

# Elcometer 3086 Motorised Pencil Hardness Tester



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### Elcometer 3086 Motorised Pencil Hardness Tester

Similar to the Elcometer 501 and using the same pencil technique, this motorised device in anodised aluminium can travel forwards (chip method) or backwards (indentation method) at a uniform speed - further increasing the reproducibility of the test.

The load on the lead is adjustable from 0 to 10N and each instrument is supplied with a lead holder and a set of 6 leads in each of the 14 hardnesses.

Also known as the Wolff-Wilborn test.

### Hardness Testers

Improved mechanical resistance is part of many quality requirements. One important criteria for assessing this feature is hardness.

Depending on the requirements there are various methods for testing hardness. Some are dedicated to characterise coatings and others are more suitable for testing bulk materials such as metals, plastics, rubber or elastomers.

Elcometer manufacture and supply a wide range of instrumentation designed for the hardness tests most frequently used in the industry – these include pendulum, scratching, indentation or rebound measuring methods.

### At a glance

- Motorised unit providing greater repeatability.
- Adjustable weight to provide a range of applied forces to meet your specific required - adjustable from 0-10N.
- Supplied with 14 hardness values.

<b>Can be used in accordance with:</b>
ASTM D 3363

Model	Description	Part Number	
Elcometer 3086/1	Elcometer 3086 Motorised Pencil Hardness Tester 220V	K0003086M001	
Elcometer 3086/2	Elcometer 3086 Motorised Pencil Hardness Tester 110V	K0003086M002	
<b>Accessories</b>	Spare Lead Holder	KT003084P020	
<b>Hardness Leads – 12 leads in each box - see Below</b>			
Description	Part Number	Description	Part Number
Hardness leads 6B	KT003084P001	Hardness leads F	KT003084P008
Hardness leads 5B	KT003084P002	Hardness leads H	KT003084P009
Hardness leads 4B	KT003084P003	Hardness leads 2H	KT003084P010
Hardness leads 3B	KT003084P004	Hardness leads 3H	KT003084P011
Hardness leads 2B	KT003084P005	Hardness leads 4H	KT003084P012
Hardness leads B	KT003084P006	Hardness leads 5H	KT003084P013
Hardness leads HB	KT003084P007	Hardness leads 6H	KT003084P014

## Related products



Elcometer 501

The Elcometer 501 Wolff-Wilborn Pencil Hardness Tester uses the same technique as the Elcometer 3080, but ensures that the pencil lead is maintained at a constant force of 7.5N and at the appropriate angle to meet the standards.



Elcometer 3080

The pencil hardness test is perhaps the most simple form of hardness test. Pencils are pushed into the sample and the coating hardness is identified by the trace generated. The Elcometer 3080 pencil hardness tester is supplied with a stand and a series of 14 pencils ranging from 6B to 6H.



Elcometer 3030/3040

The pendulum hardness tester works on the principle of the damping time of a pendulum oscillating on the sample. The amplitude of the oscillation reduces faster when the sample is soft. The Persoz and König methods differ by the dimension, time period and amplitude of the oscillation.

### ENGLAND

Elcometer Instruments Ltd  
Edge Lane  
Manchester M43 6BU

Tel: +44 (0) 161 371 6000  
Fax: +44 (0) 161 371 6010  
e-mail: [sales@elcometer.com](mailto:sales@elcometer.com)  
[www.elcometer.com](http://www.elcometer.com)

### USA

Elcometer Instruments Inc  
1893 Rochester Industrial Drive  
Rochester Hills Michigan 48309

Tel: +1 248 650 0500  
Toll free: 800 521 0635  
Fax: +1 248 650 0501  
e-mail: [inc@elcometer.com](mailto:inc@elcometer.com)  
[www.elcometer.com](http://www.elcometer.com)

### CANADA

Elcometer Canada Ltd  
PO Box 622, 401 Ouelette Avenue  
Windsor, Ontario N9A 6N4

Tel: +1 248 650 0500  
Toll Free: 800 521 0635  
Fax: +1 248 650 0501  
e-mail: [ca\\_info@elcometer.com](mailto:ca_info@elcometer.com)  
[www.elcometer.com](http://www.elcometer.com)

### ASIA & THE FAR EAST

Elcometer (Asia) Pte Ltd  
896 Dunearn Rd  
Sime Darby Centre #3-09  
Singapore 589472,  
Republic of Singapore

Tel: +65 6462 2822  
Fax: +65 6462 2860  
e-mail: [asia@elcometer.com](mailto:asia@elcometer.com)  
[www.elcometer.com](http://www.elcometer.com)

### BELGIUM

Elcometer SPRL  
Rue Vallée 13  
B-4681 Hermalle /s Ardenteau

Tel: +32 (0)4 379 96 10  
Fax: +32 (0)4 374 06 03  
e-mail: [be\\_info@elcometer.be](mailto:be_info@elcometer.be)  
[www.elcometer.be](http://www.elcometer.be)

### FRANCE

Elcometer SARL  
BP 8-Bou  
60 Rue de la Petite Levée  
45430 Chécy

Tel: +33 (0)2 38 86 33 44  
Fax: +33 (0)2 38 91 37 66  
e-mail: [fr\\_info@elcometer.fr](mailto:fr_info@elcometer.fr)  
[www.elcometer.fr](http://www.elcometer.fr)

### GERMANY

Elcometer Instruments GmbH  
Himmlingstraße 18  
D-73434 Aalen

Tel: +49 (0) 7366 91 92 83  
Fax: +49 (0) 7366 91 92 86  
e-mail: [de\\_info@elcometer.de](mailto:de_info@elcometer.de)  
[www.elcometer.de](http://www.elcometer.de)