



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

Duramin-40 is the primary range of Struers micro/macro hardness testers. It is available with a manual and motorised XY-stage and with an overview camera. Duramin-40 comes with three load ranges; 10 gf - 10 kgf, 10 gf - 31.25 kgf, and 1 gf - 62.5 kgf. The tester includes an integrated PC with a separate monitor for touch screen or mouse operation. Dual monitors are also an option. The test cycle is fully automatic and a motorised 6-position turret is standard. Add-on modules include Kc fracture measurements, mapping and weld measurements.

- Suitable for Vickers, Knoop and Brinell hardness testing
- Automatic 6-position turret
- Manual and motorised XY-stage
- Motorised Z-axis
- Anti-collision system
- Automatic illumination
- Overview camera option
- Report editor
- Embedded PC with mouse or touch screen operation

## Technical data



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	Duramin-40 M1/M2/M3			Duramin-40 A1/A2/A3			Duramin-40 AC1/AC2/AC3		
<b>LOADS AND APPLICATIONS</b>									
Model	<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>AC1</b>	<b>AC2</b>	<b>AC3</b>
Load range (main loads)	10 gf - 10 kgf	10 gf - 31.25 kgf	1 gf - 62.5 kgf	10 gf - 10 kgf	10 gf - 31.25 kgf	1 gf - 62.5 kgf	10 gf - 10 kgf	10 gf - 31.25 kgf	1 gf - 62.5 kgf
Vickers capability		Yes			Yes			Yes	
Knoop capability		Yes			Yes			Yes	
Brinell capability		Yes			Yes			Yes	
<b>STAGES AND TURRETS</b>									
XY-stage		Manual			Automatic			Automatic	
XY-stage or anvil size (mm)		90x90			350x225			350x225	
XY-stage stroke, max (mm)		25x25			220x120			220x120	
Vertical capacity (mm)		200			200			200	
Throat depth (mm)		170			170			170	
Motorized Z-axis		Yes			Yes			Yes	
Motorized turret		Yes			Yes			Yes	
Turret positions		6			6			7	
Anti-collision protection		Yes			Yes			Yes	
Machine weight		75 kg			80 kg			80 kg	
<b>CAMERAS AND OPTICS</b>									
Overview camera		No			No			Yes	
Overview cam FOV		-			-			200x160	
Overview camera resolution		-			-			5 MP	
Evaluation camera resolution		5 MP			5 MP			5 MP	
Auto illumination		Yes			Yes			Yes	
Stage illumination		Yes			Yes			Yes	
Laser or LED guider		Yes			Yes			Yes	
Dual view		No			Optional			Optional	
<b>SOFTWARE AND MODULES</b>									
CHD measurement		Optional			Yes			Yes	
Edge detection		No			Optional			Optional	
Mapping module		No			Optional			Optional	
Welding module		No			Optional			Optional	
Kc fracture measurement		Optional			Optional			Optional	
Report editor		Yes			Yes			Yes	
Data export		Yes			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			Yes	
Blue tooth		Optional			Optional			Optional	