

Hardness Testers - Measuring Quality

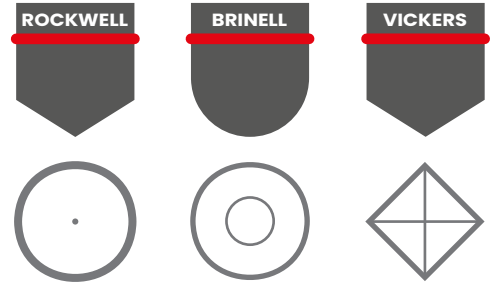
## XM 3000



## Universal motorized hardness tester

Designed to perform Rockwell, Superficial Rockwell, Brinell and Vickers Hardness tests embracing the essential comfort of a fully automatic test cycle.

In full compliance with international standard, including ISO 6506, ISO6507, ISO 4545, ASTM E10, ASTM E92, ASTM E384



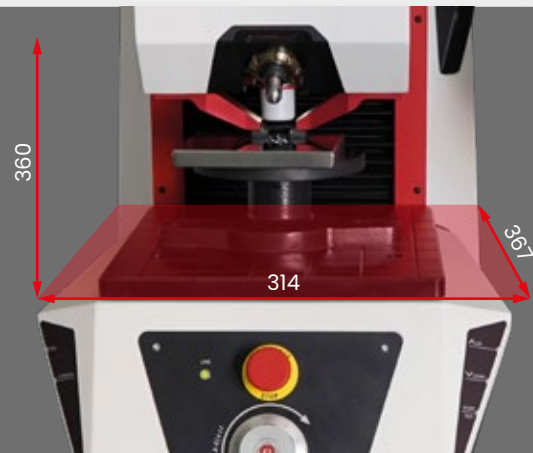
### Motorized measuring head

The measuring head has a **vertical motorized movement with a 380mm standard stroke**: this leads to much faster tests and reliable results. It allows **measuring bulky pieces**.



### Majestic support base

The large and robust base is able to support **even the largest pieces with irregular shapes**. Furthermore, it is a perfect workbench for small samples – since it is suitable for holding standard and customized supports.



### The comfort of the touchscreen

The instrument is managed using the high-visibility touch screen display, which has been **developed by our R&D department to be adjusted as you want**.

**A wide 360 degree movement** that gives ease of use for an optimal **15" display view**.



## From laboratory to production department tests

Our R&D department has designed XM3000 to measure **all ferrous and non-ferrous**, small and large materials even the most bulky.  
But it is **specialized in testing hardened, nitrided and cemented samples** including heat treatment.

### Completely automatic test cycle

Simply position the sample to be tested on the support base and press the **START** button.

The test cycle is performed automatically: the measuring head goes down until getting in touch with the sample, locks it, performs the measurement, returns into starting position and the hardness value appears on the touch screen.

#### 1 Load cell with closed loop system

Forces are applied electronically through load cell with closed-loop control system – frequency of 1000 pulses per second. This guarantees an extreme accuracy, avoiding any problems related to dead-weight hardness testers.

#### 2 A majestic stability

The force range – **from 29.4 NA to 29.4 KN (from 3 to 3000 kgf)** – can be easily set for measuring any size and geometry, **from the simplest to the most complex sample**.

Thanks to the wide movement of the head and the Axiotek locking system, **even the largest samples will be firmly fastened** so that to ensure you extreme safety in the execution of the test cycle. The indenter, whose **stroke is of 380mm**, will then reach the exact point where the indentation will be performed.

#### 3 Designed for even the most extreme conditions

Thanks to **our patented system of smart self-compensation**, you can easily perform test cycles even on samples whose surface is flexible, uneven or rounded, especially in the presence of dirt and oil.

No matter what type of semi-finished product you measure: the **test cycle is reproducible with reliable results from the very first use**.

