

elcometer®  
inspection equipment



Elcometer 1615  
Variable Impact Tester

**Elcometer 1615**                      **Variable Impact Tester**

This simple to use gauge is ideal for evaluating the resistance of a coating to impact (elongation, cracking or peeling), and is suitable for use on both direct and indirect test methods.

Direct: either a weight with a hemispherical punch attached falls on to a coated metal sheet.

Indirect: a weight falls on to a hemispherical punch which is resting on the coated metal sheet.

The Elcometer 1615 Impact Tester comes as one universal assembly with the option of seven different kits providing the functionality for various testing methods.

The base unit is common to all tests. Simply select the appropriate kit to meet your requirements, for more information see page 4.

The test specimen is fixed into position by the quick release clamp. The weight is lifted to the predetermined height and can be set by the adjustable collar device. The weight is then released and the resulting deformation is observed.

Stop collar with 10 settings between 2mm and 15mm (0.08 and 0.60") to change the depth of impact when working in accordance with ISO Standards, supplied with Kits A, D and F

Heavy-duty, passivated base plate and anodised arm to prevent rusting

Integrated bubble level to ensure the tester is perpendicular for repeatable accurate results

Tube height 1000mm (39")

Fast and safe weight release mechanism

Graduated tube engraved in both kg-cm & lb-inch (1m, 39" height) metric and imperial units

Magnifier x10

Rapid fix sample clamp; the test sample can be secured or released by a simple twist of the clamp handle supplied with Kits A, D and F



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Variable Impact Tester Kits

The Elcometer 1615 Variable Impact Testers are designed to meet a wide range of National and International Standards. Simply select the appropriate kit from page 4 and attach the punch, die and accessories to the base unit.

Interchangeable dies - enable the user to match the die to the size of the relevant punch to conform to the required Standard or method.



Please see page 4 for the list of available kits and page 6 for the full range of accessories



**STANDARDS:**  
ASTM D 2794, ASTM D 5420,  
AS/NZS 1580.406.1, BS 6496:1984,  
BS 3900-E13, ECCA T5,  
EN 12206-1:2004, EN 13523-5,  
ISO 6272:1993, ISO 6272-1,  
ISO 6272-2, JIS K 5600-5-3:1999,  
NF T30-017:1989

| Technical Specification |                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number             | Description                                                                                                                                        |
| K0001615M201            | Elcometer 1615 Impact Tester Universal Base Unit and Tube                                                                                          |
| Weight                  | 10.6kg (23.34lb)                                                                                                                                   |
| Dimensions              | 1460 x 200 x 165mm (57.5 x 8.0 x 6.5")                                                                                                             |
| Packing List            | Elcometer 1615 Impact Tester with passivated base, integrated bubble leveller, graduated tube, collar release mechanism and operating instructions |

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Elcometer Impact Tester Kits

In order to test a sample in accordance with a specified standard, a number of kits have been created to provide a single Impact Tester which, by using the appropriate kit, allow the user to work in accordance with a wide range of National and International standards.



| Part Number  | Description                   | Certificate |
|--------------|-------------------------------|-------------|
| KT001615KITA | Elcometer Impact Tester Kit A | ○           |

**Kit A:** Falling 1kg (2.2lb) weight with a 20mm (0.79") punch; 27mm (1.06") die with fixing screw; sample clamp with two fixing screws; stop collar\*; 3mm (0.12") and 4mm (0.16") hexagonal wrench

**STANDARDS:**  
ISO 6272:1993, EN 13523, JIS K 5600-5-3, DIN EN ISO 6272-1



| Part Number  | Description                   | Certificate |
|--------------|-------------------------------|-------------|
| KT001615KITB | Elcometer Impact Tester Kit B | ○           |

**Kit B:** Falling 1kg (2.2lb) weight with static indenter with 15.9mm (0.6") punch; 12.7mm (0.5") punch; 16.3mm (0.64") die with fixing screw; 3mm (0.12") hexagonal wrench

**STANDARDS:**  
ASTM D 2794, BS EN ISO 6272-2, ISO 6272-2 :2002, Qualicoat



| Part Number  | Description                   | Certificate |
|--------------|-------------------------------|-------------|
| KT001615KITC | Elcometer Impact Tester Kit C | ○           |

**Kit C:** Falling 2lb (908g) weight with static indenter with 15.9mm (0.6") punch; 16.3mm (0.64") die with fixing screw; 3mm (0.12") hexagonal wrench

**STANDARDS:**  
ASTM D 2794, BS6496:1984, EN 12206-1



| Part Number  | Description                   | Certificate |
|--------------|-------------------------------|-------------|
| KT001615KITD | Elcometer Impact Tester Kit D | ○           |

**Kit D:** Falling 1kg (2.2lb) weight with 20mm (0.79") punch and stop key; 27mm (1.06") die with fixing screw; stop collar\*; sample clamp with fixing screws; 3mm (0.12") and 4mm (0.16") hexagonal wrench

**STANDARDS:**  
ISO 6272-1, BS EN ISO 6272-1, NF EN ISO 6272-1

\* Values: 2, 3, 4, 5, 6, 7, 8, 9, 10 & 15mm (0.08, 0.12, 0.16, 0.20, 0.24, 0.28, 0.31, 0.35, 0.39 & 0.60")

○ Optional Calibration Certificate available.

