

## Guidelines for Roller Ski Equipment Specification and Control

### General Conditions

- In order to provide safe and fair conditions for athlete's taking part in FIS Roller Ski competitions OC may limit certain parameters for Roller Ski equipment (hereinafter referred to "Official equipment").
- Athlete's safety should always put as priority for equipment restrictions.
- If OC decides to limit certain Roller Ski equipment specifications in given competition it must communicate with TD before publishing official invitation.
- All Official equipment provided by OC must have standardized quality and marking and Jury must be able to check it in field conditions.

### Official equipment

- OC may provide full set of Roller Skis (with bindings) or only certain parts of Roller Ski equipment, for instance: Roller Ski wheels (including bearings, axels, and spacers) as Official equipment.

### Officially Supplied Roller Skis

- Official equipment supplier chosen by OC must be able to provide 1 type of Roller Skis with standardized quality of frame, wheels, bearings and lubrication.
- Wheels provided by official equipment supplier must be new and unused before 1th official training in given competition.
- It is recommended to use wheels with hardness range 65-75 A shores measured by Type A durometer.
- Allowed variation of wheel hardness range may differ +/- 3 shores from average value (measured by Type A durometer) from at least 5 pairs samples in given equipment control situation.
- It is recommended to use wheel bearings type: 608
- For classic Roller Skis it is recommended to use 2 wheel carbon or composite fibre frame.
- Roller Skis must be marked and drawn before each competition. Draw must be performed by competition OC (competition secretary)
- Roller Skis must be issued to athletes at the earliest 30 min and not later than 20 min before the start.  
During competition official supplier must provide spare Roller Skis in specially predefined technical zone near the course.

### Control of Roller Ski Equipment

- OC together with Jury must perform random check of officially supplied equipment before official training and before each competition.
- Any type of Official equipment control must be performed in predefined and equal conditions for all samples.
- The control must include measurements of:

- 1) Wheel size (mm)
  - 2) Wheel hardness (allowed measurement variation +/- 3 A shores from predefined value declared by Official supplier);
  - 3) Type and model of bearings;
  - 4) Standardized rolling (ski) test with not less than randomly chosen 5 pairs. Roller Ski rolling test can be done on Roller Ski course or wheel rolling/resistance can be done on special test bench
  - 5) Measurements of rolling speed (recorded time: ss,00) or rolling distance (mm,00) in given test area cannot exceed variation +/- 3%
- Roller Ski test control results (average of 5 "Time" or "Distance") must be used as priority criteria for equipment control compare to other control parameters.
  - Official equipment controls must be documented. See example of test protocol in Appendix: ROLLER SKI EQUIPMENT CONTROL PROTOCOL.
  - If controlled and tested equipment do not complies with measured criteria official supplier must provide given equipment change.

### **Obligations and Responsibilities for Teams and Athletes**

- Competition entries must be sent with notice for each athlete what kind of ski bindings athlete will use. Athletes and/or team officials has no right to make any technical changes in Officially provided equipment (including Roller Ski wheels, bearings, wheel axle, spacers and other).
- Athletes must return Official equipment for control to official control judge right after the finish of his competition (or final round in Sprint finals).
- If competition Jury has evidence that given Roller Skis has been technically impacted without notice Jury can take actions according FIS ICR 223-224.
- During official training and before competition athlete has a right to declare any technical defect found in drowned Roller Skis and ask for repairing or Roller Ski change in due time.

