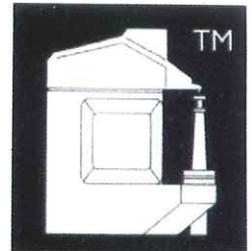




# INDENTEC

## HARDNESS TESTING MACHINES LIMITED



### HIGH SPECIFICATION ROCKWELL TESTING FOR EVERY APPLICATION WITH THE NEW "VALUE ENGINEERED" 4150AK



Digital, software controlled, accurate, reliable and extremely user-friendly, the new high specification AK delivers everything needed to meet the demands expected from modern hardness testing technology.

With the "plug and play" AK, you can test to all fifteen Rockwell scales with:

- ◆ Easy, no problem access to those awkwardly placed test points, internal and external.
- ◆ Built-in data processing (mean, range, sample count).
- ◆ Automatic test cycle.
- ◆ Audible and visual guides through test sequences.
- ◆ Automatic error diagnostics.
- ◆ Printer and PC connectivity.

PLUS all standard equipment you need – within the price:

Two indenters – diamond and  $\frac{1}{16}$ " ball  
Two anvils – vee and flat  
Two NAMAS test blocks – HRC and HRB  
User Instructions  
Calibration to BS EN 10109:2-1996 or ASTM E18

Machine Dimensions:  
Height – 782mm Width – 292mm  
Depth – 700mm Weight – 60kg  
Electrical 220/110v 50Hz/60Hz



Reading resolved to 0.1 Rockwell units, with single key for foolproof data processing and a printed table to identify load/indenter combinations for all fifteen scales.

A single toggle switch enables the following data to be displayed from a test series:



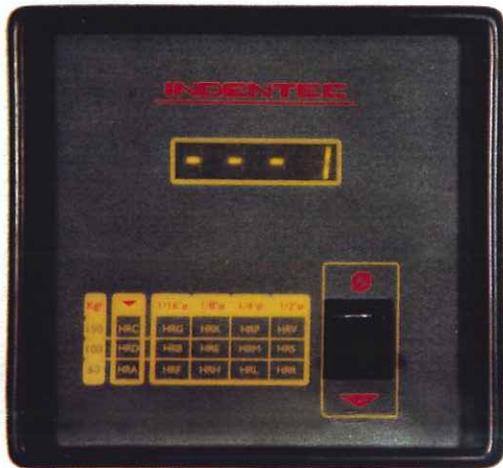
"Flick" the switch once to display the sample count.



"Flick" it twice to display the mean.



"Flick" it a third time to display the range.



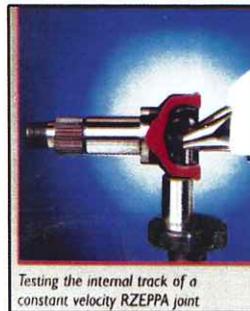
The test cycle is monitored by a bargraph and audible signals.



In the unlikely event of an incorrect test, self-diagnostic error codes are displayed.

### 4150AK SPECIFICATION:

- DISPLAY:** Single line 4 digit L.E.D display, 7.6mm high digits.
- DATA ENTRY:** Panel switch for indenter identification, data selection and printer control.
- TEST LOADS:** 10kgf (98.07N) preload... 60 (588.4), 100 (980.7) and 150kgf (1471N) total loads. Selectable by a 3-position lever.
- TEST SCALES:** Rockwell A, B, C, D, E, F, G, H, K, L, M, P, R, S & V.
- HARDNESS RESOLUTION:** 0.1 Rockwell units.
- SPECIMEN ACCOMMODATION:** Vertical space 250mm  
Horizontal space - indenter centre-line to machine frame 150mm (6").
- SPECIMEN ACCESS:** Tests external surfaces including cylindrical surfaces down to 3mm diameter and internal surfaces from 20mm diameter.
- STANDARD FEATURES:** Automatic test cycle, with analogue bar indication. Visual and audible test sequence signals. Dwell time countdown. Display of hardness, resolved to 0.1 units, eg. 61.8  
RS232 serial port for connecting to a printer, PC or data logger. Automatic calculation, display and printing of average, range and sample size. Visual and audible diagnostic error codes.
- STANDARD EQUIPMENT:** Diamond Indenter.  
 $\frac{1}{16}$ " Ball Indenter.  
Ten - spare  $\frac{1}{16}$ " Steel Balls.  
Combined 19mm diameter Flat/Vee Anvil (30mm max dia).  
HRC test block, BS EN 10109-3:1996, (NAMAS).  
HRB test block, BS EN 10109-3:1996, (NAMAS).  
Users Instructions.
- CALIBRATION:** BS EN 10109-2:1996 or American Standard ASTM E18
- SERVICES:** 3 amp single phase, 220/240V 50Hz or 110V 60Hz supply
- MACHINE DIMENSIONS:** Height - 782mm      Width - 292mm  
Depth - 700mm      Weight - 60kg



Testing the internal track of a constant velocity RZEPPA joint



Testing the internal track of a bearing race, 23mm diameter



Testing the compression face of a high tensile bolt



Preparing to test the internal surface of a limited slip differential component

# INDENTEC

HARDNESS TESTING MACHINES LIMITED

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