HARDNESS TESTER SHORE
NOVOTEST TS-A

Operating Manual

2015
CONTENTS

1. Introduction 2
2. Appointment 2
3. Specifications of the device 2
4. Completeness 3
5. Labeling, packaging 3
6. Function check and preparation for use 3
7. Intended use 4
8. Maintenance 4
9. Storage and transportation 4
10. Warranty 5
11. Certificate of Acceptance 5
1. Introduction
This operating manual is intended to familiarize with the device, the principle of action and operation of the Shore hardness tester «NOVOTEST TS-A» hereinafter device.

2. Appointment
2.1. The device use for measurement Shore hardness wide range of materials. Hardness tester Shore NOVOTEST TS-A is available in two versions:
   1) Shore A – for standard rubber, soft rubber, polyester, leather, wax, and other materials;
   2) Shore D - for hard rubber, acrylic, glass, thermoplastic materials, fiber and other similar materials.


3. Specifications of the device:
3.1. Measuring range, un.: 0-100
3.2. Graduation, un.: 1
3.3. Indenter displacement error, un.: 2
3.4. Overall dimensions, mm, not more: 115x60x25
3.5. The appliance weight, kg, not more: 0,5

4. Completeness
4.1. Hardness Tester Shore (type A or D) – 1 pc.
4.2. Case – 1 pc.

5. Labeling, packaging
5.1. On the body of the device are symbols with the trademark of the manufacturer, serial number and date of manufacture.
5.2. The device and its case for storage and transportation.

6. Operation check and preparation for use
6.1. Before using the device, check and, if necessary, set zero of the device. For this, you need to install the device on a flat ground surface (you can use glass) and make sure that the readings are within 100 ± 2 units.
6.2. If instrument readings overlook the border of 100 ± 2 units, release the screw securing the scale of the device, and adjust the instrument.
7. Intended use
Place the test sample (the test object) on a firm, fixed support. Take the instrument from its case, remove the cap from the indenter. Place the device on the sample at the distance not less than 12 mm from the edge of the sample and gently push until it stops. Read hardness value. Repeat measurements at least 5 times in different locations, with a distance of 6 mm between measurements (for porous materials: not less than 15 mm).

To improve the accuracy and repeatability of measurements is recommended to use a specialized tripod for the device.

8. Maintenance
Maintenance of the device made by the manufacturer, in case of malfunctions.

9. Storage and transportation
9.1. The device should be stored at ambient temperature from +5 to +40 °C and relative humidity up to 80% at 25 °C.
9.2. The storage should be free of dust, fumes, acids, alkalis and corrosive gases.
9.3. Transportation of the device in the case may be made by any type of transport in accordance with the requirements and rules of transportation operating on these types of transport.
9.4. During transportation, handling and storage in stock the device should be kept from shock, bumps and moisture.

10. Warranty
10.1. The manufacturer guarantees that the device meets to the technical requirements, subject to terms of transportation, storage, and use.
10.2. Warranty period - 12 months from the day of shipping.

11. Certificate of Acceptance
Hardness tester Shore «NOVOTEST TS-A» №____________ produced and accepted in accordance with the mandatory requirements of the state standards, the current technical documentation and is fit for service.
Date of manufacture

____________________
Signature

Sale date

____________________
Signature

NOTE:
The manufacturer reserves the right to make without notice in the design of ultrasonic thickness change does not impair its performance and metrological characteristics.