

FOAM TEST BATHS

14020-5 SETAFOAM DUAL TWIN FOAM TEST BATHS

ASTM D892; IP 146; BS 2000 Part 146; ISO 6247; NF T60-129; FTM 791 3211; JIS K2518

- High and low temperature baths
- Temperature range ambient to 100°C
- Up to two simultaneous tests per bath
- Two pre-heating stations per bath
- Integral flowmeters and regulators
- Two integral normalising coils

A pair of highly transparent water baths for detecting foaming characteristics in lubricating oils, which could cause inadequate lubrication, overflow and cavitation.

The instrument comprises a high temperature (93.5°C) and a low temperature (24°C) bath, each with the capacity to hold four 1000ml graduated glass cylinders. Each bath assembly comprises an inner glass bath contained in a polycarbonate safety vessel, a top mounted thermostir unit and a side mounted module containing two calibrated flowmeters with control valves and protection shields. Integral back-lighting with an opaque reflector aids sample visibility and foam measurements. The low temperature bath also has a cooling coil for use when the ambient temperature exceeds the required bath temperature, and two air normalising coils to cool the air emerging from the high temperature bath test cylinders prior to passing to external volume meters.

The thermostir units provide precision temperature control to within ±0.5°C across a temperature range of ambient to 100°C, and feature a low fluid level alarm. Easy to remove stoppers ensure air tight seals and central location of the diffusers. All air connections are via quick release connectors, and the diffuser tubes can be used with either Mott diffusers or Norton stones.

SUPPLIED WITH: four flowmeters, four graduated 1000ml cylinders and stoppers, interconnection tubing and junctions, mains leads and instruction manual.

Note: Air supply (Seta Air Pump 14019-0) and diffusers required.



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



14021-0
Norton Stone

14023-0
Mott Diffuser

SPECIFICATIONS

Outer:	Polycarbonate
Inner:	28 litre, borosilicate glass
No of Baths:	2
No of Cylinders:	4 (2 per bath)
Cylinders:	1000ml, borosilicate glass, graduated
Diffuser:	Mott or Norton Stone
Flowmeters:	2 per bath, 94 ±5ml/min
Control Units:	Thermostir, 1 per bath
Temp range:	Ambient to 100°C ±0.5°C
Supply Voltage:	110/120V, 60Hz 220/240V, 50/60Hz
Power:	3kW
Size (HxWxD):	70 x 48 x 40cm
Weight:	50kg



14020-5 with Accessories

ACCESSORIES - Dual Twin Foam Baths

REQUIRED

One diffuser/stone is required per Graduated Cylinder. Select either;

14021-0 VERIFIED NORTON STONE AND TUBE, porosity and permeability verified.
 VERIFICATION CERTIFICATE (Works)

OR

14023-0 VERIFIED MOTT DIFFUSER AND TUBE, stainless steel, porosity and permeability verified.
 VERIFICATION CERTIFICATE (Works)

14015-0 DRYING TOWER, 300mm high, for ASTM D892.

14019-0 AIR PUMP AND REGULATOR.
 Voltage: 110/120V, 60Hz
 220/240V, 50Hz

22750-2 DIGITAL STOPWATCH, hand-held, 0.1s resolution (for details see page 141).

THERMOMETERS:

ASTM12C/IP64C or ASTM12F/IP64F

Note: Two required (one for each bath)

Other items which may be required include: Dessicant (Silica Gel); Solvents

OPTIONAL

14020-002 GRADUATED CYLINDER, 1000ml, borosilicate glass, pack of 2.

14020-006 CYLINDER FOOT, to allow the graduated cylinder to stand upright on a bench-top, pack of 2.

14026-0 TEMPERATURE PROBE AND INDICATOR, for monitoring sample temperature.

14029-0 RACK, FOAM CYLINDER, allows vessels to be held for purposes such as draining or cooling, includes drip tray.

14181-2 QUAD LOW TEMPERATURE BATH CONVERSION KIT, to convert from 2 cylinders to 4 cylinders.

14191-2 QUAD HIGH TEMPERATURE BATH CONVERSION KIT, to convert from 2 cylinders to 4 cylinders.

