



Sauter GmbH

Instruction manual test stand for an analog Shore hardness tester

SAUTER TI

Version 2.0

03/2020

GB



PROFESSIONAL MEASURING

TI-BA-e-2020



SAUTER TI

V. 2.0 03/2020

Instruction manual test stand for an analog Shore hardness tester

Congratulations on the purchase of the SAUTER TI test stand for our analogue Shore hardness testers.

This table-top test stand is very robust and the device will last you many years if you operate and maintain it properly.

If you have any questions, wishes or suggestions, we are always available to you under our service number.

Table of contents:

1	Before commissioning	3
2	Introduction	3
3	Structure	3
4	Operation	4
5	Note	4
6	Maintenance	4
7	General safety instructions	5

1 Before commissioning

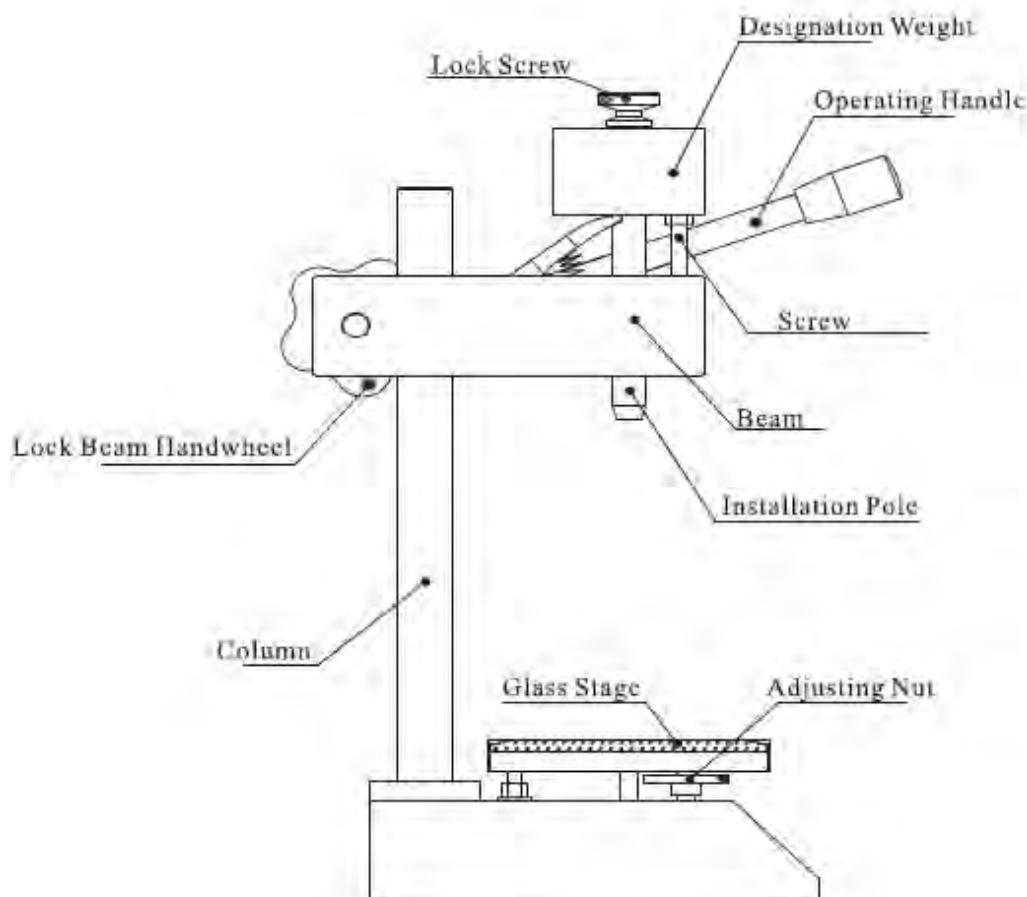
Before putting the device into operation, check the delivery for any transport damage to the packaging, the plastic case and the device itself. Should this be the case, SAUTER must be contacted immediately.

2 Introduction

The test stand was developed especially for our Shore hardness testers. In combination with these, the measuring results are up to 25% more stable and more accurate. The TI-A0 is used for HB hardness testers Shore A and 0 and the TI-D for HB hardness tester Shore D.