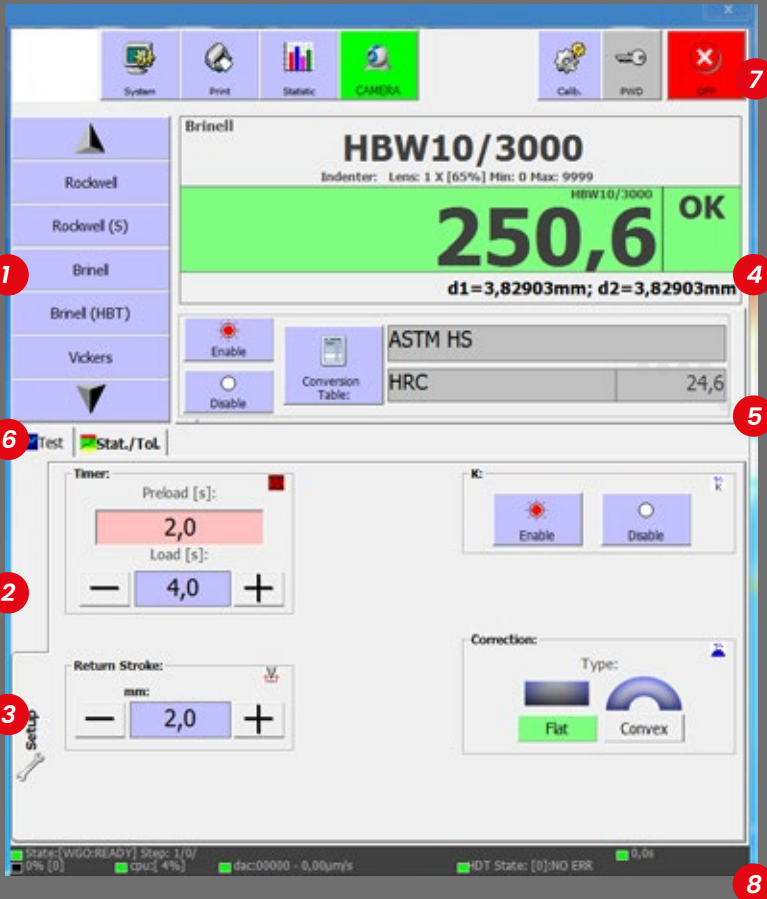
#### 4 Hardware and software built around you

The software can be configured to perform **cementing tests (CHD)**.

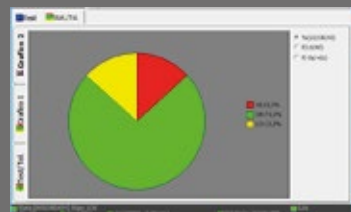
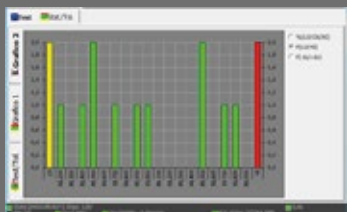
The large base is easily configurable according to your needs: you can **use any type of anvil and support you prefer, interchangeable at your convenience**.

From flat anvils and V-shaped anvils to the installation of **motorized XY tables designed to move samples whose weight is of 3 tons**.



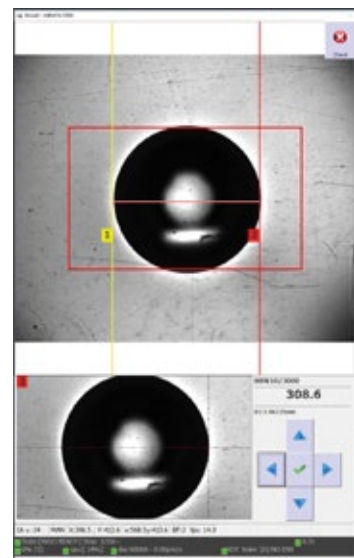
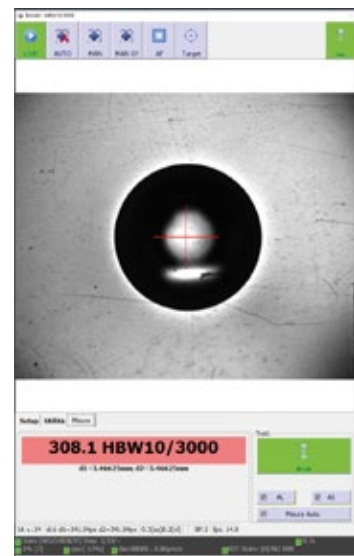


- 1 Test methods selection
- 2 Test timer setup
- 3 Return stroke setup
- 4 Test results
- 5 Hardness conversions
- 6 Management buttons
- 7 Statistics and tolerances menu
- 8 Software status bar



## HDT 600 software features

- Results and data storage, test data processing (statistics, test reports, standard deviations, diagrams, histograms);
- USB data output;
- Computer and printer connection available;
- Automatic detection of proper load according to the hardness scale selected;
- Automatic correction of results on round samples;
- Automatic conversion of results into different selectable hardness scales;
- Indentation automatic measurement through the smart autoexposition tool;
- Image analysis in high resolution, digital zoom and digital rulers, reading manual mode available.





