

# NEXUS 605RS/RSB



# NEXUS 605RS/RSB Rockwell/Superficial Rockwell/Brinell hardness tester



# General information

The NEXUS 605 models are a new generation of hardness testing instruments. The testers main body is a fine casted rigid structure which incorporates a load cell, closed loop force actuator that provides continuous force feedback information. The load application system avoids "overshoot" during the test force application and guarantees one of the best GR & R results ever seen on Rockwell/Brinell hardness testers in this class. The tester meets or exceeds the ISO, ASTM and JIS standards. (ISO 6508, ASTM E18, ASTM B254, JIS Z2245)

Test forces range from 2.5kgf/24.5N to 187.5kgf/1838N, Advanced algorithms, digital filter technology and state of the art electronics provide a very reliable and robust Rockwell hardness tester. NEXUS stands for Next Generation.

The unique machine design allows Rockwell, Superficial Rockwell and Brinell load settings.

The NEXUS 605 RS/RSB model makes it possible to perform hardness tests in Rockwell and Superficial Rockwell scales and optionally (605RSB) can provide Brinell hardness testing.

Models RSB are supplied with a separate Brinell measuring microscope.

### **Features**

- Load cell, force feedback, closed loop system
- Excellent accuracy, best in class GR & R
- Load range 2.5kgf/24.5N up to 187.5kgf/1838N (depending on model)
- Fully automatic operation
- Meets or exceeds ISO, ASTM and JIS standards
- Shape correction settings for curved surfaces
- Go/No Go function with color full visual and acoustic warning
- Large memory for test results storage
- Easy calibration function
- Testing program storage
- Standard workpiece clamping attachment
- Connectivity USB-2
- External Brinell microscope (RSB model)
- Large workpiece accommodation



# Technical specifications

## NEXUS 605RS/RSB

Hardness scales RS	Rockwell and Superficial Rockwell all scales
Hardness scales RSB	Rockwell, Superficial Rockwell and all Brinell scales (2.5kgf/24.5N to 187.5kgf/1838N)
Load application	Load cell, force feedback, closed loop system
Rockwell Pre load	3kgf and 10kgf
Rockwell main load	15kgf, 30kgf, 45kgf, 60kgf, 100kgf, 150kgf
Rockwell test scales	A, B, C, D, E, F, G, H, K, L, M, P, R, S, V
Superficial Rockwell scales	15N, 30N, 45N, 15T, 30T, 45T,
	15W, 30W, 45W, 15X, 30X, 45X,
	15Y, 30Y, 45Y
Brinell test load (RSB model)	2.5kgf/24.5N to 187.5kgf/1838N
Brinell test scales (RSB model)	
	HB 2.5: 6.25kgf/61.29N, 15.625kgf/153.2N, 31.25kgf/306.45N,
	62.5kgf/612N, 187.5kgf/1838N
	HB5: 25kgf/245.16N, 62.5kgf/612N, 125kgf/1225N
	HB10: 100kgf/980.7N
Display	Full color multi-function 6,5" industrial touch screen
Display overview	Conversion to other hardness scales such as Brinell, Vickers, Leeb, UTM.
	convex adjustment, machine settings, calibration
Standards	Meets or exceeds ISO, ASTM, JIS standards
Test cycles	Motorized, fully automatic, Pre load, Load, Dwell, Unload process
Indentors	Rockwell Diamond Cone: 120°
	Rockwell balls: 1/16", 1/8", 1/4", 1/2"
	Rockwell balls: 1/16", 1/8", 1/4", 1/2"
Dwell time	Brinell Balls: 1mm, 2.5mm, 5mm, 10mm
	Pre-load 1-99 seconds, Main load 1-99 seconds,
	,
Connectivity	Recovery 1-99 seconds USB-2
Optical system RSB	Brinell microscope
Workpiece accommodation	Vertical capacity 250mm
	Horizontal capacity 170mm (from indentor center-line)
Operating temperature	10°C to 35°C, non-condensing
Machine dimensions	220mm x 540mm x 855mm (WxDxH)
Machine weight	82kg
Power supply	100V AC to 240V AC, 50Hz/60Hz, single phase
	Toot AC to 2401 AC, 30112/ 00112, silligle pildse



## **Standard delivery**

- V-anvil
- Flat anvil 60mm •
- Round testing table 150mm Brinell microscope (RSB) •
- •
- Power cable ٠
- Four adjustable feet •
- INNOVATEST® certificate •
- Installation and user manual
- Pre-installed (plug and play) •

### **Optional accessories**

- Certified indentors (ASTM, DIN, ISO) •
- Certified reference hardness blocks (ASTM, DIN, ISO)
- Custom testing tables
- Precision vice for small parts, jaw width 36mm •
- Precision vice for small parts, jaw width 42mm

- Precision vice for small parts, jaw width 42mm Precision vice for small parts, jaw width 75mm V-blocks and special clamps Manual X-Y stage 100mm x 60mm, micrometer travel 25mm x 25 mm •
- Solid tester table and storage cabinet •



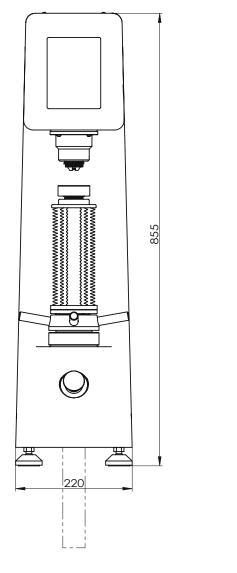
## **Order details**

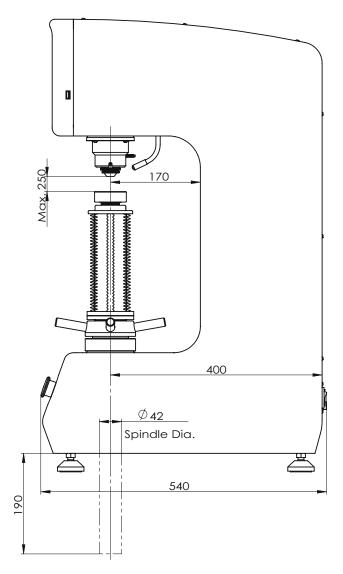
NEXUS 605RS	Rockwell, Superficial Rockwell all scales
NEXUS 605RSB	test forces 3kgf/29.4N to 150kgf/1471N Rockwell, Superficial Rockwell, Brinell all scales test forces 2.5kgf/24.5N to 187.5kgf/1838N (for Brinell)



# Technical drawing NEXUS 605RS/RSB

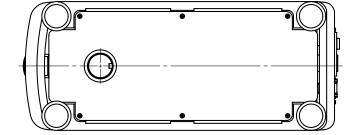
## All dimensions are in mm

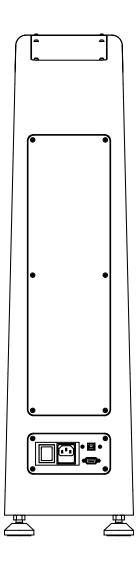






All dimensions are in mm







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