



**International Shooting Sport Federation  
Internationaler Schiess-Sportverband e.V.  
Fédération Internationale de Tir Sportif  
Federación Internacional de Tiro Deportivo**

## **ANNEX A**

# **Instructions for Conducting Shoe Sole Flexibility Tests Rifle**

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Edition 2016

Effective 1 January 2016

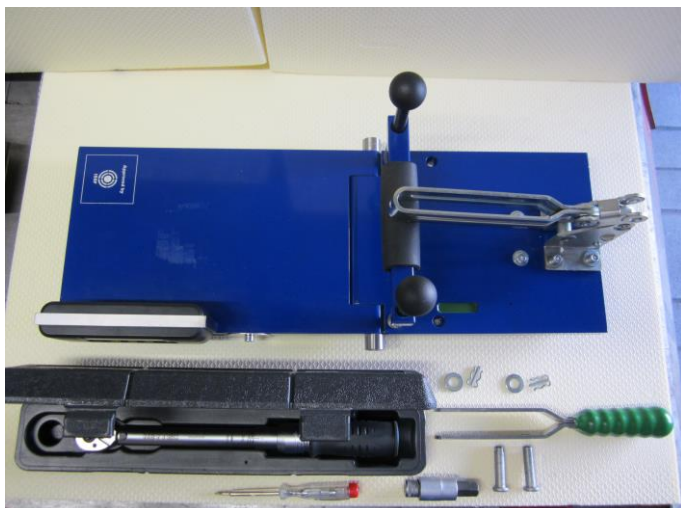
Edition 2016  
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- 1 -

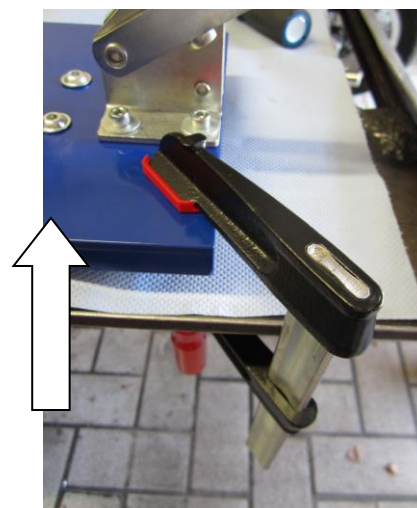
### The following are the operating instructions:

1. Ensure that the tester is clamped to a level flat surface.
2. Check that the torque wrench is set at **15 Newton meters**. This has been calculated to be the average amount of weight exerted by the average person to bend their boot and walk in a normal manner with the heel leaving the ground before the toe.
3. Ensure that the torque wrench is fully inserted in the hexagonal hole on the side of the tester with the digital counter.
4. The digital counter needs to be turned on and then the middle of the three yellow buttons showing the degrees (°) sign turned on.
5. Place the boot under the bar and clamp down. The clamping device will ensure consistency of pressure. This is necessary as experience has shown that different readings can be obtained with the same boot clamped under different pressures.
6. Place the boot so that the forward projection of the toe cap is measured against the green mark. The positioning of the boot under the bar is frequently shown by a crease showing in the upper of the boot marking the natural bend of the foot when walking. Again experience has shown that most boots should be placed in the green marker zone (this is the natural bending point). This is irrespective of width or size of boot. The measuring of each boot should be placed against the same position on the green marker zone.
7. The torque wrench should be used slowly. Reasonably slow downward pressure is sufficient. Using the torque wrench too quickly will create a false reading.
8. Records should be kept for each boot to include the following:  
Manufacturer; model; age; colour; man/woman; angle achieved before the sole 'breaks'; and thickness of the sole and whether there are inserts or not (whether hard or soft).
9. On rechecks, the tester should not be used; the boot should be checked by hand (not to 45 degrees) but merely to ensure that there is some flexibility.
10. While the tester is designed to stop rifle athletes walking in an unnatural manner (e.g. like a penguin).

