

Gibitre™ De Mattia Chamber Type Flex Tester: Description



CCSi features the Gibitre™ De Mattia Chamber Type Flex Tester for evaluating crack growth of vulcanized rubber when exposed to repetitive flexing, as described in [ASTM D813](#) “Standard Test Method for Rubber Deterioration-Crack Growth”, [ASTM D430](#) “Standard Test Methods for Rubber Deterioration-Dynamic Fatigue,” Method B, and related methods. **NOTE**

This Chamber Type De Mattia Tester is specifically designed for performing tests at ambient +20 C° and elevated temperatures (to 200 C°), meeting the requirements of [ASTM E145](#) “Standard Specification for Gravity-Convection And Forced-Ventilation Ovens.”

The high quality components of the testing chamber provide a superior thermal profile and temperature uniformity.

The interior compartment is manufactured of polished stainless steel for durability and ease of maintenance. Additionally, the exposed mechanism is constructed from stainless steel and other alloys that resist the negative effects heat and corrosive test specimens.

The Gibitre™ De Mattia Chamber Type Flex Tester incorporates a quality electric motor, thermally isolated from the chamber, which generates 60 to 300 cycles per minute with an adjustable stroke of 0 to 60 mm. The clamping mechanism is adjustable to induce varying amounts of stress on as many as 16 test specimens. The range of adjustment of the cycles, stroke, and stress allow nonstandard specimens to be tested.

The De Mattia also features a large access door with a large observation window and a positive interlock mechanism to prevent unintentional disturbance during the testing cycle. The digital temperature and fan controls are conveniently located above the chamber access door, while the digital cycle counter and other controls are situated in the extended, ergonomically designed, front panel.

The Gibitre™ De Mattia Chamber Type Flex Tester carries the CE label and complies with CE regulations:

- 89/336/EEC (and amendments): Council Directive of 03/05/89 relating to electromagnetic compatibility (EMC Directive);
- 73/23/EEC (and amendments): Council Directive relating to electrical equipment for use within certain voltage limits (European Low Voltage Directive);

NOTE: Related Test Methods:

- ISO 132, DIN ISO 132 (Germany) & BS ISO 132 (UK), Rubber, vulcanized or thermoplastic - Determination of flex cracking and crack growth (De Mattia);
- NF T46-015 & NF T46-016 (France), Vulcanized rubber. Determination of the resistance to flex cracking (De Mattia).

Gibitre™ De Mattia Immersion Type Flex Tester: Specifications

Testing Speed:	Adjustable from 60 – 300 cycles/minute
Flexure Stroke:	Adjustable from 0 – 60 mm
Clamping Distance:	100 mm
Specimen Capacity:	16
Specimen Holder Dimensions:	200 Ø x 400 mm (8.5 Ø x 15.75 inch)
Digital Display:	Number of cycles, time & temperature
Run Time Control:	1 minute – 999 hours
Thermal Control:	PID temperature controllers, ± 1 C°
Thermal Range:	Ambient + 20 C° – 200 C°
Air Circulation:	Fan assisted, speed adjustable in 10% increments
Chamber Dimensions External:	550 x 680 x 480 mm (21.65 x 26.77 x 18.90 inch)
Chamber Dimensions Internal:	400 x 400 x 330 mm (15.74 x 15.74 x 13.00 inch) 53 litres
Power Supply:	220 ± 10% VAC, 50 ± 3 Hz, 1 PH, 3 Ampere
Net Weight:	230 kg (507.2 lb.)
List Price:	Please Submit a Request for Quotation (RFQ)

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Corporate Consulting, Service & Instruments, Incorporated
 221 Beaver Street • Akron, Ohio 44304 USA
 Telephone: 800.742.8535 / 330.376.3600 • Facsimile: 800.229.9329 / 330.376.8500
 • WWW.CCSI-INC.COM • WWW.ORECOZONE.NET •