



smartIndt  
INNOVATIVE SOLUTION PROVIDER

# SMART StiloZak<sup>®</sup>

## 4.0 portable Brinell hardness tester

Instrument in compliance with the requirements of Industry  
4.0 pursuant to article 1(189) of Italian law 160/2019



(\*) Italian Patent Utility Model BMU No. 20202000005725 registered on 13 October 2020. International Patent - PCT pending.

## SMART StiloZak®

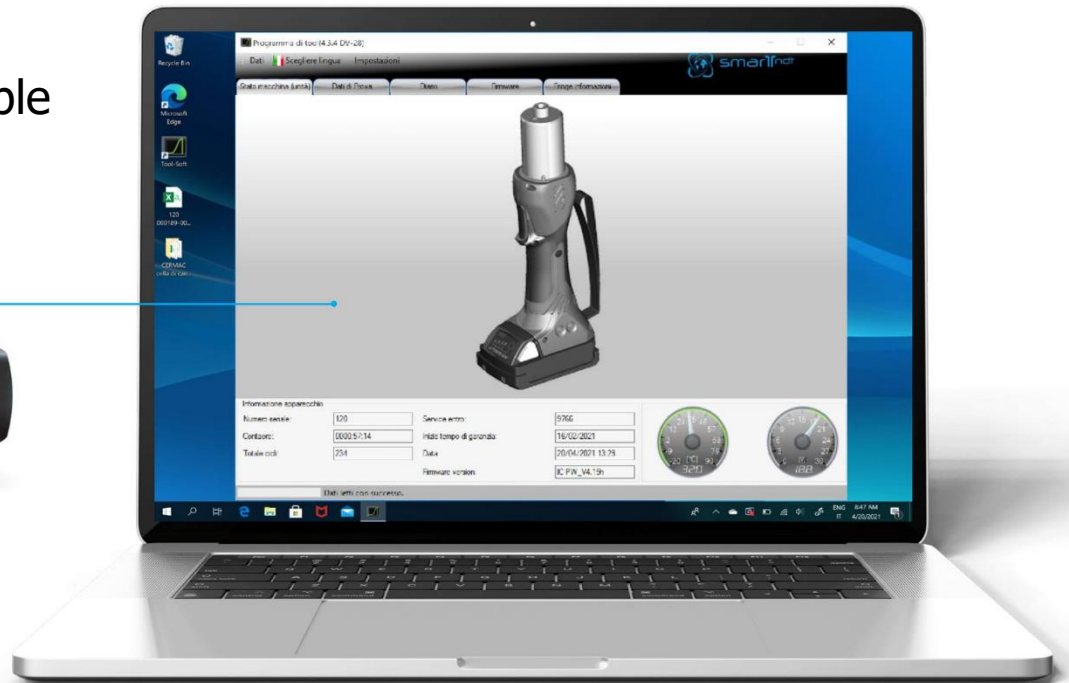
Industry-leading technological innovation in the field of portable instruments for Brinell hardness testing. In compliance with ASTM E110 / E10. This versatile instrument is designed for reliable operation in harsh working conditions calling for fast execution and high quality results.

**SMART StiloZak®** is powered by rechargeable Li-ion batteries and it can perform HB hardness testing of metallic and non-metallic materials with programmable test load: **Standard 10/3000 kgf**.

### Fully programmable data acquisition software

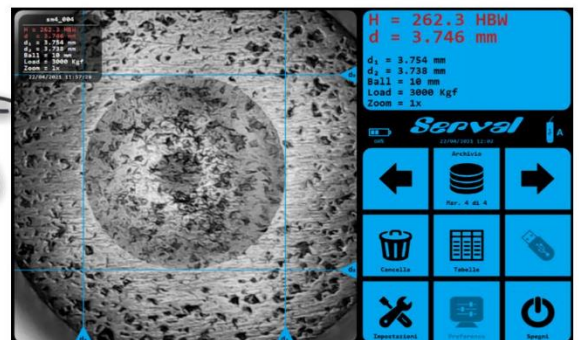


Software and additional instructions are provided on a USB flash drive supplied with the instrument



### SMART TOOL SOFTWARE FUNCTIONALITY:

- assessment of work cycles
- assessment of working curves and measurement data
- work modules documentation
- measurement data export
- device data and service log data reading
- import of default settings and firmware updates plus
- programming of different test loads



Screen page of the "Serval" indentation evaluation software (StiloZak® optional accessory - not included).



