# Discover the world of hardness testing



## Large product range.

### Further info at www.emcotest.com









Intest hardness tester for Ø 36-110 mm insertion depth up to 400 mm Tooth flank hardness tester Tooth measurement width up to 140 mm (N7F) or 700 mm (N7P) External teeth modul 2-10 (N7F)/3-35 (N7P)

Portable hardness tester 147-1840 N (15-187.5 kgf) Span width:

0-20/145/235/335 mm

- Rockwell EN ISO 6508, ASTM E18
- Plastic testing EN ISO 2039
- · HBD methods

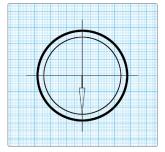
Ν4

N<sub>3</sub>A

Rockwell hardness tester with dial gauge (N3A)

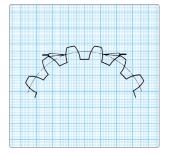
147 - 1840 N (15 - 187.5 kgf)

- Rockwell en ISO 6508, ASTM E18
- Plastic testing EN ISO 2039
- · HBD methods



#### Drilling

The testing machine is positioned in the drilling and fixed by clamping action. The test load is applied via hand lever. Subsequently the reading is taken from the dial gauge in HRC values.



#### Tooth flanks

The tester is positioned on the tooth flanks and is clamped on the designated test point. After the clamping the application of the test load follows by means of a hand lever. Subsequently the result of the measurement is taken from the dial gauge in HRC values.



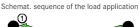
#### Exchangeable

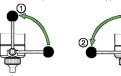
The N1A test unit with exchangeable spring sleeves is used for different loads (spring sleeves with different loads).



#### Dial gauge

N3A hardness tester measurement readings via analogue dial gauge. Three coloured scales printed on the clock-face. Hardness value read on corresponding scale according to chosen test method and test load (accuracy 0.5).















#### Duralet 10 G5

Rockwell hardness tester with touch display

9.8-2450 N (1-250 kgf)

- Rockwell EN ISO 6508, ASTM E18
- Plastic testing EN ISO 2039
- Carbon testing DIN 51917
- HBD and HVD methods

#### DuraScan 10 G5/20 G5

Laboratory- hardness tester with big load range 0.098-612.9 N (0.01-62.5 kgf) 0.002452-612.9 N (0.00025-62.5 kgf)

- · Semi automatic
- 3-fold measurement turret manual
- 6-fold measurement turret automatic (option)
- Manual cross slide (DuraScan 20 G5)
- 10 Mpix camera
- Vickers ISO 6507, ASTM E384, ASTM E92
- Knoop ISO 4545, ASTM E384, ASTM E92
- Brinell EN ISO 6506, ASTM E10

## DuraScan 50 G5/70 G5/80 G5

Laboratory-hardness tester with big load range 0.098-612.9 N (0.01-62.5 kgf) 0.002452-612.9 N (0.00025-62.5 kgf)

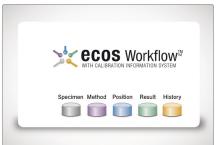
- · Fully automatic
- 6-fold measurement turret automatic
- · Motorised linear table
- Overview camera (DuraScan 70 G5, 80 G5)
- 10 Mpix camera
- Vickers ISO 6507, ASTM E384, ASTM E92
- Knoop ISO 4545, ASTM E384, ASTM E92
- Brinell EN ISO 6506, ASTM E10



#### Touch display

The DuraJet G5 covers the complete Rockwell range with its electronic load application. With a load range from 1 to 250 kgf, it offers a wide range of measurement types: in addition to Rockwell tests also plastic- and carbon testing as well as Vickers and Brinell tests (in depth) are possible. Easy operation is ensured by the operating software **ecos** Workflow DuraJet Edition. It guides the user quickly and safety through the hardness test cycle in three seperate stages: from the selection of the test type to the archiving of test results.





## Intuitive operator software – **ecos** Workflow

Logic, transparency and simple operation are the cornerstones for safe and comfortable hardness testing. The workflow principle guides step-by-step through the measuring process. A special feature of **ecos** Workflow is the integrated calibration assistant that monitors all calibrated methods and greatly simplifies the inspection of the hardness tester required by standard.



