

FENIX 200 DCL

Rockwell | Brinell Hardness Tester

SEMI - **AUTOMATIC**



FENIX 200DCL

Fully digital Rockwell hardness testing

The FENIX 200DCL, constructed around a rock solid C-frame, is equipped with a load cell, closed loop, force feedback test force application system. Perform your hardness test, by easily pressing the START button on the 5" industrial touchscreen. Test results can be simply stored up to 50 readings.

The DCL version performs both on Rockwell as Brinell, one of the advantages of the closed loop system. The internal system can be easily serviced by removing the side and top covers, no need to turn the machine upside down.



HARDNESS SCALES



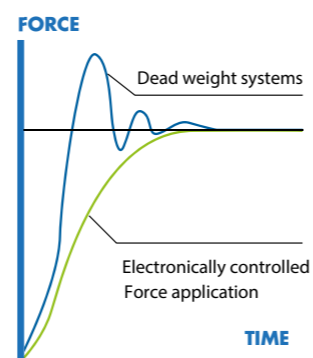
ROCKWELL 10kgf – 150kgf



BRINELL 10kgf – 187.5kgf



TECHNOLOGY OF TODAY



Load cell, closed loop, force feedback system

ROCKWELL & BRINELL FORCE RANGE

1kgf	10kgf	FENIX 200DCL	187.5kgf
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HIGHLIGHTS

- 1 Load cell, closed loop, force feedback, force application system, error <0,25%
- 2 Rockwell scales : A | B | C | D | E | F | G | H | K | L | M | P | R | S | V
Brinell scales : HBW1/30 | HBW2.5/31.25 | HBW2.5/62.5 | HBW2.5/187.5 | HBW5/25 | HBW5/62.5 | HBW5/125 | HBW10/100
- 3 5" Industrial touchscreen for scale indication, dwell time countdown etc.
- 4 Start/stop & menu selection buttons.
- 5 Large internal memory of 50 readings
- 6 Throat depth : 150mm
- 7 Working height : 260mm
- 8 Machine weight (net) : 104kg
- 9 Machine dimensions : H765mm / W270mm / D555mm

SENSIBLE INNOVATION



200DCL
Multi loadcell,
ball bearing,
force actuator

STANDARD
Force
adjustable
workpiece clamp



Observe, Think, Try, Change...

Unparalleled in this class of Rockwell hardness testing machines is the electronic Load cell, closed loop, force feedback, force application system. Absolute maintenance free, automatic setting of test forces by choosing the Rockwell hardness scale. Error free operation, due to an automatic test cycle, applying the main load and correct pre-set dwell time.

Innovative software functions

The I-TOUCH™ LT software provides clever multi-function keys for testing, set-up, storing and uploading of test programs, statistic control and more, making tester operation as easy as it can be.

Data export, single or batch readings, with a single press on a button, or just fully automatic over an USB connection to a PC and imported or evaluated in EXCEL. Further advanced features include extended statistics, shape correction for convex, concave or ball shaped specimens, hardness conversion to Rockwell, Brinell or Tensile strength according to ASTM E140 and ISO 18625 with different material tables.