**Illustration of the Tester:**



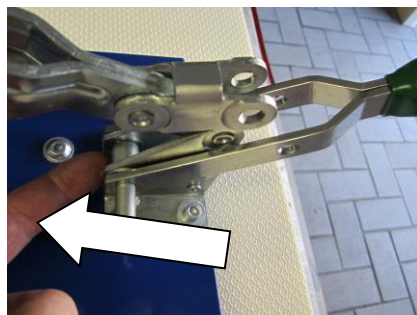
Take out all parts from the box



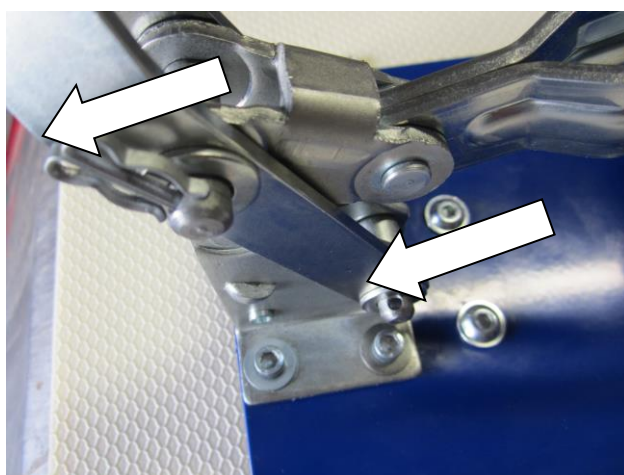
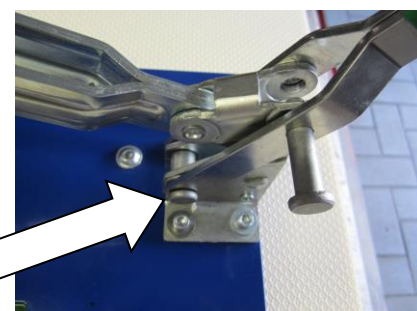
Fix the Tester on to a flat surface (a table is ideal) by the clamp (as shown by the white arrow)



Handle and bolts with clips

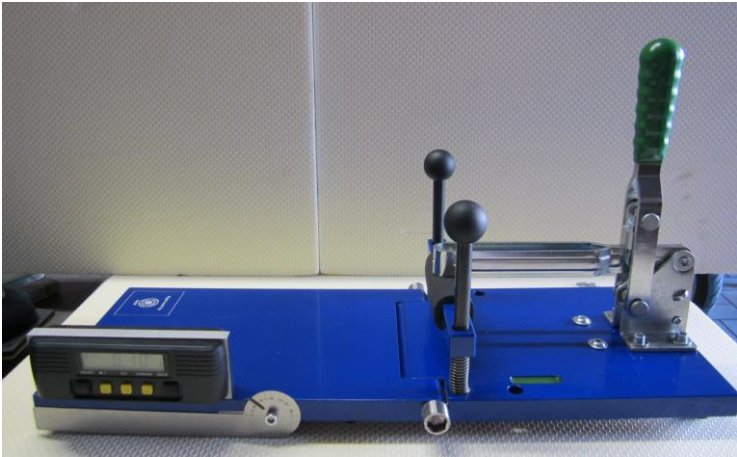


Put first pin in the hole, by helping with a finger, second Pin in the above hole

