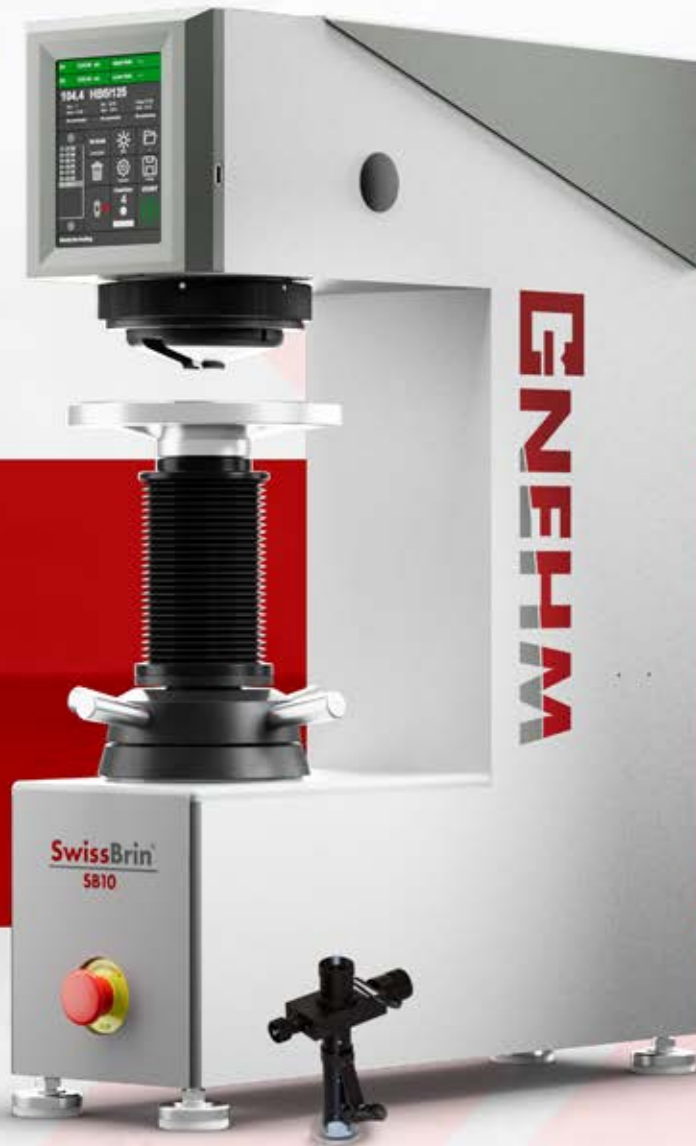


BRINELL HARDNESS TESTER

# SwissBrin<sup>®</sup> SERIES



## SB10

SEMI-AUTOMATIC HARDNESS TESTER

**GNEHM<sup>®</sup>**  
A Swiss premium brand

# INTRODUCTION

The SWISSBRIN SB10 Brinell Hardness Tester is a ridged simple solution but still tailored to meet the needs of modern material testing. With a testing range of 62.5 kgf to 3000 kgf, it combines robust mechanics with solid electronics to deliver consistent and accurate results.

Sense and simplicity; the electronic system with full color touch screen, is robust and operates flawless under all circumstances. The USB output allows for exporting measuring reports and other data.

The included Brinell Microscope allows to measure indent diameters and keying in the results on the screen will give automatic calculated Brinell hardness test results.

# CLOSED-LOOP LOAD CELL CONTROL SYSTEM

Accommodates forces from 62.5 kgf to 3000 kgf, enabling versatile application across materials like soft metals, hard alloys, and composites.

Durable Construction: Industrial-grade materials and components ensure reliability and longevity, even in demanding environments.

With its combination of advanced features, the SWISSBRIN SB10 is ideal for industries requiring precise and efficient hardness testing, including: **Automotive and Aerospace, Metallurgy and Foundries as well as Construction Materials.**



# KEY FEATURES

Embedded electronics provide a simple and reliable operation panel.

The pre-installed advanced firmware offers intuitive navigation, real-time data analysis, and reporting capabilities.