OPERATING COMFORT WITH I-TOUCH LT

INNOVATIVE SOFTWARE FUNCTIONS

1 ACTIVE UPPER LIMIT



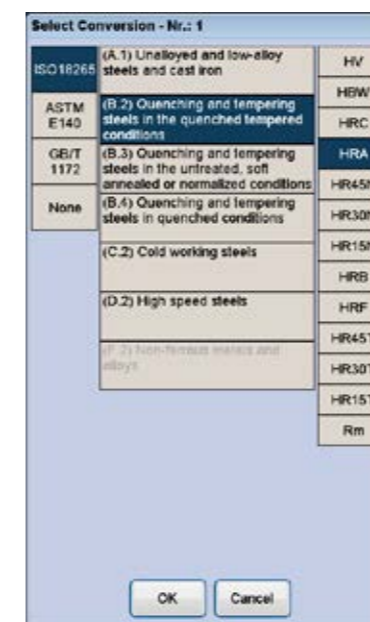
2 ACTIVE LOWER LIMIT



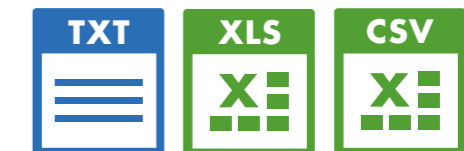
3 MEASUREMENT OVERVIEW



4 CONVERSION SCREEN



5 EXPORT FUNCTIONS





VARIOUS

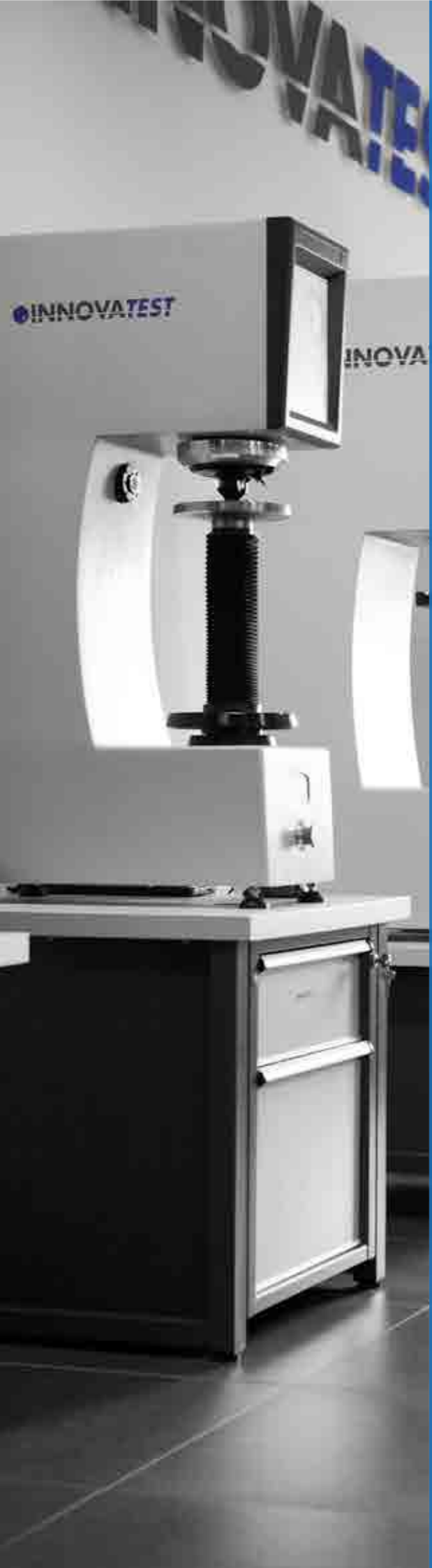
POSSIBILITIES

INDENTER COVER & CLAMP

The FENIX 200 series is standard equipped with an indenter protection cover that includes an integrated spring loaded workpiece clamp pressing the workpiece firmly on the anvil and eliminating possible workpiece and spindle hysteresis. Adjustable clamp force, to avoid impressions on softer materials.

The FENIX 200 is larger than most other machines in its class. With a throat depth of 150mm and maximum workpiece height of 240mm, it offers the user a generous workspace. Moreover the FENIX 200 is super rigid, sturdy and can withstand the harshest environments. Compare these parameters with alternative products and find that FENIX is leading in its class.





SUPPORT YOUR BEST TESTING RESULTS

With our rigid designed Bench stands

- Rock solid bench stands
- 100% retractable drawer, bearing guidance, max 100kg load. Rubber anti slip bottom
- Lockable cabinet, 300mm high
- Adjustable feet, (+/- 50mm height adjustable to reach ergonomic working position)
- Made of corrosion resistant zinc plated steel with RAL powder coating
- Carrying capacity of 400kg
- Top surface made of 50mm Plywood with 1.5mm chemical resistant plastic plating, edges made of shock resistant 3mm ABS side liner
- Industrial quality, for workshop or laboratory

Designed for hardness testing instruments, painted in INNOVATEST® RAL colors matching our testers.



