

ERGOTEST COMP 25 with Digital display Unit ROCKWELL STANDART/SÜPER, BRINELL, VICKERS SERTLİK ÖLÇÜM CİHAZI



Description(Code : 742000301)

Dial gauge hardness tester with automatic zero setting

- Standard Rockwell tests with loads: 150-100-60 kgf
- Superficial Rockwell tests with loads: 45-30-15 kgf
- Brinell test with loads: 250-187.5-62.5-31.25-30-10 kgf
- Vickers test with loads: 100-60-30-10 kgf

TECHNICAL DATA:

- Twin scale 80 mm Ø dial gauge for Standard & Superficial Rockwell
- Resolution 1 Rockwell unit (estimation 0.2 Rockwell units)
- Max. specimen height 295 mm
- Throat depth 220 mm.
- Pre-loads 10-3 kgf with manual selection
- 10 kgf load (with 3 kgf pre-load selected) included
- Each load must be set upon the tester by operator manually
- Load application speed adjustable by dash-pot
- ISO standard S.I.T. Certificate available as follows:
- direct and indirect verification for Standard Rockwell testing
- direct load verification for Brinell and Vickers testing (direct and indirect verification only if it is mounted the accessory 742032280)
- indirect verification only for Superficial Rockwell testing

ACCESSORY SET "A" for Ergotest COMP hardness tester (Code: 742003100)

- plane anvil, 60 mm Ø
- central relief anvil, 37 mm Ø
- deep "V" shaped anvil, 37 mm Ø (suitable for pieces up to 62 mm Ø)

- small "V" shaped anvil, 37 mm Ø (suitable for pieces up to 14 mm Ø)
- diamond 120° cone indenter for Rockwell testing
- steel ball indenter, 1/16" Ø for Rockwell testing
- steel ball indenter, 2,5 mm Ø for Brinell testing
- steel ball indenter 5 mm Ø for Brinell testing
- test block HRC and test block HRB
- instruction manual
- hardness conversion booklet
- dust cover and Allen-keys
- Hard-plastic accessory box and can of oil
- Diamond pyramid indenter for Vickers tests
- Test block HBS 2,5/187,5
- Test block HV30
- Test block HR15N

SET OF LOADS

Code: 742000211 Load Set No. 6 (60-62.5-100-150-187.5-250 kgf)

Code: 742000212 Load Set No. 7 (31.25 kgf)

Code: 742000280 Load Set No. 11 (15-30-45 kgf)

DIGITAL MEASURE DEVICE for BRINELL & VICKERS indentations, generated by GALILEO ROCKWELL HARDNESS TESTER, model ERGOTEST (e.g. the picture shows the device with the model COMP)

Code: 742032280

The kit allows the digital measure of indentations generated with the Brinell or Vickers method by a Rockwell Galileo hardness tester, model Ergotest. Each Rockwell measurement can be processed by the kit too, typing each value manually on the keyboard. The kit can be certificated by a SIT Centre, on request, as HB-HV indentation measure device. It is constituted as follows:

ELECTRONIC CONSOLE for data elaboration

The console, separated from the instrument, is used to set up of each test to be performed, to manage measure cycle of Vickers and Brinell indentations and to elaborate Rockwell – Vickers – Brinell hardness values. The device performs too:

- Backlight LCD display, provided with alphanumerical (8 lines x 16 characters) and graphic (128x4 pixel) readout;
- 16-keys touch panel for selection of testing parameters, by means interactive menu and for the acquisition of the Rockwell measurement;
- Readout of Rockwell, Vickers or Brinell scale, of the load application time, of the number of proofs, of the imposed conversion scale;

- Automatic estimate of Vickers & Brinell hardness value on the ground of diagonal/diameter measurement (loads 10 - 15.625 – 31.25 – 62.5 – 187.5 – 250 kgf for Brinell and 10 – 20 – 30 – 50 – 100 kgf for Vickers, where present);
- Possibility of acquisition of Rockwell measurement for subsequent data processing;
- Automatic approximate conversion of the measured value into a different hardness scale or into tensile strength;
- Calculation of statistical parameters such as average value, standard deviation, max and min, values and number of measurements;
- Besides, it allows key-in parameters such as date, specimen and batch number, to be included in test reports for documentation;
- Centronics parallel interface to the printer;
- RS232C serial interface to PC or Host Computer;
- Special interface for output to PC by keyboard emulation: data are sent directly into Microsoft ® (as Word, Excel, etc) software package;
- Display mode of result: single measurement, table with all statistical parameters, measurement histogram, "historical diagram";
- Data output mode: single measurement, list of all effected measurements, statistical report;

**DIGITAL EYEPIECE and SLIDER for specimen support,
to fit directly upon the Galileo hardness tester, model Ergotest**

It consists of:

- Base supporting the optical components, with a special clamp to fit the group to the left side of the tester;
- Digital micrometric eyepiece 10x, with a dioptric adjustment, with 0,1 µm resolution, calibrated for three available lenses;
- 5x lens: view field of 2,8 mm approx, measurement field of 2,3 mm and total magnification 50x;
- 2,5x lens: view field of 6 mm approx, measurements field of 4,8 mm and total magnification 25x;
- 10x lens: view field of 1,4 mm approx, measurements field of 1,2 mm and total magnification 100x;
- the observation of the indentation through the microscope is carried out by displacing the specimen along the axes by means of sturdy and accurate linear slider. The slider is equipped by a flat anvil: as optional, it is available a V anvil for round pieces; the slider is fitted and tighten upon the raising screw of the hardness tester;
- Indentation focusing is carried out by moving vertically the specimen through the raising screw;
- direct illumination of the indentation by 6V - 5 W lamp;
- on request, the microscope can be certificated by a SIT Calibration Centre, as Brinell or Vickers indentation measure device.

POWER SUPPLY DEVICE

- Composed of a plate with transformer, switches and plug for the power supply, which can be fitted inside to the frame of the hardness tester.
- 110 V – 60 Hz.
- The main electrical power cord and all the cords to connect the tester with the console and the microscope are included in the device as standard;