



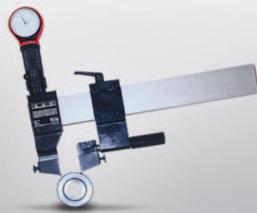
# Large product range.

Further info at [www.emcotest.com](http://www.emcotest.com)



N6

Intest hardness tester  
for  $\varnothing$  36–110 mm  
insertion depth  
up to 400 mm



N7

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)



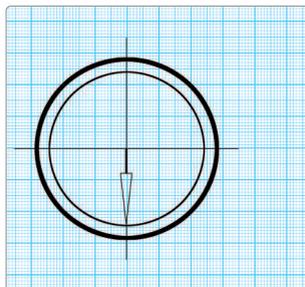
N4

Portable hardness tester  
147–1840 N (15–187.5 kgf)  
Span width:  
0 – 20 / 145 / 235 / 335 mm  
Rockwell EN ISO 6508, ASTM E-18  
Plastic testing EN ISO 2039  
HBD and HVD methods



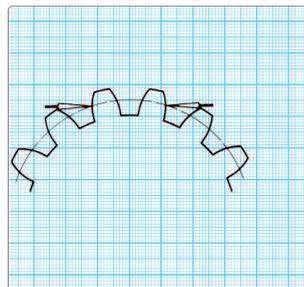
N3A

Rockwell hardness tester  
with dial gauge (N3A)  
147–1840 N (15–187.5 kgf)  
Rockwell EN ISO 6508, ASTM E-18  
Plastic testing EN ISO 2039  
HBD and HVD methods



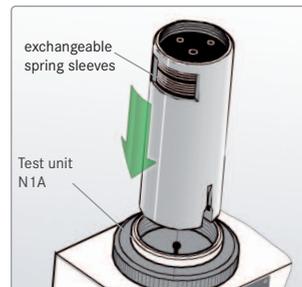
## Drilling

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

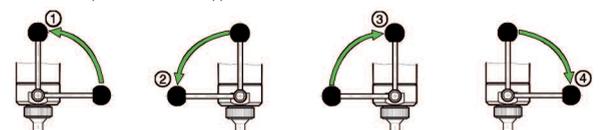
The N1A test unit with exchangeable spring sleeves is used for different loads (spring sleeves with different loads).



## 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).

Schemat. sequence of the load application





## DuraJet 10 G5

Rockwell hardness tester  
with touch display  
9,8 - 2450 N (1-250 kgf)  
Rockwell EN ISO 6508, ASTM E-18  
Plastic testing EN ISO 2039  
Carbon testing DIN 51917  
HBD and HVD methods



### 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 safely through the hardness test cycle in three separate stages: from the selection of the test type to the archiving of test results.



## DuraScan 10/20

Micro- and low-load hardness tester with a patented load system.  
0.098 - 98 N (0.01 - 10 kgf)  
- Semi-automatic  
- 3-fold measurement turret - manual  
- 6-fold measurement turret - automatic (option)  
- Manual cross slide (DuraScan 20)  
Vickers EN ISO 6507, ASTM E-384  
Knoop EN ISO 4545, ASTM E-384  



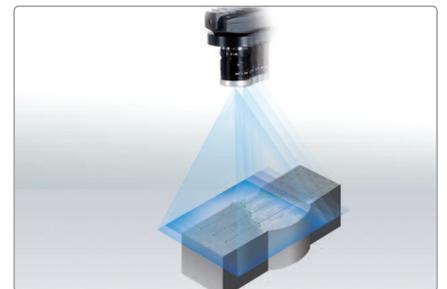

### Intuitive operator software - **ecos Workflow**

Logic, transparency and simple operation are the cornerstones for safe and comfortable hardness testing. The workflow principle: Specimen, method, position, result and history are the five steps of **ecos Workflow**. On top of the single measurement, it is also possible to conduct serial measurement and progression rows (CHD, RHT or NHT runs). Further particulars include sustained data management and reporting. The 2-step zoom, a standard feature, doubles the magnification spectrum provided by the lens while maintaining the same high standard of image quality.