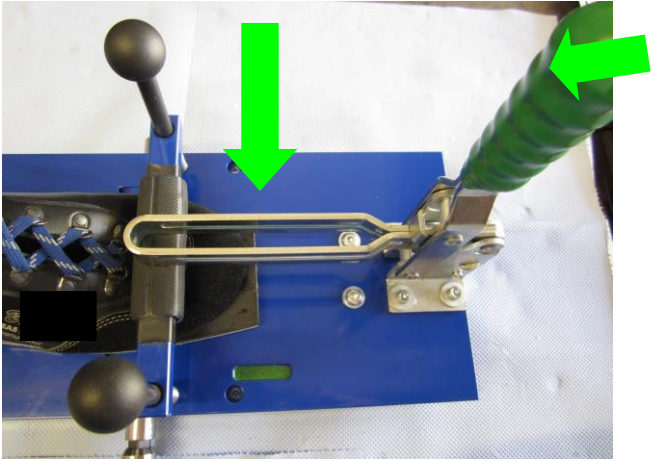


Put two washers and two clips in

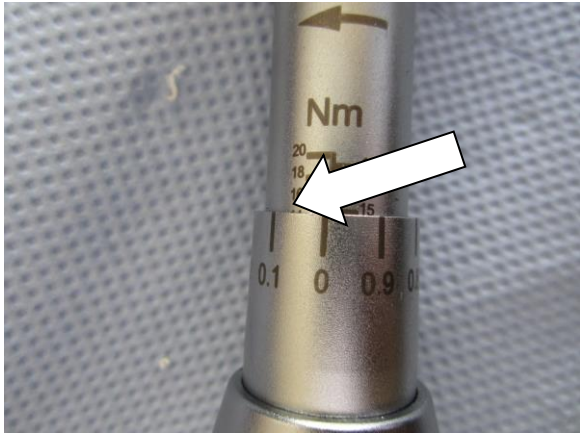
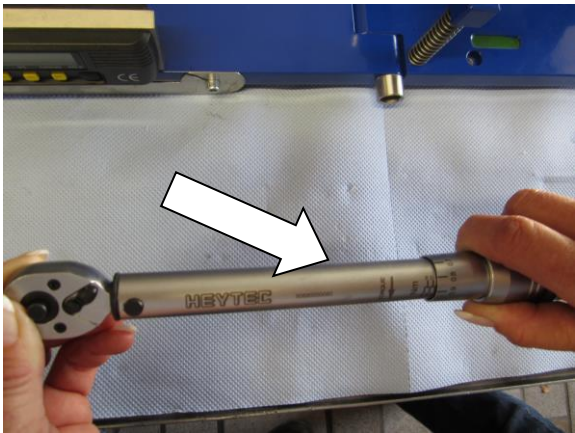
The Tester is now ready for testing boots



Put a boot in the Tester



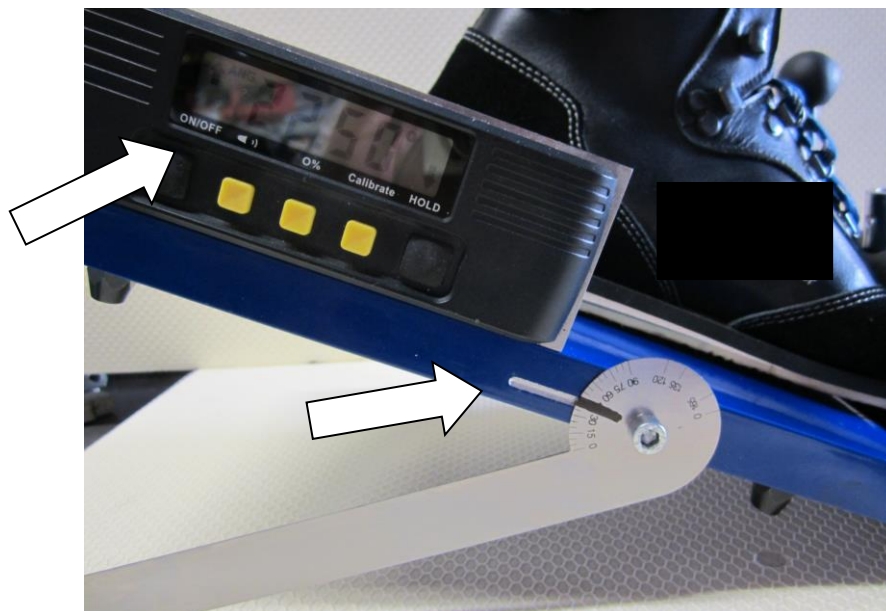
Push down the bar and clamp it using the green lever



Prepare the torque wrench by setting at 15 Nm, push the ring with the fingers back, to unlock and turn with the other hand the spindle until the 15 Nm shows up.

Attention: Reduce the torque pressure to zero by rotating the spindle, shown by the large yellow arrow, at the end of each day and reset when required.  
Please do not leave the torque wrench under pressure overnight.

Every boot should have a crease point which, on a small boot, is about 9-10 cm from the front of 10 mm projection beyond the toecap and, on a large boot, about 10-11 cm from the 10 mm projection beyond the toecap.



Switch on the digital display. The display will show the angle in degrees.  
The alternative, but less accurate, measure, is the rule attached to the side of the Tester. There are marks on the rule and on the side of the Tester. When these marks are in line, this means that the boot has achieved an angle of 22.5 degrees.

Insert the torque wrench and push it down until it 'clicks'.  
Boots should have a minimum angle of 22.5 degrees.



**ATTENTION.** Please bear in mind that the Tester is a simple device to operate.  
This is designed to ensure consistency of testing Boots with flexible soles, and will have no difficulty in achieving 30 degrees or greater.

**Note: This device may also be used for testing pistol shoes.**

For any questions / any help please contact the ISSF HQ.