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## Instruction manual test stand for an analog Shore hardness tester

### SAUTER TI

Version 2.0  
03/2020  
GB



PROFESSIONAL MEASURING

TI-BA-e-2020



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V. 2.0 03/2020

## Instruction manual test stand for an analog Shore hardness tester

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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:

<b>1</b>	<b>Before commissioning .....</b>	<b>3</b>
<b>2</b>	<b>Introduction .....</b>	<b>3</b>
<b>3</b>	<b>Structure .....</b>	<b>3</b>
<b>4</b>	<b>Operation .....</b>	<b>4</b>
<b>5</b>	<b>Note .....</b>	<b>4</b>
<b>6</b>	<b>Maintenance .....</b>	<b>4</b>

## 1 Before commissioning

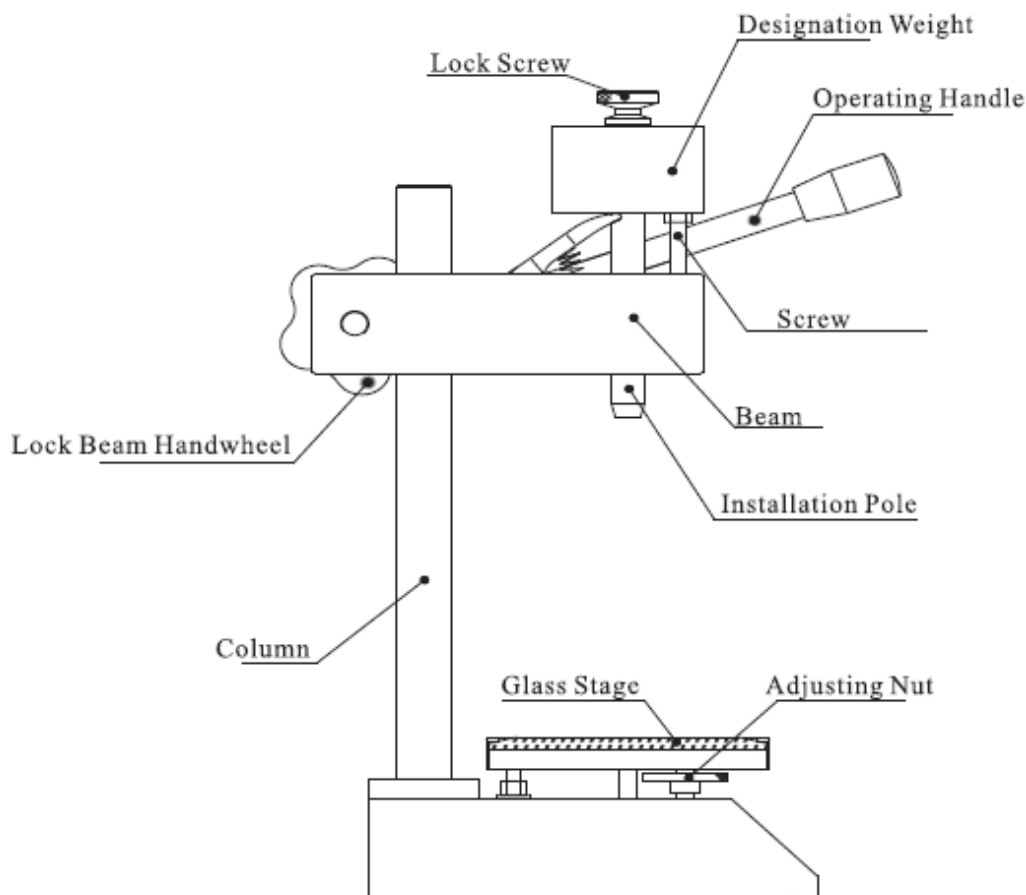
Before putting the device into operation, check the delivery for any transport damage to the packaging, the plastic case and the device itself. Should this be the case, SAUTER must be contacted immediately.

## 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  $\pm 1$  of the value engraved on the hardness block (lower side). If the value is not  $100\pm 1$ , the adjusting nut under the glass plate must be turned in such a way that the value reaches  $100\pm 1$ . 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  $100\pm 1$ . 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.