

Duramin-650		
Hardness methods	Vickers	ISO 6507 ASTM E384, E92 JIS B 7725
	Knoop	ISO 4545 ASTM E92 JIS Z 2251
	Brinell	ISO 6506 ASTM E10 JIS Z 2243
	Rockwell	ISO 6508 ASTM E18 JIS Z 2245
Force range	M1&AC1	9.8-2451 N (1-250 kgf)
	M2&AC2	29.4-7355 N (3-750 kgf)
	M3&AC3	49-29420 N (5-3000 kgf)
Test force	Force application	Multi-load cell, closed loop, force feedback system
	Test force tolerance	< 0.25%
	Dwell time settings	Default 10 s, adjustable up to 250 s
Read method		Automated
Overview camera resolution	Duramin-650 AC	5 Mpix
Overview camera field of view		Variable 40x30 mm - 210x160 mm (1.6"x1.2" - 8.3"x6.3")
Measurement camera resolution		10,8 MPix
Positions in nosepiece		6-position turret
Max no. of indenters		3
Max no. of objectives		3
Indenter shaft	Diameter	6.35 mm
Standard objectives included		0.7x
Optional objectives		2.5x, 5x, 10x, 20x
Z axis		Motorized
Anti-collision protection		Yes

Duramin-650		
XY stage/anvil	Duramin-650 M	Anvil
	Duramin-650 AC	Motorized XY stage
Stage size	Duramin-650 M	Ø80 mm (Ø3.1")
	Duramin-650 AC	337x238 mm / 410x280 mm (13.3"x9.4" / 16.1"x11")
Stage stroke (travel range)	Duramin-650 AC	250x150 mm (9.8"x5.9")
Auto illumination		Yes
Stage illumination		No
Laser/LED guide		No
Software	Operating software	High performance embedded controller, i7, mSSD 120 GB MS Windows 10 operated
	Integrated PC	Yes
	Monitor	15" portrait mode capacitive touch screen
	Dual view	Optional
	Possibility to connect printer	No
	Ethernet connection	Yes
	Data export	4x USB, Ethernet LAN, Wi-Fi, RS232, Bluetooth, Dual HDMI
System	Data output	XML, CSV, Q-DAS certified (optional)
Software modules		Total test, max., min., average, range, standard deviation, all in real time after each test
Sample height		300 mm (11.8")
Throat depth		220 mm (8.7")
Safety standards		CE labelled according to EU directives
REACH		For information about REACH. contact your local Struers office
Operating environment	Surrounding temperature	10-35°C (50-95°F)
	Humidity	10%-90% RH non-condensing
Safety circuit categories/Performance level	Emergency stop	EN ISO 13849-1 PL c, Category 1 Stop category 0
Noise level	A-weighted sound emission pressure level at workstations	< 70 dB(A)
Vibration level	During operation	Total vibration exposure to upper parts of the body does not exceed 2.5 m/s ²

Duramin-650		
Electrical data	Power supply	100 V AC – 240 V AC, 50/60Hz, single phase
	Power consumption load	71 W
	Power consumption idle	75 W
	Power consumption max. load - Duramin-650 M	103 W
	Power consumption max. load - Duramin-650 AC	201 W
	Power inlet	1-phase (N+L1+PE) or 2-phase (L1+L2+PE) The electrical installation must comply with Installation Category II
Residual Current Circuit Breaker (RCCB)		Type A, 30 mA is required depending on local regulations.
Dimensions	Width	365 mm (14.4")
	Depth	6813 mm (24.1")
	Height	1434 mm (56.5")
Weight	Duramin-650 M	255 kg (562 lbs)
	Duramin-650 AC	260 kg (573 lbs)