## Data export

XM3000 offers lots of possibilities for data output and data backup. Beyond saving results, all data detected during tests can be exported as .pdf or .xls (Excel) files, depending on customer's needs.

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## Report printing

One of the XM 3000 standard feature is creating and printing personalized test reports with company logo and data, values and comments, through any printers connected on the system.

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## Smart dialogue with corporate ERP

Thanks to the possibility of **direct interface with administration or process software** (such as business ERP), through additional custom applications, XM3000 is able to export and receive files for data storage (even combined with a specific order), and for automatic setting of scales or tolerances.

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**HARDNESS TESTS AVAILABLE:**

**XM 3000/F**

**Rockwell:**

HRA - HRB - HRC - HRD - HRF HRG - HRL - HRM - HRR

**Superficial Rockwell:**

HRN - HRT

**Brinell:**

HBW1/30 - HBW2.5/15.625 - HBW2.5/31.25 - HBW2.5/62.5 - HBW2.5/187.5 - HBW5/25 - HBW5/62.5 - HBW5/125 - HBW5/750 - HBW10/100 - HBW10/250 - HBW10/1500 - HBW10/3000

**Vickers:**

HV3 - HV5 - HV10 - HV20 - HV30 - HV50 - HV100

**XM 3000/G**

**Brinell:**

HBW1/30 - HBW2.5/15.625 - HBW2.5/31.25 - HBW2.5/62.5 - HBW2.5/187.5 - HBW5/25 - HBW5/62.5 - HBW5/125 - HBW5/750 - HBW10/100 - HBW10/250 - HBW10/1500 - HBW10/3000

**Vickers:**

HV3 - HV5 - HV10 - HV20 - HV30 - HV50 - HV100

**TEST LOADS:**

**XM 3000/F**

**Rockwell:**

588,4 - 980,7 - 1471 N (60 - 100 - 150 Kgf)

**Superficial Rockwell:**

147,1 - 294,2 - 441,3 N (15 - 30 - 45 Kgf)

**Brinell:**

49,03 - 61,29 - 98,07 - 153,2 - 245,2 - 294,2 - 306,5 - 612,9 - 1226 - 1839 - 2452 - 4903 - 7355 - 9870 - 29421 N (5 - 6,25 - 10 - 15,6 - 25 - 30 - 31,25 - 62,5 - 125 - 187,5 - 250 - 500 - 750 - 1000 - 3000 Kgf)

**Vickers and Knoop:**

29,42 - 49,03 - 98,07 - 196,14 - 294,2 - 490,3 - 980,7 N (3 - 5 - 10 - 20 - 30 - 50 - 100 Kgf)

**XM 3000/G**

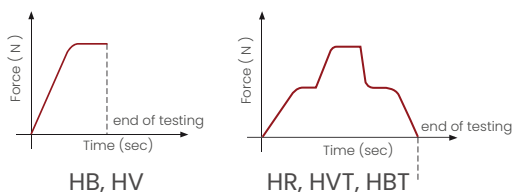
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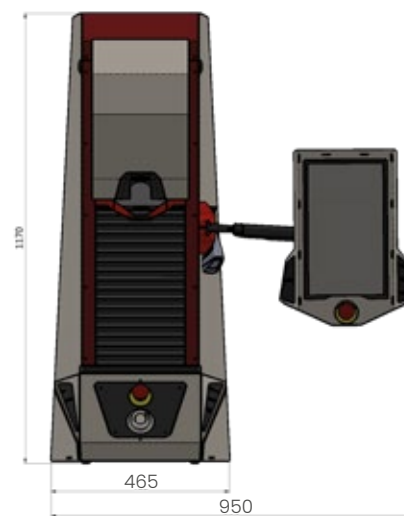
**FORCE APPLICATION**



AVAILABLE IN TWO COLORS



DIMENSIONS



## Service & Maintenance

Our generational experience based on more than 60 years of field work allows us to answer any of your questions or concerns.

Our highly strategic geographical position allows us to support you in the maintenance of your instrument, offering you completely made in Italy spare parts.

## Why choose us?

- ◉ We guarantee **100% Italian quality**.
- ◉ We believe in **true innovation**: listening to your needs and making an hardness tester that can meet them.
- ◉ We promote an **empathic design**, which ensures functionality and harmony in the interaction with measuring instruments.
- ◉ **We are pragmatic and result-oriented**: what we design and produce is the result of years of study, research and experimentation.
- ◉ **We love to accompany you step by step**, listening and advising you what better embraces your needs



### WHERE WE ARE

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