High-resolution imaging ensures accurate edge detection, even on challenging material surfaces.

Entering the Brinell diameters at the user interface provides direct calculation of the Brinell hardness value and with the option to display atleast 4 converted hardness values like Vickers or Rockwell

Ensures compliance with ASTM E10 and ISO 6506 standards, guaranteeing accurate and repeatable results.

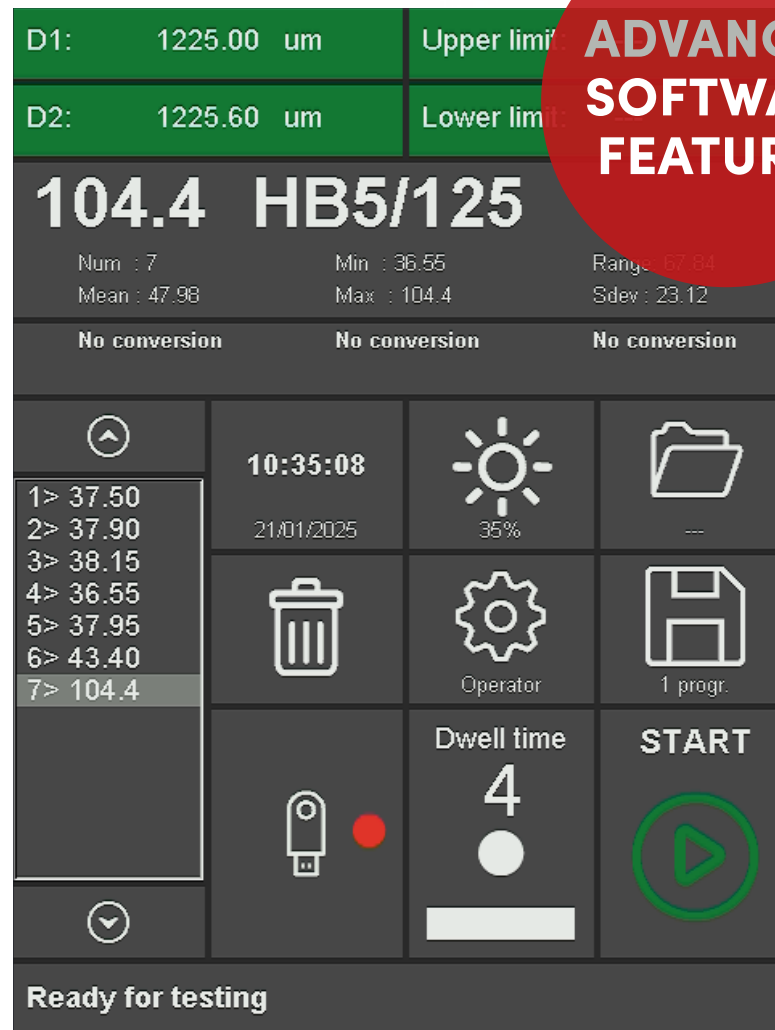
“DISCOVER THE ART  
OF **PERFECTION**”



## INTUITIVE & PRACTICAL SOFTWARE

The machine's software offers practical, user-friendly multi-function keys for test setup, execution, storing, and uploading of test programs. Data can be easily exported manually or automatically via USB to a PC for further analysis in Excel.

The software also includes advanced features for extended statistical analysis, shape corrections for convex, concave, or ball-shaped specimens, and hardness conversion between Rockwell, Brinell, and Tensile strength based on ASTM E140 and ISO 18625 standards, with material-specific tables.



