ADL-D100 Portable dynamic hardness tester

Dynamic hardness tester ADL-D100 is specially designed for express-control of hardness of metal products.

The ADL-D100 is a versatile solution for accurate portable hardness testing and can be a reliable tool in your claims work. Especially when situations arise when other devices do not provide sufficient accuracy when measuring the hardness of parts.

ADL-D100 will be an affordable and reliable solution to problems when there are disagreements between workshops or contractors in the results obtained and when accepting parts, since the device measures with an accuracy as close as possible to stationary hardness testers.

An intelligent averaging mode, a unique statistical processing system and flexible memory organization allow for the most accurate hardness measurements.

The device allows you to calibrate one or two exemplary test blocks and one-point calibration.

For clarity of results, graphs are provided on the hardness tester display. Equipping the device with additional positioning attachments makes the ADL-D100 hardness tester universal in use.

For operation in a workshop, the device is manufactured in a rugged case, equipped with a bright color 3.5 "LCD TFT display with a user-friendly interface.

MAIN ADVANTAGES:

Individual solutions - allows programming, in addition to standard calibrations, a large number of user calibrations, i.e. create special scales according to standard firmness measures of the enterprise (specific customer material).

Modernity - made on a modern electronic base. This allows you to implement more possibilities for software processing of results using different methods and algorithms.

Expertise - the creation, storage, recording and adjustment of specialized scales for various materials make this device universal in use between different workshops within the enterprise and between third-party organizations.

Mini-computer - the device is a database on specific various materials of the enterprise and allows you to accumulate a knowledge base on the scales of these materials.

Reliability - accurate, modern and reliable in use. Warranty and post-warranty service is carried out promptly on the basis of the service center.

Accuracy - a modern element base and a high-quality sensor allow high-precision measurements according to programmed calibrations, as close as possible to the accuracy of stationary hardness testers.

Specification

The hardness tester			
The range of measurements on the main scales	Rockwell	20 - 70 HRC*	
	Brinell	20 - 650 HB*	
	Vickers	230 - 940 HV*	
* The hardness tester can be recalibrated across a broader and individual range of scales when reference samples with corresponding hardness values are available.			
Error measurements		Subject to following recommendations *	Requirements of ISO and ASTM standards
Rockwell		**±0.2 HRC**	±2 HRC
Brinell in the range	90-150 HB 150-300 HB 300-450 HB	**± 3 HB**	± 10 HB ± 15 HB ± 20 HB
Vickers in the range	240-500 HV 500-800 HV 800-940 HV	**± 3 HV**	± 15 HV ± 20 HV ± 25 HV
* To achieve maximum accuracy and repeatability in measurements, it is necessary to: • Adhere to the requirements for the roughness of the gauge or product; • Improve operator skills; Follow the measurement guidelines outlined in the user manual.			
The recommended roughness of the controlled product			
For a dynamic sensor type "D"	3.2 Ra		
For a dynamic sensor type "G"	7.2 Ra		
Diameter of the surface for installing the sensor			
For the dynamic sensor:	from 14 mm (0.551") on the plane		
Programmable scales	More than 100 additional scales		
Algorithm for discarding false readings	Exists		
Calculation	Average value for 1 - 20 measurements; Minimum, maximum, average value; Algorithm for discarding false readings		
Construction of graphs	All points from the series that were considered in the calculation of the average value		
Conversion of scales	It is possible to convert the measured hardness into different scales.		
Device body	Shockproof plastic body, protected from falls with rubberized inserts		
Display	LCD TFT 3.5'' 320x480 px		
Language	English, Ukrainian, Russian		
Communication with a PC	USB, saving data, processing results, creating reports		
Power supply	Li-Pol built-in battery, 3.7V 3000mAh		
Work without recharging	up to 9 hours (depending on operating mode)		

Overall dimensions	185x98x42 mm
Weight	0.35 kg

DELIVERY SET:

Measuring block	1 pc
Type D sensor	1 pc
Cable for Type D sensor	1 pc
USB Type-C cable	1 pc
AC USB charger	1 pc
Carrying and storage bag	1 pc
Protective case	1 pc
Hardness test blocks: Vickers or Rockwell high hardness	(one of your choice)
Manual	1 pc
Warranty card	1 pc
Additional hardness measurement scales*	optional
Additional types of sensors*	optional

ADDITIONAL EQUIPMENT:

The device can be equipped with specialized positioning tips for measuring hardness on uneven surfaces.

In addition to the standard “D” type sensor, the supply of “G” type sensors for surfaces with high roughness and light “E” type sensors is available.

For surface preparation, the device can be equipped with a grinder with a set of consumables.