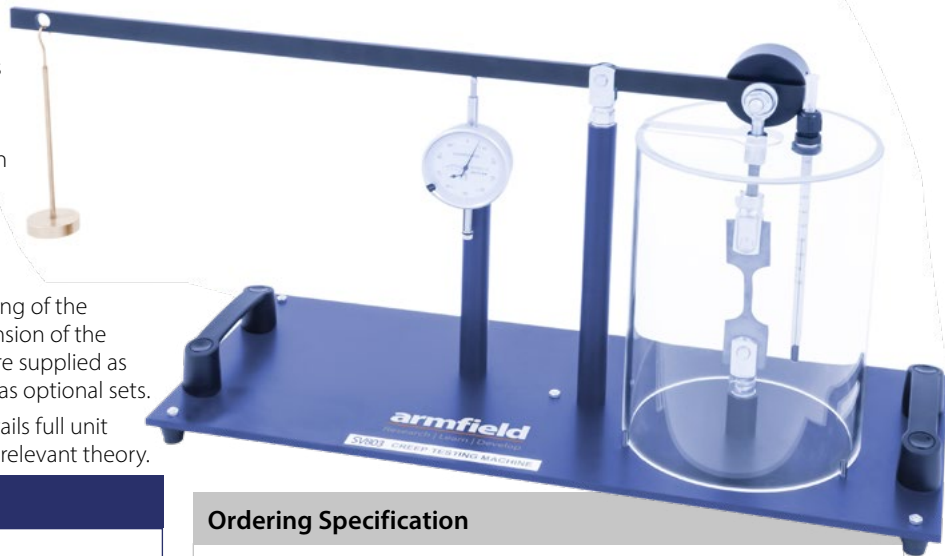
A lever arm transmits the load from a load hanger and weights into the specimen and the lever arm has a counter balance weight to ensure the lever arm self-weight is calibrated out.

Surrounding the test specimen is a transparent specimen guard. Its primary function is to allow the surrounding specimen temperature to be adjusted hot or cold.

The temperature can be read using the thermometer supplied and the temperature controlled using a special thermal pack. The specimen cover also allows easy viewing of the specimen during creep. A dial gauge measures the extension of the specimen during testing. Specimens in polypropylene are supplied as standard. Specimens in nylon and PVC are also available as optional sets.

A full technical Instruction manual is supplied, which details full unit operation, experimental technique, example results and relevant theory.

A BENCH TOP MOUNTED UNIT FOR STUDYING THE AFFECT OF CREEP ON DIFFERENT MATERIAL TEST SPECIMENS



Experimental content	
▶ Creep fracture load	
▶ Temperature effect on creep rate and failure	
▶ Material variation on creep rate and failure	
▶ Load variation on creep rate and failure	

Features / benefits	
▶ Bench top unit	
▶ Balanced loading arm	
▶ 0 – 25mm dial gauge for specimen extension	
▶ Specimen enclosure for temperature control and safety	
▶ Plastic specimens supplied	
▶ Hanger and weights supplied	
▶ Additional specimen available	
▶ Customer specific specimens can be fitted easily	

Related laws	
▶ Creep	▶ Temperature effect
▶ Failure	▶ Elastic strain
▶ Tensile testing	▶ Primary, secondary, tertiary periods
▶ Duration	▶ Material composition

Operational conditions	
▶ Storage temperature: -10°C to +70°C	
▶ Operating temperature range: +10°C to +50°C	
▶ Operating relative humidity range: 0 to 95%, non-condensing	

Overall dimensions	
Length	0.700m
Width	0.360m
Height	0.520m
Packed and crated shipping specifications	
Volume	0.17m ³
Gross weight	22kg

Ordering Specification	
▶ SV803 Creep Testing Machine	▶ 1 x Miniature ice pack
▶ 10 x Specimen	▶ 1 x Thermometer
▶ 1 x Load hanger	▶ Weights: 2 x 0.1N, 4 x 0.2N,
▶ 1 x Hex wrench set	3 x 1N, 3 x 2N, 2 x 5N
▶ 1 x Cold/Hot pack	

Requirements	Scale
▶ Sturdy benchtop	

Recommended Accessories / equipment	
▶ SV803-1: Additional 10 Nylon Test Specimens	
▶ SV803-2: Additional 10 PVC Test Specimens	
▶ SV803-3: Additional 10 Polypropylene Test Specimens	

Technical specification	
▶ Loading arm: 4:1 loading ratio	
▶ Polypropylene specimens (10 each)	
▶ Specimen: 22mm gauge length, 4.8(W) x 1.6(t) mm nominal	
▶ Load hanger: 1N	
▶ Dial gauge, 0.01mm resolution, 25mm travel	
▶ Thermometer	
▶ Transparent specimen cover	
▶ Hot and cold packs	

Ordering codes	
▶ SV803: Creep Testing Machine	
▶ SV803-1: Additional 10 Nylon Test Specimens	
▶ SV803-2: Additional 10 PVC Test Specimens	
▶ SV803-3: Additional 10 Polypropylene Test Specimens	

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Armfield standard warranty applies with this product

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