## Elcometer Impact Tester Kits

### Elcometer 1615

| Part Number         | Description                   | Certificate |
|---------------------|-------------------------------|-------------|
| <b>KT001615KITE</b> | Elcometer Impact Tester Kit E | ○           |

**Kit E:** Falling 400g (0.9lb) weight with 23mm (0.90") punch; 22mm (0.87") die with fixing screw; 3mm (0.12") hexagonal wrench

#### STANDARDS:

NF T30-017:1989



| Part Number         | Description                   | Certificate |
|---------------------|-------------------------------|-------------|
| <b>KT001615KITF</b> | Elcometer Impact Tester Kit F | ○           |

**Kit F:** Falling 1kg (2.2lb) weight with a 20mm (0.79") punch; 27mm (1.06") die with fixing screw; Falling 1kg (2.2lb) weight with 12.7mm (0.5") punch; sample clamp with two fixing screws; 16.3mm (0.64") die with fixing screw; stop collar\*; static indenter with 15.9mm (0.6") punch; 3mm (0.12") hexagonal wrench; 4mm (0.16") hexagonal wrench

#### STANDARDS:

ASTM D 2794, BS EN ISO 6272, DIN EN ISO 6272-1, EN 13523-5, ISO 6272, Qualicoat 2006, SN EN ISO 6272-1



| Part Number         | Description                   | Certificate |
|---------------------|-------------------------------|-------------|
| <b>KT001615KITG</b> | Elcometer Impact Tester Kit G | ○           |

**Kit G:** Falling 1kg (2.2lb) weight with a 15.9mm (0.62") static indenter with handle and punch; 12.7mm (0.5") static indenter with handle and punch; 16.3mm (0.64") die with fixing screw; guide bracket with two fixing screws; 3mm (0.12") hexagonal wrench; 4mm (0.16") hexagonal wrench

Additional 1kg (2.2lb) weights are available as an optional extra.

#### STANDARDS:

BS EN ISO 6272-2:2011



For a full range of kits, dies and other accessories to meet a wide range of National and International Standards see page 4



○ Optional Calibration Certificate available.

## Elcometer 1615

## Variable Impact Tester Accessories



The following range of accessories have been designed to help you evaluate the resistance of a coating to impact (elongation, cracking or peeling) when used in conjunction with the Elcometer 1615 Variable Impact tester.

Punches are universal and can be used either fitted to a falling weight or as a punch resting on the sample.

### Accessories

|              |                                                                | Suitable for Kit |   |   |   |   |   |   |
|--------------|----------------------------------------------------------------|------------------|---|---|---|---|---|---|
|              |                                                                | A                | B | C | D | E | F | G |
| KT001615N201 | Additional 1kg (2.2lb) Falling Weight, 24.6mm (0.97 ) Diameter |                  |   |   | ■ |   |   |   |
| KT001615N221 | Additional 1kg (2.2lb) Falling Weight, 25.0mm (0.98 ) Diameter | ■                |   |   |   |   | ■ | ■ |
| KT001615N226 | 20mm (0.79") Diameter Punch (Outside Diameter 25mm)            | ■                |   |   |   |   | ■ |   |
| KT001615N215 | 12.7mm (0.5") Diameter Punch                                   |                  | ■ |   |   |   | ■ |   |
| KT001615N205 | 15.9mm (0.6") Diameter Punch                                   |                  | ■ | ■ |   |   | ■ |   |
| KT001615N206 | 20mm (0.79") Diameter Punch (Outside Diameter 24.6mm)          |                  |   |   | ■ |   |   |   |
| KT001615N207 | 23mm (0.9") Diameter Punch                                     |                  |   |   |   | ■ |   |   |
| KT001615N216 | Static Indenter with 12.7mm/0.5" Diameter Punch                |                  |   |   |   |   |   | ■ |
| KT001615N217 | Static Indenter with 15.9mm/0.6" Diameter Punch                |                  |   |   |   |   |   | ■ |
| KT001615N208 | Stop Ring Collar                                               | ■                |   |   | ■ |   | ■ |   |
| KT001615N209 | Sample Clamp Mechanism                                         | ■                |   |   | ■ |   | ■ |   |
| KT001615N210 | Weight Release Mechanism                                       | ■                | ■ | ■ | ■ | ■ | ■ | ■ |
| KT001615N211 | Replacement Graduated Tube                                     | ■                | ■ | ■ | ■ | ■ | ■ | ■ |
| KT001615N212 | 16.3mm (0.64") Die                                             |                  | ■ | ■ |   |   | ■ |   |
| KT001615N232 | 16.3mm (0.64") Die (with 1.5mm Radius)                         |                  |   |   |   |   |   | ■ |
| KT001615N213 | 22mm (0.87") Die                                               |                  |   |   |   | ■ |   |   |
| KT001615N214 | 27mm (1.06") Die                                               | ■                |   |   | ■ |   | ■ |   |