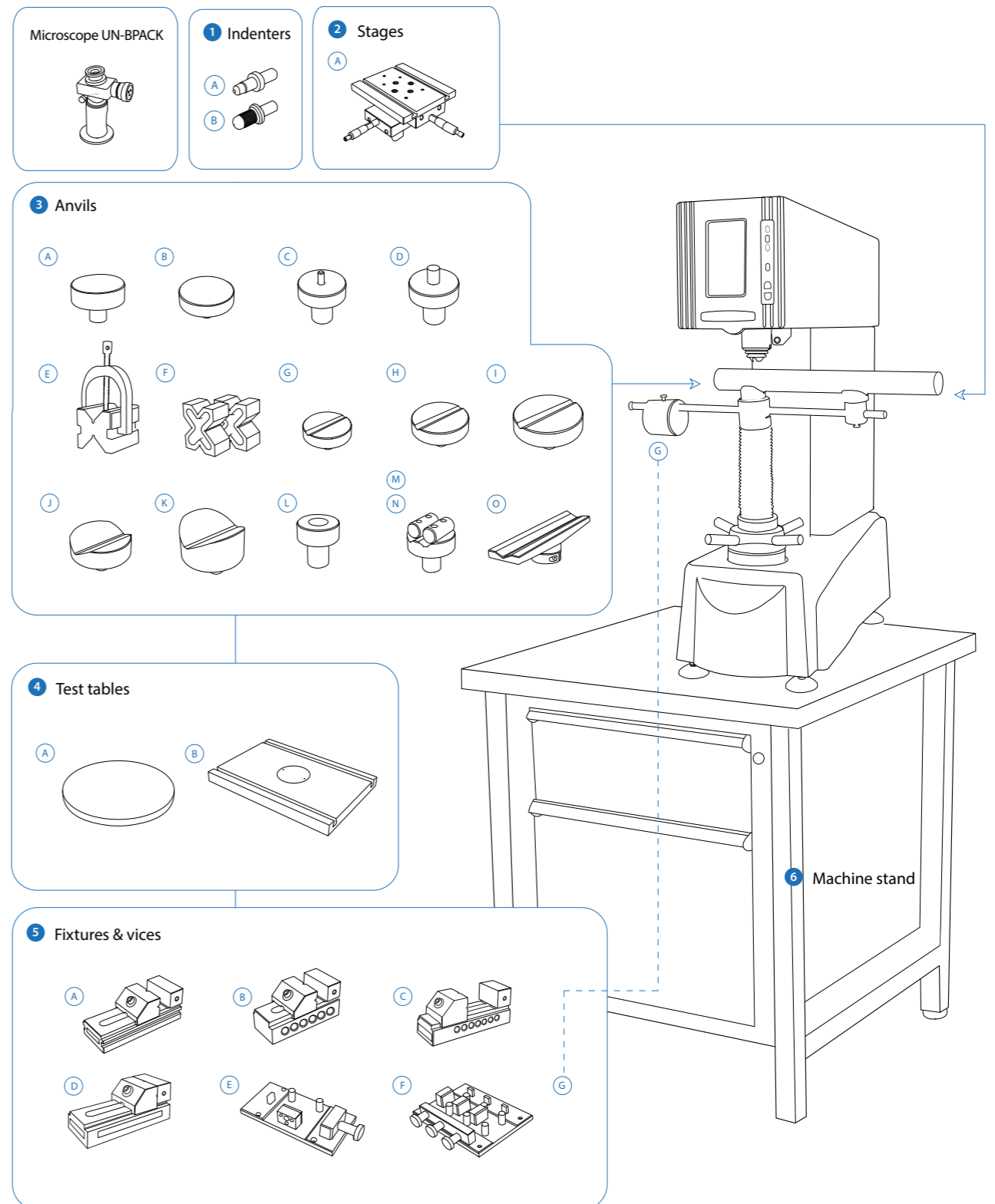
UN-STAND/960 71 x 75 x 80 cm



UN-STAND/965 150 x 75 x 80 cm

ACCESSORIES FENIX 200

Schematic overview of the configuration options, standard and optional accessories



Not all accessories are displayed on this page. Full details can be found on the Order details page.