#### Innovative image evaluation

The 10 Mpix camera employed in all devices of the DuraScan G5 series sets new standards in image quality. The intelligent use of the high-resolution camera chip allows a 3x zoom without having to accept any loss in quality due to interpolation. This innovative solution allows a broad range of applications to be covered with a small number of lenses. The proven fully automatic evaluation reliably regulates the brightness of the image and automatically evaluates the indentation.







#### DuraVision 20 G5/30 G5

Low load and macro hardness tester with handwheel

2.942-2452 N (0.3-250 kgf) 29.42-29420 N (3-3.000 kgf)

- Brinell EN ISO 6506, ASTM E10
- Vickers EN ISO 6507, ASTM E384, ASTM E92
- Rockwell EN ISO 6508, ASTM E18
- Knoop en iso 4545, astm e384, astm e92
- Plastic testing EN ISO 2039
- Carbon testing DIN 51917
- · HBD and HVD methods

#### DuraVision 200 G5/300 G5

Low load and macro hardness tester with motorised test head

2.942-2452 N (0.3-250 kgf) 29.42-29420 N (3-3.000 kgf)

- Brinell en ISO 6506, ASTM E10
- Vickers EN ISO 6507, ASTM E384, ASTM E92
- Rockwell EN ISO 6508, ASTM E18
- Knoop en iso 4545, astm e384, astm e92
- Plastic testing EN ISO 2039
- Carbon testing DIN 51917
- HBD and HVD methods

#### DuraVision 250 G5/350 G5

Fully automatic Macro Hardness testing machine with motorised cross slide

9.42-2452 N (0,3-250 kgf) 29.42-29420 N (3-3.000 kgf)

- Brinell EN ISO 6506, ASTM E10
- Vickers EN ISO 6507, ASTM E384, ASTM E92
- Rockwell EN ISO 6508, ASTM E18
- Knoop en iso 4545, astm e384, astm e92
- Plastic testing EN ISO 2039
- Carbon testing DIN 51917
- · HBD and HVD methods





#### **COS Workflow** Touch WITH CALIBRATION INFORMATION SYSTEM



#### **ecos** Workflow Pro



## A broad spectrum of applications

The DuraVision G5 Series offers a uniquely broad standard load range from 0.3 kgf to 3000 kgf. Intelligent utilization of the 10-megapixel camera enables a 3x zoom, enabling the entire application range to be covered with just a few lenses. The combination with 7 turret positions also saves tool changing. Automatic evaluation of the test indents by fully automated brightness control and fast autofocus in combination with the star turret shortens the cycle times and minimises the operator influence.

#### Brinell SmartLight

The new lenses with the innovative Brinell SmartLight now ensure ideal lighting and allow better recognisability of the test indentation during Brinell tests. The lenses with Brinell SmartLight are available as 2.5x and 5x lenses. The contour is clearly recognisable and the indentation can be precisely evaluated. The SmartLight technology is permanently integrated into the lens and requires no further settings by the operator.

# Quick and simple testing of several work pieces

The large traverse paths combined with very quick XY-stage movements facilitate excellent, full automatic hardness testing on a multitude of work pieces. Regardless of whether same parts or parts with different sizes are used, serial measurement is a big strength of the DuraVision G5. The work pieces that have already been measured serve as master patterns; thus makes the operation very simple. Additional features such as the automatic brightness adjustment or the optimised autofocus are applied in order to maintain a maximum of measurement accuracy and repeatability.

# Premium quality with certified quality promise (ISO 9001)

In order to ensure that only perfect quality is supplied to you, every EMCO-TEST testing machine is thoroughly and stringently tested before delivery. The ease of service is taken into consideration right from the beginning in the design phase. The results are menu-driven fault detection, integrated self-diagnosis and modular exchange of electronic components that ensure the remedying of faults in a minimum of time. Software updates that take into consideration changes in standards or optimise future processes ensure high investment security for you.

#### **Remote Support**

The TeamViewer Client integrated as standard can be started directly from **ecos** Workflow and offers the optimum basis for perfect online support worldwide. This software allows remote maintenance as well as the sha-ring of the screen contents with other computers, e.g. for training purposes (internet connection required).

## Benefit from our global sales and service network!

With qualified sales and service partners in over 40 countries, we guarantee top level support for you and your machine. You can find your local dealer on our website www.emcotest.com.



- Austrian head office
- Sales and distribution partners



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