

# IBSF Skeleton Runner Testing Protocol

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## Runner Testing Protocol (general):

**Any runner must have followed the procedure below before being eligible to be used at an IBSF event:**

1. Diameter inspection
2. IBSF stamp inspection
3. IBSF labelling
4. Composition of the steel
5. Hardness inspection (max. 280 Brinell (HB))
6. Treatment / coating inspection (data collection)

## IBSF labelling:

1. Schedule of runner checks will be drawn and announced at first TCM.
2. Each athlete will be allowed to have two (2) sets of runners inspected and labeled during training. No additional sets will be checked regardless of the results of the initial runner checks. Exceptions:
  - a. During the first race of the season, each athlete will be allowed to have a maximum of three (3) sets of runners inspected and/or assigned to them.
  - b. At the discretion of the Jury when exception circumstances occur one (1) additional set may be checked.
3. A label will be assigned to runners which pass the following controls:
  - a. Stamp Inspection
  - b. Diameter inspection
  - c. Composition of steel
  - d. Hardness inspection (max. 280 Brinell (HB))

## Runner Testing Protocol (on-site pre-race):

1. Specific runner cleaning fluid(s) used to clean the runner surface by material controllers or clear instructed personnel. 3 swipes along the whole runner and 3 wipes inside the grooves are made for each runner, always using new wipes for each sled.
2. The runner diameters are checked with a diameter gauge.
3. The IBSF stamps are checked.
4. According to the rules the runner temperatures are checked including fore runners.
5. The runners are sanded at the table, grade 400 paper is used. Another grade sandpaper can be used by the Jury at their discretion.
6. The paper is swiped over the runner 5 times, the whole length of the runner, sanding in both directions.
7. The paper is then rotated 90 degrees and the whole length of the runner is sanded 5 times again, sanding in both directions.
8. The runners are cleaned with specific cleaning fluid(s).
9. The runners are checked with the Dyne Pens (data collection & indicator).
10. The Runners are cleaned with specific cleaning fluid(s).
11. Stage 1 is repeated prior to each run of the day.
12. If the runners are changed due to damage between runs, the process, stages 1-10 must be carried out.

13. In the case of an ice box the runners must be cleaned afterwards again by a member of the IBSF or a person delegated to do so.

**\*At their discretion, the Jury may modify the procedure if it is deemed necessary.**

**\*\* Stages 6 - 10 may be repeated at the discretion of the IBSF Jury prior to each following run of the day.**

#### **Runner Testing Protocol post run 1**

1. For data collection and analysis, runner temperatures will be checked at the time and location of the weigh checks, including fore runners, against a second reference runner maintained at the finish.

#### **Runner Testing Protocol for each single official IBSF race (post-race):**

**After the race, the following tasks are mandatory to be carried out:**

1. All runners of identified athletes are checked with the official calibrated runner hardness inspection equipment. The testing procedure will include runner hardness testing on 5 areas across the running surface and on 5 areas across the opposite side of the running surface.
2. The composition of the steel.
3. At the discretion of the IBSF Jury, any additional check of certain described pre-run checks, or any other check, can be ordered.

#### **Runner Hardness testing procedure:**

1. Runners are removed from the sleds
2. Runners must be clean and dry
3. The Runners are sanded with 400 grade paper
4. The IBSF runner hardness tester is a 'Proceq Equiotip 3' machine with custom made Skeleton fitting & xxxx data logger.
5. The Runners will be tested in 5 areas along the running surface of the runner. Should there be a high or low anomaly then the tester will be moved 1mm along the runner and a 6<sup>th</sup> reading will be taken. All readings are recorded. The median of the 5 points determines the hardness value.
6. Should the runner fail the hardness test on the running surface a further inspection will be taken on the runner inline with the IBSF stamps. The same procedure will be followed.

#### **Should the runner(s) fail full runner controls:**

**If at any stage of this protocol the runner fails with evidence to be legal, the IBSF Jury, advised by the IBSF Material Controller, must disqualify the athlete from the race. A further consequence will be the removal of the IBSF stamps.**