15650-0 WATER PURIFIER, to minimise scale production. Suitable for domestic water supply, 60l/hr max. flow. Comprises disposable cartridge with capacity for 960 litres soft water or 180 litres hard water.

99300-2 MINI LOW TEMPERATURE BATH/CIRCULATOR, to provide chilled water if local supply exceeds 18°C, (for details see page 139).

45000-0 SETAPLUS EXTENDED 12 MONTH WARRANTY

CALIBRATION, VERIFICATION & TRAINING

14010-4 SETA VOLUME METER, for measuring the volume of air at 24°C which has passed through one diffuser stone. Tank capacity of 2.5 litres. Note: One required for each simultaneous test.

14028-4 VERIFICATION KIT - FOAM, (for details see page 103).

Norton Stone/Mott Diffuser verification service available.

CONSUMABLES - Dual Twin Foam Baths

2 Years/2000 Tests		Qty
14000-002	GRADUATED CYLINDER, pack of 2	2
14020-403	DICHROIC LAMP, pack of 4	1

FOAM TEST BATHS

14028-4 VERIFICATION KIT - FOAM

ASTM D892 Appendix; D6082; IP 146 Appendix; ISO 6247;
NF T60-129; JIS K2518

- Verify maximum pore diameter
- Verify permeability
- Suitable for Mott Diffusers and Norton Stones

An apparatus to quickly verify the maximum pore diameter and permeability of Mott diffusers and Norton stones used in foam baths.

Comprising an air pump, a test selector valve, two air control regulators, glassware, digital manometer and a flowmeter, all mounted on a chassis with the necessary manifolds and interconnecting tubes.

For pore diameter verification the test selector valve directs air via the 'porosity' air control regulator to the diffuser/stone, which is immersed in water in a 250ml glass measuring cylinder. The digital manometer reads the air pressure required for a bubble to appear at the diffuser/stone.

During permeability verification the test selector valve directs air via the 'permeability' air control valve to the diffuser/stone which is in a 250ml Buchner flask, the outlet of which is connected to the flowmeter. The flowmeter shows the airflow when the digital manometer shows a specified air pressure upstream of the diffuser/stone.

SUPPLIED WITH: air pump, glassware, manometer, flowmeter, all necessary tubing, mains lead and instruction manual.



14028-4 (Mott Diffuser not supplied)

ACCESSORIES - Verification Kit - Foam

REQUIRED

22750-2 DIGITAL STOPWATCH, hand-held, 0.1s resolution,
(for details, see page 141).

CONSUMABLES - Verification Kit - Foam

2 Years/2000 Tests	Qty
14028-202 FLASK, 250ml, glass	1
14028-203 CYLINDER, 250ml, glass	1
16720-002 SILICONE RUBBER TUBE, 5m	1



CALIBRATION CERTIFICATE (UKAS) - MANOMETER & FLOWMETER

SPECIFICATIONS

Voltage:	110/120V, 60Hz 220/230V, 50/60Hz
Power:	300W
Size (HxWxD):	60 x 45 x 28cm
Weight:	8.6kg

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DEMULSIFICATION

16500-0 SETA DEMULSIFICATION APPARATUS

IP 19; BS 2000 Part 19; DIN 51 589-1; NF T60-156

Comprises a glass bodied steam generator, emulsifying bath, separating bath and oil container.

SUPPLIED WITH: steam piping, auxiliary steam line, screw clips, connecting tubes and instruction manual.



16500-0 (Stand & clamp supplied separately)

SPECIFICATIONS

Size (HxWxD):	45 x 35 x 35cm
Weight:	3kg

ACCESSORIES - Demulsification Apparatus

REQUIRED

- 10720-0 SETA BURNER, for coal gas.
OR
10740-0 SETA BURNER, for LPG.
OR
10750-0 SETA BURNER, for natural gas (Methane).
OR
25000-3 SETA-HOT, 1000W electric heater with variable heat control,
(for details see page 137).
24500-0 SETA STEEL STAND
24520-0 CLAMP, 2 to 90mm diameter capacity.
24650-2 BOSSHEAD, to fit 24520-0.

THERMOMETERS:

IP3F or IP3C.

OPTIONAL

- 22750-2 DIGITAL STOPWATCH, hand-held, 0.1s resolution,
(for details see page 141).