

DuraVista-80		
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
	Conversion	Conversions to other hardness methods according to ASTM E140, ISO 18265, GB/T 1172
Test force range	Main load ranges (select one)	0.098 N - 19.6 N (10 gf - 2 kgf)
		0.098 N - 98.1 N (10 gf - 10 kgf)
		0.098 N - 306.5 N (10 gf - 31.25 kgf)
		0.0098 N - 612.9 N (1.0 gf - 62.5 kgf)
		1.962 N - 612.9 N (200 gf - 62.5 kgf)
	Extended load ranges	Force range extension 0.00098 N - 0.0098 N (0.1 gf - 1 gf)
		Force range extension 0.0098 N - 0.098 N (1 gf - 10 gf)
		Force range extension 0.098 N - 1.9 N (10 gf - 200 gf)
		Force range extension 19.6 N - 98.1 N (2 kgf - 10 kgf)
		Force range extension 98.1 N - 306.5 N (10 kgf - 31.25 kgf)
		Force range extension 306.5 N - 612.9 N (31.25 kgf - 62.5 kgf)
Test force characteristics	Force application	Load cell, closed loop, force feedback system
	Test force tolerance	< 0.25% for test force above 0.1 kgf < 0.5 % for test forces lower than 0.1 kgf
	Dwell time settings	Standard 10 seconds, user defined up to 250 seconds
Turret	Motorized turret	6 + 2 position turret
Max no. of Indenters		2 (1 in standard delivery, 2 optional)
Indenter Shaft	Diameter	3 mm (0.12")
Max No. of Objectives		4
Laser/LED Guide		Laser positioning guide on turret (standard)
Touch focus		Touch probe on turret (standard)
Standard objectives included		10x & 50x long working distance (LWD)

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Optional available objectives		2,5x, 5x, (10x), 20x , 40x, (50x) and 100x , all long working distance objectives (LWD).
Instrument overall dimensions	Width	32.5 cm (12.8")
	Depth	57.5 cm (22.6")
	Height	79.2 cm (31.2")
Weight	DuraVista-80M	120 kg (265 lbs)
	DuraVista-80A (Excluding stage)	
	DuraVista-80TM	130 kg (287 lbs)
	DuraVista-80TA (Excluding stage)	
Measurement camera resolution		18 MP
Read method		Automated from Camera Image
Overview camera	DuraVista-80M	NA
	DuraVista-80A	13 MP
Overview camera field of view	DuraVista-80M	NA
	DuraVista-80A	200 x 160 mm (7.9" x 6.3")
Z-Axis	DuraVista-80M	Motorized test head
	DuraVista-80A	
	DuraVista-80TM	Motorized test head & motorized spindle
	DuraVista-80TA	
XY Stage / Anvil	DuraVista-80M	Configurable manual or motorized XY-stage
	DuraVista-80A	Motorized XY-stage (configure size option)

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Motorized stage options	DirectConnect stage, 215 x 160 mm	Travel: 75 x 75 mm Resolution: 0.001 mm Repeatability: ± 0.0015 mm Total load: up to 400 kgf max.
	DirectConnect stage, 260 x 205 mm	Travel: 120 x 120 mm Resolution: 0.001 mm Repeatability: ± 0.0015 mm Total load: up to 400 kgf
	DirectConnect stage, 360 x 205 mm	Travel: 220 x 120 mm Resolution: 0.001 mm Repeatability: ± 0.0015 mm Total load: up to 400 kgf
	DirectConnect stage, 490 x 224 mm	Travel: 340 x 120 mm Resolution: 0.001 mm Repeatability: ± 0.0015 mm Total load: up to 4000 kgf
Auto Illumination		Yes
Stage Illumination		Yes
Software	Operating software	DuraSoft software for work flow system & tester control
	Integrated PC	Yes, external PC on request
	Monitor	27" touchscreen
	Possibility to connect Printer	Yes
	Ethernet Connection	Yes
	Data Export	2x USB, Ethernet LAN, Wi-Fi, Bluetooth, HDMI
System	Data output	XML, CSV, PDF (with virtual printer)
		Q-DAS export (optional)

DuraVista-80		
Software modules	DuraSoft for DuraVista-80M, -80TM	Basic Statistics Data export Report editor Test pattern Vickers & Knoop automeasure
	DuraSoft for DuraVista-80A, -80TA	Basic Statistics Data export Report editor 3-axis controller & free style test pattern editor Vickers & Knoop automeasure DuraSoft-Met metallography pack
	DuraSoft options for DuraVista-80M, -80A, -80TM & -80TA	Pattern editor CHD, SHD and NHD (requires motorized stage) Artificial Intelligence Deep Learning Brinell module Drawing and measuring functions Automatic edge detection (requires a motorized stage) KiC Palmqvist & Median measurement scales Image stitching for full stage overview (requires a motorized stage) Automatic Contour scanning (requires a motorized stage) 2D / 3D hardness scanning (includes automatic contour scanning) (requires a motorized stage) ISO 898-1 screw thread measurement of (de)-carbonized part. (requires Contour scanning) ISO-2702 tap screw thread measurement (requires a motorized stage) ISO 9015 Weld pattern configuration (requires motorized stage + overview camera or 0.7x objective) ISO bullets casings pattern Unlock API for robotic systems Q-DAS Certified connectivity protocol Bar code & QR data mapping software
Sample height	DuraVista-80 with manual stage	Max. 200 mm (7.8")
	DuraVista-80 with motorized stage	Max. 180 mm (7.1")
	DuraVista-80T with manual stage	Max. 170.8 mm (6.7")
	DuraVista-80T with motorized stage	Max. 150 mm (5.9")
Sample weight	DuraVista-80	Max. 100 kg (220 lbs)
	DuraVista-80T	Max. 25 kg (55 lbs)
Throat depth	180 mm (7.1") (from Center of indenter to back)	

DuraVista-80		
Electrical data	Power supply	100 V AC - 240 V AC, 50/60 Hz, single phase
	Power consumption Max. load	< 100 W
	Idle	< 100 W
Safety standards		CE labeled 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 .