

Elmatear

DIGITAL TEAR TESTER 655



Control panel



Pendulum weight grip



Specimen grip



HEAL'S Elmatear *simplifies* and *accelerates* routine tear testing. The operator selects the unit of measurement and the number of plies – the test result is displayed digitally – no calculations are required. The *intelligent* design diminishes the scope for operator error to ensure accurate and repeatable results. Cumbersome pendulums have been replaced with easy-to-change, manageable pendulum weights.

The optional PC Software Package permits logging of tear force values and the comprehensive report generating facility provides statistical analysis of data, saving, exporting or printing of test results in a standard format.

The operation of Elmatear is *intrinsicly safe* – release of the pendulum requires both hands, and finger traps have been eliminated. The blade is simple to adjust to meet the requirements of different methods/standards.

Elmatear is supplied *complete* – the price of the equipment includes a full set of pendulum weights, equivalent to the traditional pendulums A–D, as well as one spare blade and two textile specimen preparation templates.



KEY FEATURES

- > Direct reading of measured data – no calculations
- > Optional PC software – for statistical analysis of data and reporting
- > User selection of measuring unit – N, gf, lbf or ozf
- > User selection of number of plies – 1, 2, 4, 6, 8, 10 and 16
- > Easy-to-change pendulum weights
- > Long-life titanium nitride coated blade
- > Ergonomic front loading design
- > Double action mechanical jaws – for rapid and effective clamping
- > Intrinsicly safe – two-handed pendulum release and no finger traps
- > Supplied complete with pendulum weights A–D and corresponding check weights
- > Automatic pendulum damping
- > LEDs illuminate to confirm a valid result

Technical data

Maximum Specimen Thickness	5mm
Tear Length	43mm
Units of Measurement	N, gf, lbf, or ozf
Calibration	4 check weights supplied
No. of plies	1, 2, 4, 6, 8, 10 and 16
Display	4 digit, green LED
Cut Length	Adjustable to either 15 or 20mm
Blade	Titanium nitride coated
Weight	Approx. 28 kg (including pendulum and check weights)
Dimensions	300 (W) x 600 (D) x 560 (H) mm
Power Supply	85 – 264V 50/60Hz 75W

Standards

Textile	EN ISO 13937-1 ISO 13937 (woven fabrics) EN ISO 4674-2 (rubber or plastic coated fabrics) ASTM D 1424 ASTM D 5734 (non-wovens) M&S P29 NEXT TMI7
Paper	EN ISO 21974 ISO 1974 ASTM D 689 TAPPI T414 om-88
Plastic	ISO 6383-2 – Method 360A ASTM D 1922

Pendulum Weights

Pendulum Weight	N	gf	lbf	ozf
A	8	800	1.8	28
B	16	1600	3.6	56
C	32	3200	7.2	112
D	64	6400	14.4	224

Figures assume 1 ply. For example, for 4 plies, divide the figures by 4.

ELMATEAR DIGITAL TEAR TESTER...

How to Order

903-302 ELMATEAR – MODEL 655	
STANDARD ACCESSORIES	OPTIONAL ACCESSORIES
4 x Pendulum Weights (A–D) 4 x Check Weights (A–D) 2 x Textile Specimen Preparation Templates 1 x Cutting Board 1 x Spare Blade 1 x Blade Setting Tool	794-729 PC Software Package Comprising a Windows-compatible CD and Serial Cable <i>For logging of tear force values, statistical calculations, saving, exporting results and report generation</i> 761-850 Specimen Preparation Guillotine Principally for non-textile specimens <i>Textiles are normally cut, using a template, and frayed to the correct size</i> 761-813 Spare Blade 201-455 ISO Certificate of Calibration for Elmatear

We reserve the right to alter the specification or modify the appearance without notice.



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