ORDER DETAILS

FENIX 200



Digital, Load Cell Closed Loop, Rockwell hardness tester 10kgf - 150kgf	FENIX 200DCL
Plug & Play prepared, calibration, sea & airworthy packing in "non coniferous wood" material	P&PSEAPACK60

ACCESSORIES

1	Indenters	A	Rockwell C Diamond Indenter. Ø6.35mm. ISO & ASTM certified	IN/6005			
			Rockwell Ball Indenter 1/16". Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7506			
			Rockwell Ball Indenter 1/8". Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7606			
			Rockwell Ball Indenter 1/4". Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7706			
			Rockwell Ball Indenter 1/2". Includes 1 carbide ball, Ø6.35mm. ISO & ASTM certified	IN/7806			
			B	Brinell Indenter 1mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7000		
				Brinell Indenter 2.5mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7005		
				Brinell Indenter 5mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7010		
				Brinell Indenter 10mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified	IN/7015		
			2	Stages		Manual X-Y stage with analogue metric micrometers, 180x160mm Displacement: 25x25mm, scale 0.01mm, max load 300kg	UN-TESTTABLE/030
3	Anvils	A	Flat anvil 60mm	AS3000-19-04			
			B	Flat anvil 80mm	UN-TESTTABLE/002		
			C	Spot anvil 5mm	UN-ANVIL/010		
			D	Spot anvil 10mm	UN-ANVIL/011		
			E	V block with bracket 40x40x50mm (LxBxH)	UN-VBLOCK404050		
			F	Steel, cross type, (X) V-block 60x120x100mm 8-90mm pair	UN-CROSSBLOCK01		
			G	V-anvil ø40mm 6-60mm	UN-ANVIL/005		
			H	V-anvil ø63mm 10-100mm	UN-ANVIL/006		
			I	V-Anvil ø80mm 3.3-20mm	UN-ANVIL/040		
			J	V-Anvil ø80mm 15-80mm	UN-ANVIL/045		
			K	V-Anvil ø80mm 23-40mm	UN-ANVIL/050		
			L	Anvil for round specimen dia. 6-25,4mm	UN-ANVIL/200		
			M	Cylindrical V anvil 6-80mm	UN-CVANVIL680		
			N	Cylindrical V anvil 50-200mm	UN-CVANVIL50200		
			4	Test Tables	A	Test table 100x100mm, V groove 20mm wide, 10mm deep	UN-TESTTABLE/040
						O	Extra long V-Anvil (Ø10 - Ø100)
A	Testing table Ø200mm (61 - 65HRC) requires lock flange	CM-08-0194					
	Testing table flat ø180mm, screwfix	ASV700-00-20					
	Testing table flat ø235mm, screwfix	UN-TESTTABLE/014					
	B	Large flat surface testing table 350x250mm, thickness 30mm with 2 T-slots, for large components	UN-TESTTABLE/015				

5	Fixtures and Vices	A	Lock flange	UN-XYZ BUSH42	
				Mounting plate for lock flange	UN-XYZ30FP40-42
				Lock flange	ASV700-21-01
			B	Polished precision vice with lock down system, jaw width 25mm, opens 20mm	UN-VICE/210
			B	Polished precision vice with lock down system, jaw width 36mm, opens 42mm	UN-VICE/215
			C	Polished precision vice with lock down system, jaw width 48mm, opens 75mm	UN-VICE/220
			D	Polished precision vice with lock down system, jaw width 75mm, opens 100mm	UN-VICE/230
6	Machine Stand	E	JOMINY Fixture, for 1 quench end test sample, quick release function	UN-JOMFIX1	
			F	JOMINY Fixture, for 3 quench end test sample, quick release function	UN-JOMFIX3
			G	Adjustable Vari rest	SA-08-0013
				Cabinet test table with drawer for hardness testers 71x75x80cm	UN-STAND/960
				Seaworthy packing box for 950/960	PACK/100
				ISO/ASTM verification Direct and Indirect Verification/Calibration & BRINELL Certification in compliance with ISO & ASTM, NADCAP. Includes Direct force and depth verification report, machine hysteresis report, indirect verification report (block readings), GR & R report, flat fee for selected common scales, per scale	CALCEFRDW/1B
				Direct and Indirect Verification/Calibration & ROCKWELL Certification in compliance with ISO & ASTM, NADCAP. Includes Direct force and depth verification report, machine hysteresis report, indirect verification report (block readings), GR & R report, flat fee for selected common scales, per scale	CALCEFRDW/1R
	Cover	Anti Static machine cover 350x550x770mm	UN-COVER1		

SOFTWARE

	Upgrades	Upgrade Rockwell tester RS to RSB, Brinell scales, analogue microscope 40x	UN-BPACK01
	Connectivity Plus	Interface cable for PC	UN-CABLE/910
		Utility software; Import test results in MS applications like Excel	UN-SW/905

