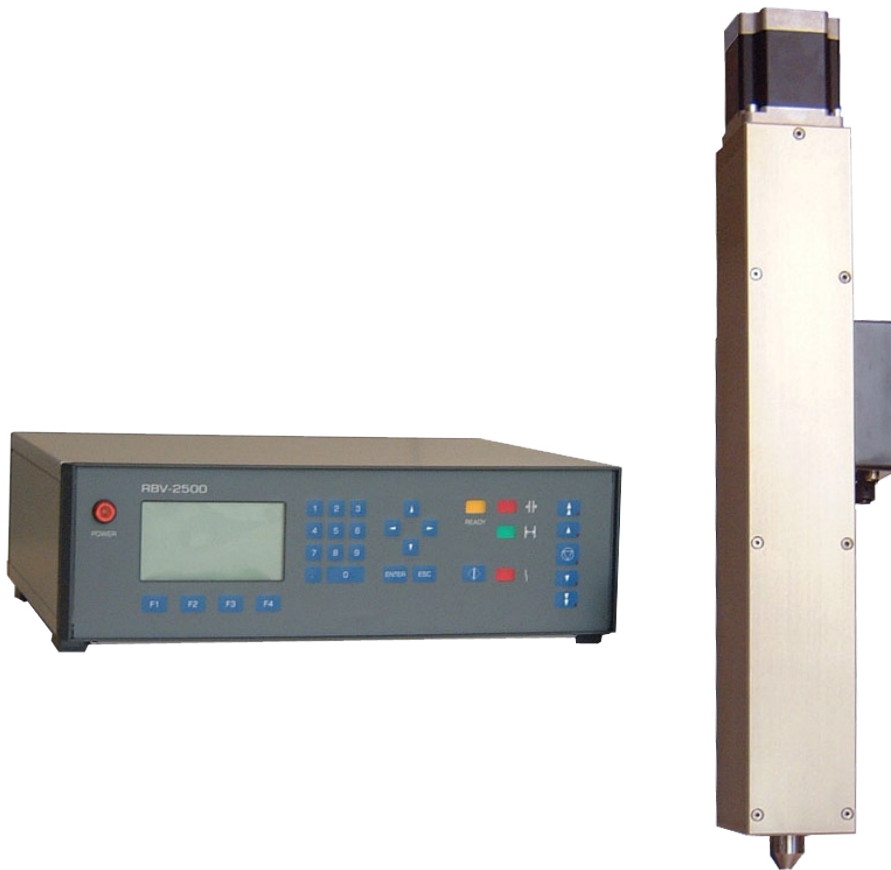


Production line

hardness testing



Rockwell - Brinell - Vickers



RBV2500 machine for automated quality control

The hardness testing machines are designed for concomitant tests and for 100% tests in mass production. Due to the new design, it can be simply integrated with any production line.

Models for Rockwell (HRC), Brinell (initially 187.5 kg) and Vickers hardness are part of our product range.

The test machine is composed of the hardness testing module and a separate control element, which can be installed in a control cabinet.

Because optical measurement of the indentation is not reasonable in a quick, automated test, the measurements of Brinell and Vickers hardness is done by a modified method based on the penetration depth. During load application, the test load is permanently controlled and adjusted by a closed loop control system. That leads to high accuracy of measurements at a great sampling rate.

Once the specimen is positioned, the measuring cycle is initiated by setting the „start“ input. One cycle takes about 30 sec. When the cycle has finished, the „ready“ output signals, that the specimen can be removed. The measuring result will be evaluated corresponding to the preset bounds and the outputs will be set accordingly. The reading can be queried by means of the RS232 interface or via a TCP/IP-LAN connection.



Integrated hardness testing module

Technical specification

Hardness scale	Rockwell, other on request
Test load (Rockwell)	10 kp Preload, 150kp total load
Resolution	0.1 HRC units
Range	15 mm
Measuring cycle duration	Approx. 30 sec.
Power supply	85 – 264V / AC
Dimensions	88mm x 88mm x 750mm + connection box at the side
Mounting	Threaded holes on the rear side
Control unit	19" case, 3U
SPS connection	Switching outputs (potential-free)
Interface	RS232
Display	Grafic LCD