**BRINELL TESTING  
EXCELLENCE**



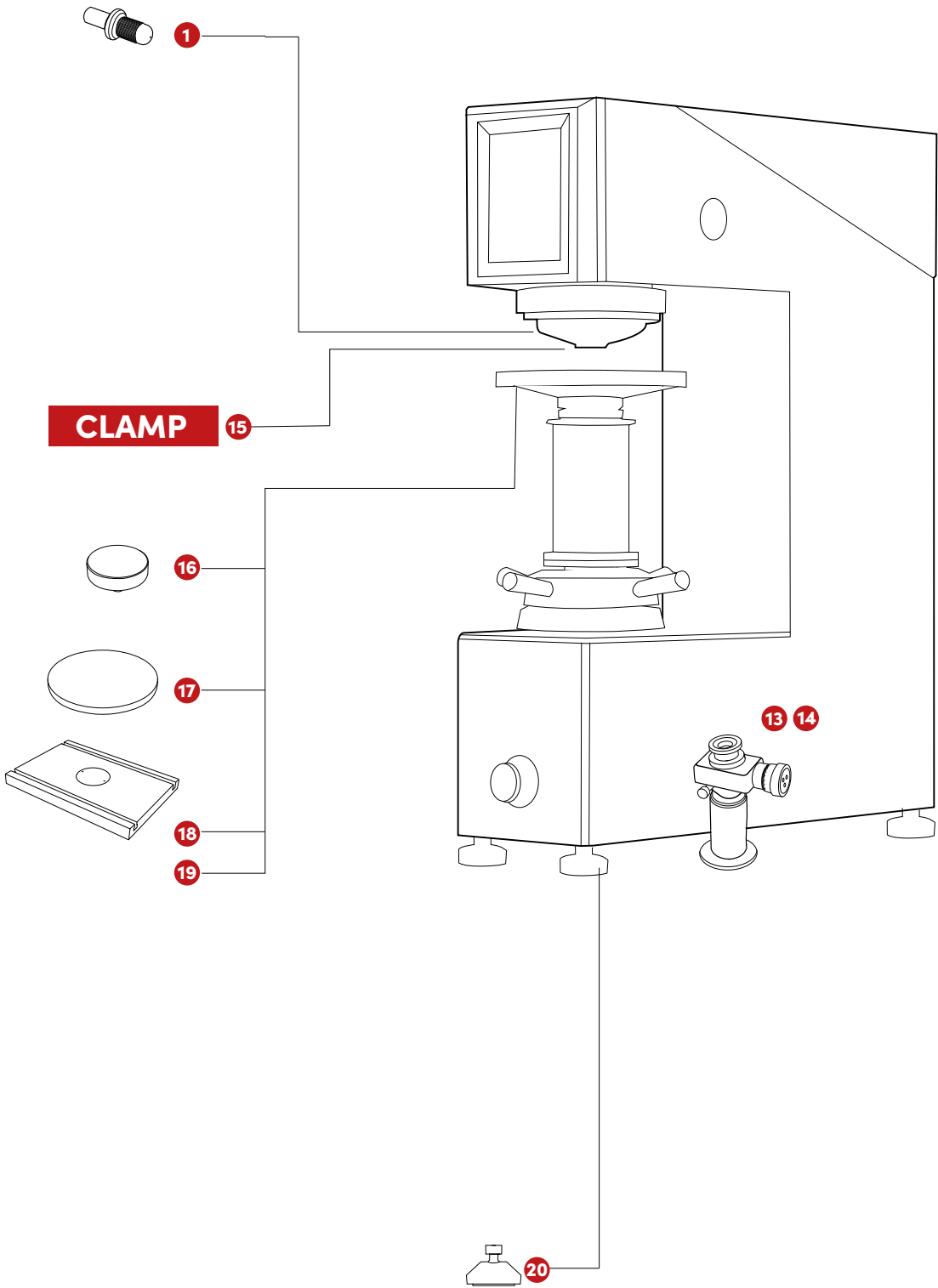
Tester model	SB10
Load system	
Test load range	62,5kgf - 3000kgf
Load steps	10
Loads in kgf	62.5   100   125   187.5   250   500   750   1000   1500   3000kgf
Load application system	Load cell, closed loop, force feedback
Force control	Load Cell Transducer
Load operation sequence	Automatic - (Manual pre-load)   Load   Dwell   Unload   (auto start at reaching Pre Load)
Load application speed	Compliant to applicable standards
Load dwell time	1-999 seconds
Parameters & settings	
Brinell scales	HB(W) 2.5/31.25   HB(W) 2.5/62.5   HB(W) 2.5/187.5 HB(W) 5/31.25   HB(W) 5/62.5   HB(W) 5/125   HB(W) 5/250   HB(W) 5/750 HB(W) 10/100   HB(W) 10/125   HB(W) 10/250   HB(W) 10/500   HBW 10/1000 HB(W) 10/1500   HB(W) 10/3000
Conversion to other methods	All hardness scale conversions compliant to ISO & ASTM
Cylindrical and spherical	Offset for both available via touch panel
Go/No Go	Settings via touch panel
Microscope	
Microscope	Analogue Brinell microscope 20x
Electronics system	
Screen	Full colour screen 6,5"   Portrait mode   Touchscreen
Integrated controller	High performance industrial electronics
Connectivity	USB-2 front & rear connection
Storage	Memory for 999 readings / external via USB stick
Display information	Scale, test load setting, test result (hardness value), Go-No go settings (limits), results list, output channel, load progress indicator, dwelltime, light source on / off, results list selection, limit settings, conversion scales, start/stop button, calibration menu access.
Self diagnosis	Motors, switches, power supplies
Machine settings	Last settings memory
Calibration	Password controlled settings