The TI-ACL and TI-DL are designed for digital HD units and come with a longer column that can be interchanged with the shorter column of the standard models.

3 Structure



4 Operation

The hardness tester is screwed to the mounting device on the test stand. The hardness test block is placed on the glass plate. Then the operating lever is pressed down, keeping the balance, to push the tip of the hardness tester into the hole in the hardness block until it is completely resting on the hardness block (the foot of the instrument is completely touching the hardness block).

At this time, the hardness value on the reading scale should be within ± 1 of the value engraved on the hardness block (lower side). If the value is not 100 ± 1 , the adjusting nut under the glass plate must be turned in such a way that the value reaches 100 ± 1 . If the hardness tester is used without a hardness test block, the operating lever must also be pressed down in equilibrium until the foot of the test tip is completely in contact with the glass plate. Here the hardness value on the reading scale should also be within 100 ± 1 . If this is not the case, the adjusting nut must also be turned until this preset value is reached.

Then the material to be tested is placed on the glass plate. The operating lever is to be pressed down carefully under force of the indicated weight. When the hardness tester touches the test material completely, the value appears on the reading scale.

The reading time for thermoplastic rubber is 15 seconds, for vulcanized rubber or other unknown types of rubber it is 3 seconds.

5 Note

1. this test stand can only be used for Shore hardness testers. If it is used for other hardness testers, the weight must first be adjusted according to the requirements.

GB/T531.1-2008 has established a rule on this, as shown below:

Shore A and Shore AO model is $1^{+0.1}_0$ kg

Shore D model is $5^{+0.5}_0$ kg.

Shore AM model is $0.25^{+0.05}_0$ kg

Shore C model is $1^{+0.1}_0$ Kg. (In HG/T2489-2007) #

Attention: All components must be adjusted to each other to ensure error-free operation.

2. the test bench should only be used in a vibration-free environment. The maximum print speed during the test should be 3.2mm/s.

6 Maintenance

To avoid rust, the test bench should be cleaned with a soft cloth after each use.

Under no circumstances should aggressive cleaning agents be used.

7 General safety instructions

WARNING

Risk of injury due to overridden functions of the protective devices!

Overloaded functions of the protective devices can lead to severe injuries lead.

- Never override the functions of the protective devices, either yourself or by third parties.
- Never test with protective devices disabled.
- Never tamper with protective devices.
- Comply with all safety instructions.

WARNING

Risk of injury from falling parts!

Falling parts can cause serious injuries.

- Only use suitable and technically flawless lifting gear.
- Use lifting equipment with sufficient lifting capacity.
- Carefully fasten individual parts and larger assemblies with lifting gear.
- Secure individual parts and larger assemblies with lifting gear.
- Make sure that there is no danger from the hoist.
- Lift individual parts and larger assemblies slowly.

WARNING



Risk of injury when handling in the test room!

When handling in the test room during the operation of the test system, there are Risk of injury. Your hands and arms can be pinched and crushed.

- Never handle in the test room while the test system is running.
- Never handle anything in the test room during a test.

WARNING



Danger of tipping due to use of heavy specimens!

In the case of heavy specimens that are inserted off-center, as well as due to improper Behavior can tip the test system.

- Ensure that the test system is securely positioned.
- Never use the test system as a climbing aid.

CAUTION

Risk of injury!

There is a risk of injury when working on/with the test system.

- Comply with the applicable and binding national regulations on the accident prevention.

Comply with the recognized technical rules for safety and professional work.

Comply with the regulations on health and safety at work.

Provision of work equipment and its use.

- Observe company regulations such as supervision and reporting requirements.
- Read the operating instructions completely.
- Read the operating instructions and data sheets of external components all the way through.
- Observe all safety instructions in the operating instructions.
- Observe all safety signs attached to the test system.
- Always wear appropriate safety equipment.

NOTE

Work on the test system may only be carried out by specialists qualified for this work.
be carried out.

NOTE

Only one operator may work on the test system at a time.

- During operation, the operator's workplace is located in front of the