CEAST 50 years 1953 - 2003

CLASH & BERG

CEAST

DESIGN AND PRODUCTION OF INSTRUMENTS AND APPARATUS FOR QUALITY CONTROL ON MATERIALS

These instruments are made in compliance with CE health and safety requirements

CE

Clash & Berg - code 6550.000

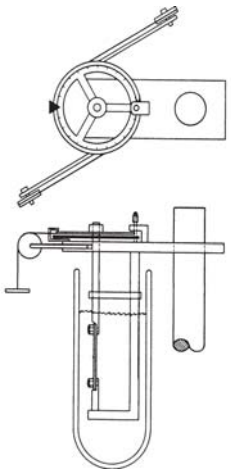

Fig. 1
From
ASTM D 1043
Standard

The Clash & Berg Torquemeter 6550.000 is specifically designed for determining the apparent rigidity torsional modulus «G», or tangential apparent modulus.
Once «G», and the Poisson ratio of the material being tested are known, the apparent modulus of longitudinal elasticity, also called Young's modulus, can be calculated. Both are apparent modulus, and they are measured as a direct function of the test temperature.
Determinations are carried out on specimens, prepared either by die punching or contour milling, of plastics thermoplastics-rubber-elastomers and other similar materials.
The testing principle specifies that the specimen must be firmly held by two clamps, one fixed, one rotating; the latter to be directly connected to the system which applies torque to the specimen.
The reading system for regular variation is connected to the rotating clamp.
The test takes place in an insulated cell.

Standards

Designed and built to meet the following standards:
ASTM D 1043 - ISO 458 - DIN 53447 - BSI 2782 Method 153A
and others equivalent.

Technical Characteristics

- Working temperature range: - 70 to +250°C
- Temperature regulator: - PID temperature controller "Eurotherm" in connection with a Pt100 thermoresistance
- Test performance
  - semiautomatic, after preset temperature has been reached and held for 3 min and 15 s
  - automatic brake-release of load systems
  - automatic angle reading after 5 s and optical signal of cycle end
- Thermic protection - fixed insulated lid to operate up to +250°C
- Test weights and torgue - the test weights are made up by the following couples of weights and the corresponding output torgue:
  - 4.4 g - 0.01 Nm
  - 13.2 g - 0.02 Nm
  - 39.6 g - 0.05 Nm
  - 86.6 g - 0.10 Nm
  - 171.6 g - 0.20 Nm
  - 215.6 g - 0.25 Nm
- Specimen size
  - thickness from 1 to 5 mm
  - width from 6 to 6.4 mm
- Specimen clamps span - adjustable between 38 and 100 mm
- Heating system - by armoured resistance elements
- Cooling system - by Carbon Dioxide or by circulation of a cooling fluid in a thermic-exchange coil produced by a separate cryostat

Options

- Interchangeable thermometers - with the following scale:

– 80 to + 20 °C - 1°C div.	code 0100.021
+ 10 to + 110 °C - 1°C div.	code 0100.022
+ 100 to + 200 °C - 1°C div.	code 0100.023
+ 190 to + 290 °C - 1°C div.	code 0100.024

- Couples of weights

- 3 g	code 6500.106
- 8 g	code 6500.107
- 13 g	code 6500.108
- 18 g	code 6500.109

- Hollow punch ASTM D 1043

- 6.35 x 63.5 mm	code 8036.000 - 8036.020
- 6.35 x 125.4 mm	code 8081.000 - 8081.020

Technical Data

• Overall dimensions (basic apparatus)(LxDxH)	490 x 400 x 1080 mm	• Power	1200 W
• Overall dimensions (control box)(LxDxH)	400 x 290 x 230 mm	• Paint	blue RAL 5014 - gray RAL 7035
• Supply	230 V - 50 Hz - Singlephase		

"Due to the continuous development policy of CEAST's Research and Development Department, changes may be introduced without notice"

CEAST
www.ceast.com

CEAST S.p.A. • Via Airauda, 12 • 10044 Pianezza (TO) Italy
• Tel: (+39) 011.966.40.38 (10 lines) • Fax: (+39) 011.966.29.02
E-MAIL: Int. Sales: InfoItaly@ceast.com - Int. after sales: aftersalestech@ceast.com

CEAST USA Inc. • 4816 Sirus Lane, Charlotte, NC 28208
• Tel. 704-423-0042 • Fax 704-423-0081
E-MAIL: USA Sales: salesusa@ceast.com - USA Service: Keith@ceast.com

CEAST GmbH • Bunsenstr. 5, D-82152 Martinsried
• Tel. ++49 (0) 89/85 90 28 12 - 89 50 18 10 • Fax ++49 (0) 89/89 94 98 51
E-MAIL: Sales and Service: info.germany@ceast.com

AP550-02 0201