ACCESSORIES

MICROSCOPES

UN-BPACK

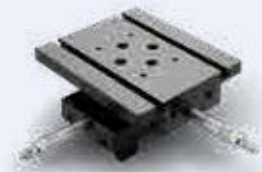


AS3001-MICRO/02

INDENTERS



STAGES



UN-TESTTABLE/030

TEST TABLES



CM-08-0194
ASV700-00-20
UN-TESTTABLE/014

UN-TESTTABLE/015

FIXTURES AND VICES



ANVILS



MACHINE STAND



UN-STAND/960

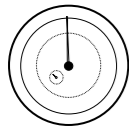
COVER



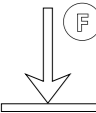
UN-COVER1

SPECIFICATIONS

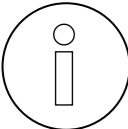
HARDNESS SCALES

	ROCKWELL EN-ISO 6508, ASTM E-18 JIS Z 2245	A B C D E F G H K L M P R S V
	BRINELL EN-ISO 6506, ASTM E92 JIS Z 2243	HBW1/30 HBW2.5/31.25 HBW2.5/62.5 HBW2.5/187.5 HBW5/25 HBW5/62.5 HBW5/125 HBW10/100

TEST FORCE

	Force application	Load cell, closed loop, force feedback system
	Test forces	Preload : 10kgf, main loads : 15.625 25 30 31.25 60 62.5 100 125 150 187.5kgf
	Force range	FENIX 200DCL 10kgf – 187.5kgf
	Test force tolerance	< 0.25% for test force 10kgf to 187.5kgf
	Dwell time settings	Default 10 seconds, user defined. Up to 999 seconds