## SMART StiloZak® PORTABLE HARDNESS TESTER FEATURES

This portable hardness tester is a smart servo-assisted hydraulic device that assures continuous and constant application of the required force for the execution of Brinell hardness tests, avoiding and minimising the problems of conventional testers.

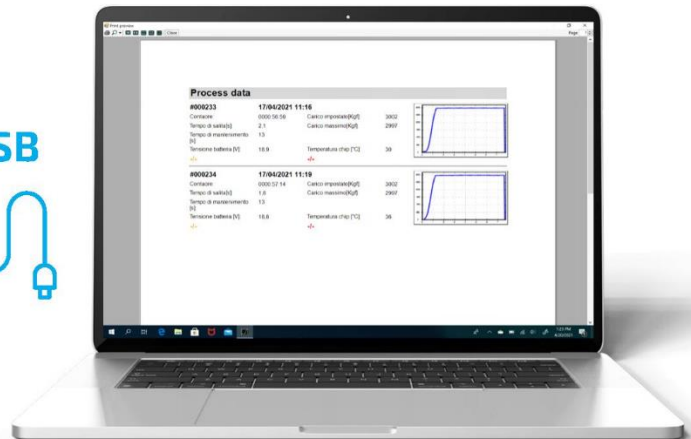
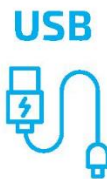
The control device is composed of a central unit connected to the test head carrying the indenter incorporating the certified ball.

The characteristic of the test head, which can be mounted to fixed or portable stands, either already in use or available on the market, is that of guaranteeing rapid application of the test force ( $\approx 2$  seconds) and maintaining it constant (up to 15 seconds), within the stated tolerance values, displaying the load curves stored on the instrument via PC.

Unlike current portable Brinell hardness testers, as referenced also in statutory legislation, the innovative feature of this device is that it applies continuous and constant force in the load application and holding times, in compliance with legally defined tolerance limits.

This characteristic means that even though the device is portable, its performance is equivalent to that of a fixed hardness testing machine.

This system makes it possible to achieve the maximum test pressure while simultaneously monitoring both the load (test force) and application time, in compliance with statutory legislation.



SMART StiloZak® technical data	
Test load	750 kg / 1000 kg / 3000 kg setting via software
Battery voltage	18 V
Battery capacity	2.0 Ah
Battery type	Li-Ion
Battery charging time	approx. 30 min
Sound pressure level	75 dB (A) at 1 m
Acceleration	< 2.5 m/s <sup>2</sup> effective weighted acceleration value
Recommended oil	Shell Tellus S2-V15
Operating temperature	10°C to +40°C
Dimensions	600 x 280 x 200 mm
Weight	12.1 kg approx. (including battery and stand)
Protection rating	IP40
Conformity	CE

## In compliance with:

- ASTM E110** *Standard Test Method for Rockwell and Brinell Hardness of Metallic Materials by Portable Hardness Testers*
- ASTM E10** *Test Method for Brinell Hardness of Metallic Materials*

Application of force with Smart StiloZak® is "true" and measurable and not "equivalent" to the three manual pump strokes of the portable tester currently widely used in industry, which is based on manual application of the test pressure.

**Note:** "optional stand" fixing systems are available, customised to match individual applications.

## Dimensions



**Note:** example of optional stand.

(\* Italian Patent Utility Model BMU No. 202020000005725 registered on 13 October 2020. International Patent - PCT pending.



### SMART NDT S.R.L.

Registered office: Via Viarana, 22 | Besana Brianza | (MB)

Headquarters: Via Cristina Trivulzio di Belgioioso, 34 | 20852 | Villasanta (MB)

VAT no./tax identification no. IT07608940966 | T +39.039.6013490 | F +39.039.6014111 | E: [info@smartndt.it](mailto:info@smartndt.it)

[smartndt.it](http://smartndt.it)



[tcm.smartndt.it](http://tcm.smartndt.it)