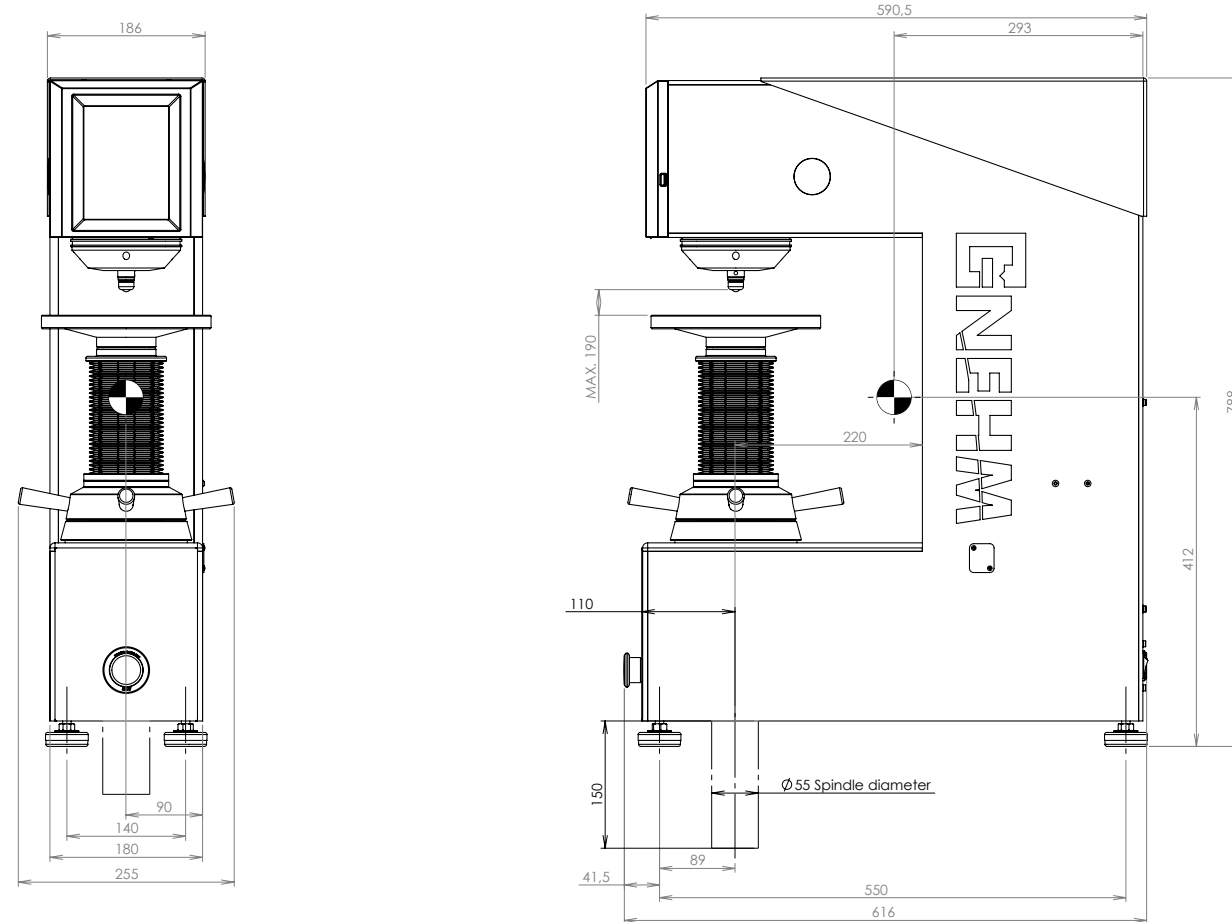
Compliance	
Measuring system & operation	Conform to EN ISO 6508   ASTM E18   JIS B-7726
Certification	Factory calibration certificate or ISO 17025 accredited ILAC-MRA certificate
Electronic system	Meeting general global safety & European CE standards
General data	
Electric connectivity	Single phase AC100~240V 50/60Hz
Workspace dimensions	Workpiece height Max 190mm   Depth from spindle middle 220mm
Dimensions	W255 x D620 x H793 mm
Weight (net)	130kg