## DuraScan 50/70/80

Micro- and low-load hardness tester with a patented load system.  
0.098 - 98 N (0.01 - 10 kgf)  
- Fully automatic  
- 6-fold measurement turret - automatic  
- Motorised linear table  
- Overview camera (DuraScan 70, 80)  
Vickers EN ISO 6507, ASTM E-384  
Knoop EN ISO 4545, ASTM E-384  

### Automatic image evaluation

One important factor in ensuring the accuracy of test results is the measurement of the test indentation. Exact results can only be achieved with clearly distinguishable test indentations, optimal contrast settings and ideal brightness. The camera electronics regulate image settings independent of the operator, thus maximising image recognition. Particularly when testing unpolished surfaces, this function is a prerequisite for automatic, operator-independent indentation recognition.



DuraVision 20/30/40

Macro hardness tester with hand wheel.

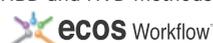
- 9.8 - 2450 N (1 - 250 kgf)
- 29 - 7350 N (3 - 750 kgf)
- 98 - 29430 N (10 - 3000 kgf)
- Brinell EN ISO 6506, ASTM E-10
- Vickers EN ISO 6507, ASTM E-384
- Rockwell EN ISO 6508, ASTM E-18
- Knoop EN ISO 4545, ASTM E-384
- Plastic testing EN ISO 2039
- HBD and HVD methods



DuraVision 200/300/400

Macro hardness tester with motorised test unit positioning.

- 9.8 - 2450 N (1 - 250 kgf)
- 29 - 7350 N (3 - 750 kgf)
- 98 - 29430 N (10 - 3000 kgf)
- Brinell EN ISO 6506, ASTM E-10
- Vickers EN ISO 6507, ASTM E-384
- Rockwell EN ISO 6508, ASTM E-18
- Knoop EN ISO 4545, ASTM E-384
- Plastic testing EN ISO 2039
- HBD and HVD methods



DuraVision 250/350/450

Fully automatic Macro Hardness testing machine with motorised cross slide

- 9.8 - 250 N (1 - 250 kgf)
- 29 - 7350 N (3 - 750 kgf)
- 98 - 29430 N (10 - 3000 kgf)
- Brinell EN ISO 6506, ASTM E-10
- Vickers EN ISO 6507, ASTM E-384
- Rockwell EN ISO 6508, ASTM E-18
- Knoop EN ISO 4545, ASTM E-384
- Plastic testing EN ISO 2039
- HBD and HVD methods



### A true all-rounder

The turret (optional) can be used freely with various indenters and lenses depending on requirements making the DuraVision a true all-rounder. The 2-step zoom, a standard feature, has made it possible to double the magnification spectrum provided by the lens while maintaining the same high standard of image quality. Hence, you can cover the full range of test methods and hardness values with just a single machine.



### Progressive design

The attractive, modern exterior of the DuraVision houses a number of clever features. The use of PLC components is a guarantee for the highest degree of process precision. The modular kit concept enables the DuraVision to be completely tailored to your requirements. The DuraVision is as equally effective in laboratory environment as it is in everyday manufacturing processes.



### 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. 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.

# Top quality from Austria – now all from a single source!

## Accredited ex-works calibration service ISO/IEC 17025

EMCO-TEST has over half a century of experience in hardness testing to guarantee maximum security. This is why so many Austrian and international customers trust our highest quality and cutting-edge hardness testers.

Our latest service adding to our reputation as the Austrian innovation leader is our own Accredited Calibration Laboratory certified to ISO/IEC 17025 for testing all new and used EMCO-TEST machines to the latest DIN, EN ISO and ASTM standards.

This provides you with full quality assurance from one single source!



## The advantages of the EMCO-TEST Calibration Laboratory:

### Security ...

1. of accreditation
2. through know-how
3. through quality and reliability

# Benefit from our global sales and service network!

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