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Item # 1077, Model TR 2200 Temperature Retraction Testers

Programmable, with liquid nitrogen control

The Benz TR 2200 temperature retraction tester measures the effects of low temperature on rubber, plastic and other elastomeric materials.

Meeting and exceeding ISO 2921 and ASTM D-1329, the TR 2200 allows the accurate evaluation of crystallization and the comparison of rubber and rubber-like sample viscosity at low temperatures.



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Specifications

Compatible Program	Windows ME Windows NT Windows XP Windows 95 Windows 98 Windows 2000
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Standard	ASTM D-1329 ISO-2921
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Frame

Frame Depth	25 in 63.5 cm
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Frame Width	21 in 53.5 cm
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Frame Height	32 in 82 cm
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Frame Weight	100 lb 45 kg
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Temperature

Temperature Controllers	P.I.D.
Temperature Range	-125 to -100 °F -100 to -35 °C
Temperature Accuracy	± 0.5 °F 0.2 °C

Power

Voltage	115 V
Frequency	60 Hz
Phase	1
Note for Power	Other systems available

Computer System

- IBM-compatible PC
- CPU, HDD, RAM, CD ROM floppy. ALL CURRENT STANDARDS
- SVGA color monitor

Software

- Library storage of data by user defined formats.
- Package includes mean, std. deviation and coefficient of variation, with maximum, minimum, and histogram automatically calculated after the second test.
- Data can be exported to popular spreadsheets and statistical programs.
- Windows 95, 98, NT, 2000, ME and XP compatible program.

General Description

An operator stretches a sample, often to 50%, 100%, 150% or 200% of the original length, cools it in a bath solution like methanol or silicone grease, then releases the sample and allows it to retract.

Windows-compatible Benzwin software, supplied free with the TR tester, allows retraction point calculation and comparison. Readings are presented real-time and saved.

A single sample can be analyzed in different conditions, and different samples can be compared.

The Benz TR 2200 reports an elastomer's low limit operating temperature. It also details a sample's percentage of retraction at different temperatures. And it allows the determination of a temperature range in which a sample is elastic.

The Benz TR 2200 is often used with a Benz BPT 2100, a high accuracy brittlepoint tester, to gauge a material's suitability for low temperature use.

A special attribute of the Benz TR 2200 is its ability to be programmed so that the operator can select not only temperature retraction points but the end point of testing, shortening testing time.

A standard feature, not an option, is liquid nitrogen control, which results in highly accurate controlled temperatures and reduces operator intervention.

Sample lengths changes are determined to an accuracy of ± 0.001 inches.

The TR 2200 is unique sample holder reduces temperature deviation when a sample is immersed in its bath.

Attractively constructed of hard-coated anodized aluminum and stainless steel, the Benz TR 2200 carries an extensive one-year parts and labor warranty.

It operates at 110/220 volts, 1 amp AC power and needs only 3 square feet of counter space.