

Premium Micro-Vickers Hardness Tester EW-410AAT Series

Motorised turret with analogue measurement microscope and easy-to-use integrated hardness calculator

Features

- Two models available with 10gf - 1 Kgf or 10gf - 2Kgf depending on model
- Fully automatic 4 position turret for Micro Vickers /Knoop measurements
 - Choice of turret configuration
 - 3 objectives and 1 indenter
 - 2 objectives and 2 indenter (Vickers & Knoop)
 - Dual indenter (Vickers/Knoop) turret optional
- High resolution analogue eyepiece
- Built in high speed printer
- New user friendly display interface

Typical Applications

- Steels, nonferrous metals, IC wafers, small precision components
- Thin plastic, metallic foils, plating, coating, surface layers, laminated metals
- Effect of heat treatment, case depth analysis, depth of carburised and flame hardened layers



EW-412AAT 1 KG analogue, 2 objectives

TECHNICAL SPECIFICATION

EW-412AAT	Analogue, 2 objectives, 0.01 - 0.025 - 0.05 - 0.1 - 0.2 - 0.3 - 0.5 - 1Kgf (HV)
Test force selection	Manual
Test procedure	Automatic, loading/dwell/unloading
Hardness value	5 digits
Turret	4 positions over 360°, fully automatic, memorised start position, option for 2 indenters and 2 objectives or 1 indenter and 3 objectives
Test force accuracy	< +/-1% for force from 100gr to 2kg, < +/-1.5% for force below 100 gr
User display	Length of diagonals, hardness value, converted value, test force, online statistics
Display resolution	0.1 HV, HK
Standardisation	EN, ISO 6507, ASTM E-384, EN 150 4545
Statistics	Total test, max, min, average, range, standard deviation, all in real time after each test
Control panel	Start test, stop test, light intensity, dwell time, print, clear
Firmware	English
Memory	Memory for 10 test results, with CCD-VIEW software unlimited results
Data output	RS-232 Bi-Directional
Dwell time setting	Default 5 seconds, user defined 5 to 60 seconds (5 sec. increments)
Printer	Built in, silent high speed thermal printer
Eyepiece microscope	Bright dual line filar eyepiece with 15x magnification, 0.1um reading
Light source	Halogen 12V, 30W, green filter, dimmable
Optical path	2 way, eyepiece / camera
Vertical capacity	90mm (maximum specimen height)
Horizontal capacity	130mm (from centre line)
Stage dimensions	100x100mm, travel 25x25mm, and reading 0.01mm
Operating temperature	5°C to 40°C (+/-20° for force 25gr and 50gr)
Humidity	10% to 90% non condensing
Dimensions	420 x 250 x 490mm
Weight	37.5Kg
Power	240V/110V, 50/60Hz, single phase

Standard Delivery

- Main unit
- Manual X-Y stage
- Objectives according to model (10x & 40x or 10x, 20x & 40x)
- Analogue eyepiece 15x
- Vickers test block (+ / - 725 HV 1)
- Vickers test block (+ / - 450 HV 0.2)
- Built-in thermal printer
- RS-232 data output
- 4 adjustable feet
- Spare halogen bulb
- Fuse
- Installation & user's manual
- Eseyway quality certificate

Optional Accessories

- Choice of objective configuration
- INV Video measuring systems
- Dual indenter Vickers & Knoop
- Motorised X-Y stage
- Motorised X-Y-Z stage
- Set of work piece fixtures - vice, chuck & clamp
- Metal support table with storage cabinet
- Indenter & test blocks
- Certified indenter & test blocks

Optional System

- INV system for semi and automatic traverses, pattern testing through PC support and motorised XY stage