## **IN-LINE CUSTOM SOLUTIONS**

# MATRIX

This hardness tester is endowed with movement on 3 independent axis and rotation of 360° to allow an easy location of the testing point.

Perfect and effective measurements even at the first test.

### **SLIM INDENTER**

Only one control to operate the movement for test preparing and for the entire test cycle performance, including the piece clamping phase. It follows that every result is correct even the first test result is accurate and reliable, so this increases the repeatability of the machine that offers test accuracy and reading reliability.

With this instrument you can perform tests directly during the manufacturing process, so that the annealing oven staff can be informed about the test result in real time.

The output qualitative level can be increased without any added cost. The interesting price of the entire instrument permits a very quick write off in one year of work.

### **AUTOMATIC RESEARCH OF TEST PIECE**

- If you press Start button, MATRIX moves to reach the test surface and automatically starts the hardness test cycle in automatic succession without breaching a phase.
- It does not require elevating screws
- It meets all laboratory requirements
- Full operation even in presence of vibrations, sudden changes in temperature or dusty environments.

#### **MODULAR STRUCTURE**

The machine is made with a modular structure so that it can easily fit different test pieces sizes.

### EASY DISPLACEMENTS

All movements are on guides with recirculating screws to grant accurate and easy movement of the test head that accurately places itself in the different testing points both on crankshaft in supporting diameters and on connecting rods and camshafts.

#### **AUTOCENTERING**

The location of the precise testing point through centering is carried out automatically by moving head-supporting carriage that centres itself in a precise and reliable way thanks to an exclusive system.

Technical characteristics	
Standards	EN-ISO 6508 / ASTM E18-08 / JIS
Reading	Digital, with memory
Data output	RS 232 C for connection to printer or computer
Setting	min. and max. tolerance limits
Force range	HRC 588.6 - 981 - 1471.5 N (60 -100 -150 kgf)
Accuracy	± 0,1 %
Test time	5 second (adjustable)
Working Depth	1000 mm (different on request)
Head Stroke	Programmable distance with automatic contact
Machine weight	800 kg ~
Power supply	110V-220V 50÷60Hz - 200VA
Pneumatic power	4 BAR





**AFFRI**