



## Versatile universal hardness testing that ensures repeatability over a wide load range

Duramin-650 is the universal tester suited for laboratory use. Each model in the range has a motorised test head and turret, and is available either with a fixed anvil or with a motorised XY-stage and overview camera, primarily suitable for high volume testing. Duramin-650 is available in three load ranges.

- Suitable for Vickers, Knoop, Brinell and Rockwell hardness testing
- Available in three load ranges: 1-250 kgf, 3-750 kgf, 5-3000 kgf
- Motorised test head
- Motorised XY-stage (optional)
- Automatic illumination
- Anti-collision system
- Overview camera (optional)
- Laser positioning system
- Embedded PC, operated by mouse or touch screen

## Technical data



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	Duramin-650 M1/M2/M3			Duramin-650 AC1/AC2/AC3		
<b>LOADS AND APPLICATIONS</b>						
Model	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>AC1</b>	<b>AC2</b>	<b>AC3</b>
Load range (main loads)	1 kgf - 250 kg	3 kgf - 750 kgf	5 kgf - 3000 kgf	1 kgf - 250 kg	3 kgf - 750 kgf	5 kgf - 3000 kgf
Vickers capability		Yes			Yes	
Knoop capability		Yes			Yes	
Brinell capability		Yes			Yes	
Rockwell capability		Yes			Yes	
HVT/HVB		Yes			Yes	
<b>STAGES AND TURRETS</b>						
XY-stage		Manual			Automatic	
XY-stage or anvil size (mm)		∅ 80		350x265	390x262	390x262
XY-stage stroke, max (mm)		-		220x160	250x160	250x160
Vertical capacity (mm)		300			300	
Throat depth (mm)		220			220	
Motorized Z-axis		Yes			Yes	
Motorized turret		Yes			Yes	
Turret positions		6			7	
Anti-collision protection		Yes			Yes	
Machine weight		255 kg			260 kg	
<b>CAMERAS AND OPTICS</b>						
Overview camera		No			Yes	
Overview cam FOV (mm)		-			200x160	
Overview camera resolution		-			5 MP	
Evaluation camera resolution		5 MP			5 MP	
Auto illumination		Yes			Yes	
Stage illumination		Yes			Yes	
Laser or LED guider		-			Yes	
Dual view		No			Yes	
<b>SOFTWARE AND MODULES</b>						
Jominy module		No			Yes	
CHD measurement		Optional			Optional	
Edge detection		No			Optional	
Mapping		No			Optional	
Welding module		Optional			Optional	
Kc fracture meas.		Optional			Optional	
Report editor		Yes			Yes	
Data export		Yes			Yes	
<b>INTERFACES AND CONNECTIVITY</b>						
Operation	Embedded Windows 7 PC with 15" touch screen. Mouse and keyboard operation is optional.					
Communication Ports	HDMI, VGA, RJ45, WLAN, USB, RS232					
WiFi		Yes			Yes	
Blue tooth		Optional			Optional	