IBSF Skeleton Runner Testing Protocol

Rules

10.8.2 Runners (General)
In all official IBSF races listed on the IBSF-Calendar (OWG, World Championships, Junior World Championships, Continental Championships, WC, ICC, EC, NAC, etc.) only IBSF standard runners (standard material) are admitted. The authenticity of the runner steel may be controlled by the IBSF Jury and/or IBSF Material Controller at any time. To define the authenticity of the runner steel, inspections may include the analysis of the composition of the runner material and examination of the hardness of the runner steel. Only geometrical changes to standard IBSF runners through the removal of the original material are allowed. No materials (exceptions runner block and runner post) may be added in any way. The use of any means of propulsion is prohibited. Changing runners between race heats held on the same day is only permitted after damage and with the authorization of the Jury. At the Jury’s discretion, runners can be subjected at any moment to inspection with special equipment. In case of inconclusive findings, runners may be seized and sent to a specialized laboratory for further testing.

On the occasion of:
- Olympic Winter Games
- Senior World Championships
Complete inspections can be conducted prior to the competition.

10.13 Runner Cleaning
The runners are treated and cleaned before the start of the race heats with special cleaning solutions provided by the IBSF. The IBSF will publish a runner testing Protocol. If any runners are found to be outside the limits set by the Protocol the athlete can be sanctioned by the Jury. The sanctions available to the Jury are outlined in 8.10 of these rules.

12.8 Runners
- The runner blocks and runner posts must be welded to the runner.
- The runners must be mounted directly to the runner supports.
- Every runner must be constructed from one solid piece of the standard material according to IBSF specifications and must not exceed 280 Brinell (HB). The standard material is produced and distributed by a factory designated by the IBSF.
- The material is supplied as polished round bars with a diameter of 16 mm (h9 tolerance class) and a length of 1000 mm, –0/+50 mm. The material is always supplied with markings. These markings must always be present on the runners and must not be altered in any way.
- All types of treatment are forbidden, including those which cause even only a local variation of the physical characteristics (*) and / or the composition and / or the structure of the material.
- No plating and / or coating is allowed.
- The diameter of the steel runner must be 16 mm along its entire length right up to the joints with the runner supports and the runner posts (a shortfall of up to 0.80 mm is permissible).
- The grooves and milled areas on the runners must be formed in such a way as to avoid any excessive damage to the ice surface of the track. The depths of the millings and grooves, measured from the surface of the ice, must not be greater than 2 mm.
- By order of the Jury the runners maybe confiscated for in-depth inspection subject to protocol.

Note (*): The term “physical” is to be understood as a global term which comprises all specific terms like, for example, “mechanical”, “tribological”, “electromagnetic”, etc.
**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. Composition of the steel.

3. The IBSF stamps are checked.

4. Diameter check.

5. According to the rules the runner temperatures are checked including fore runners.

6. The runners are cleaned with specific cleaning fluid(s).

7. Step 1 is repeated prior to each run of the day.

8. If the runners are changed due to damage between runs, the process, stages 1 - 6 must be carried out.

9. 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.

**Runner Testing Protocol (on-site post-race):**

*After the race, the following checks will be made:*

Random hardness test. (for internal data collection)

At the discretion of the IBSF Jury any additional check can be ordered.

Diameter inspection

IBSF stamp inspection

Composition of the steel

**Should the runner(s) fail 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, can penalize the athlete. A further consequence may be the removal of the IBSF stamps.

*At the Jury’s discretion, runners can be subjected at any moment to inspection with special equipment. In case of inconclusive findings, runners may be seized and sent to a specialized laboratory for further testing.*