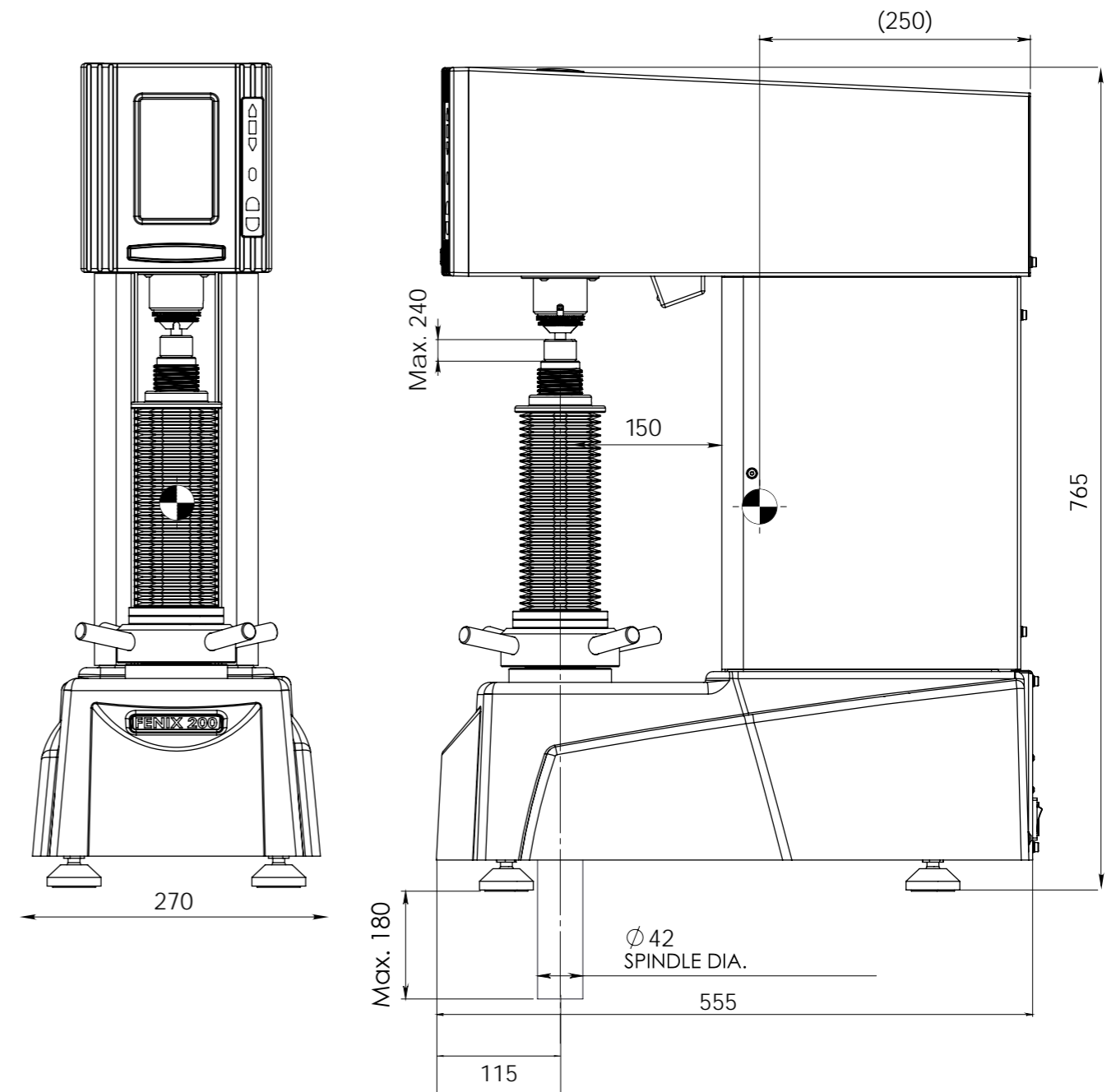
GENERAL

	Machine dimension	765mm x 270mm x 555mm
	Machine weight	104kg
	Workpiece accommodation	150mm (H) x 240mm (D)
	Power supply	100VAC to 240VAC, 50/60Hz, single phase
	Operating temperature	10°C to 35°C
	Power consumption	10W
	Humidity	10% to 90%, non-condensing
	Noise emission	< 70 db(A)

TECHNICAL DRAWINGS

All dimensions in these drawings are in mm, approximate. Working heights and or workpiece accommodation varies depending on the stages and stage accessories used.

Please contact our sales department for more details.



OTHER MODELS IN THE ROCKWELL RANGE



FENIX 200AR

Load applied from a dead weight force actuator Rockwell / Brinell hardness tester.

See brochure B18F200/XX



FENIX 300RS

Load Cell, closed loop, force feedback, test force application system Rockwell / Brinell hardness tester with I-TOUCH™ system.

See brochure B20F300/XX



VERZUS 720

Load Cell, closed loop Rockwell/Super Rockwell/ Brinell hardness tester, with direct depth measuring system, integrated PC, Windows 10, WiFi, full color touchscreen.

See brochure B19V720/XX



NEMESIS 6100

Load Cell, Closed loop Fully automatic Rockwell/ Superficial Rockwell (Brinell) hardness tester with descending test head & fixed workpiece position. full color touchscreen operation.

See brochure B19N6100/XX



NEMESIS 6200

Load Cell, Closed loop Fully automatic Rockwell/ Superficial Rockwell (Brinell) hardness tester Includes CNC motorized X-Y stage, overview camera and advanced software (IMPRESSIONS™) for automatic pattern testing and fixture recognition.

See brochure B19N6200/XX



HAWK 250RS/400RS

Load Cell, closed loop Rockwell/ Superficial Rockwell hardness tester, with direct depth measuring system, Graphic User Interface, 6.5" Full color touchscreen.

See brochure B20HSERIES/XX



HAWK 652RS-IMP

Load Cell, Closed loop Fully automatic Rockwell/ Superficial Rockwell hardness tester with dual motorized Z-Axis, IMPRESSIONS™ software, 15" industrial capacitive touchscreen.

See brochure B20HSERIES/XX



NEMESIS 9100RS

Load Cell, closed loop Rockwell/Superficial Rockwell Brinell hardness tester, with integrated PC, Windows 10, WiFi etc. full color touchscreen.

See brochure B18N9100/XX



NEMESIS 9600RSB

Floor type, Load Cell, closed loop. Brinell, Rockwell/Superficial Rockwell hardness tester With motorized Z-axis & BIOS Brinell Indent Optical Scanner

See brochure B19N9600/XX

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Changes in products and/or product specifications can emerge due to new technologies and continuous development.

We reserve the right to change or modify specifications of the products without prior notice. We recommend you to contact our sales office for up-to-date information.

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