SB10 STANDARD ACCESSORIES		
1	100.SB10.ACC	IND-B6355   Brinell Indenter 5mm. Incl. 1 carbide ball. Ø6.35mm
4		IND-B63510   Brinell Indenter 10mm. Incl. 1 carbide ball. Ø6.35mm
17		150.TT.106   Rond Testing table 200mm, hardened Stainless steel, spindle fixed
		HTB-300B5750   Hardness test block Brinell +/- 300HBW5/750
		HTB-300B103000   Hardness test block Brinell +/- 300HBW10/3000
13		170.AM.105   Analogue Microscope 20X magnification
20		LVDLDMP4   4 Level Dampers
		PWCBL1   Powercable EU / Powercable US
		ACCBOX2   Accesories packing Box
		INSMANENG   English Instruction Manual, USB stick
		900.PB.50   Standard packing box for air/seafreight

SB10 OPTIONAL ACCESSORIES		
1	IND-B63511A	Brinell Indenter 1mm. Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
2	IND-B63525IA	Brinell Indenter 2.5mm. Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
3	IND-B6355IA	Brinell Indenter 5mm. Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
4	IND-B63510IA	Brinell Indenter 10mm. Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
5	RU-CB116IA	1/16" carbide ball. ISO & ASTM certified
6	RU-CB118IA	1/8" carbide ball. ISO & ASTM certified
7	RU-CB114IA	1/4" carbide ball. ISO & ASTM certified
8	RU-CB112IA	1/2" carbide ball. ISO & ASTM certified
9	RU-CB1IA	1.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
10	RU-CB25IA	2.5mm carbide ball, only for ø6.35mm. ISO & ASTM certified
11	RU-CB5IA	5.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
12	RU-CB10IA	10.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
13	170.AM.105	Analogue Brinell microscope 20X
14	170.AM.110	Analogue Brinell microscope 40X
15	120.CL.105	Workpiece clamp, clamps parts on stage or test table if required
16	140.AV.105	Flat anvil 60mm
17	150.TT.106	Round Testing table 200mm, hardened Stainless steel, spindle fixed
18	150.TT.150	Large test table 350x250mm
19	150.TT.155	Large test table 450x350mm
	150.MF.105	Mounting flange for large test table
	140.ST.105	Large swivel test table / irregular shaped parts test platform





All dimensions in these drawings are approximate and in millimeters. Working heights and workpiece accommodation may vary based on the stages and accessories used.

**For more details, please contact our sales department.**

#### Catalogue SB10 V1.3

Product specifications may evolve with new technologies and ongoing development.

We reserve the right to update or modify product specifications without prior notice. For the most current information, please contact our sales office.

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## **DEALER**