



## Common waxing protocol for IBU Events

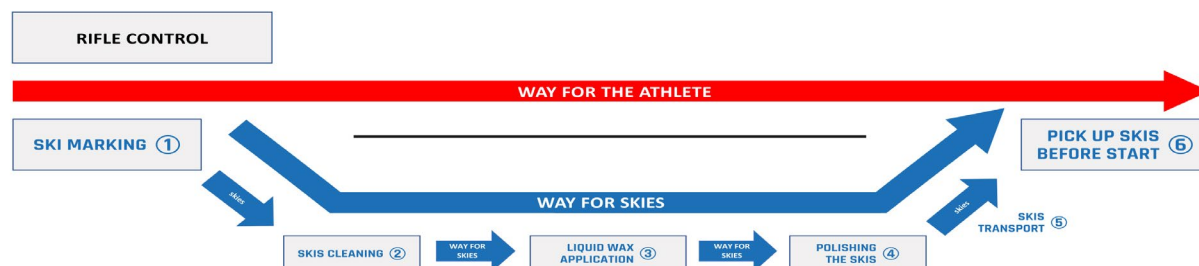
(Version 2.0 approved by the IBU Executive Board in November 2024; additions/adjustments to version 1.0 are highlighted in blue)

Scope: IBU Junior Cup, JOECH, YJWCH, Regional Events, YOG, EYOF

### Common waxing station

The process will happen in the **Wax station** which can be located close to the start area together with material control station (tent, tunnel, double containers, garage or another dedicated place). Appropriate space of at least 45m<sup>2</sup> must be available.

The place needs to be organized with 6 separate stations, each equipped by dedicated equipment and staff. The process will be coordinated by IBU responsible Referee in close cooperation with available Technicians/Coaches from different Teams.



### 1. Ski marking and spot check (2 dedicated persons)

Skis must be delivered to the control station latest 1 hour 15 minutes before the athlete's start time (either by the athlete or team staff) and placed in the dedicated ski stand.

Skis need to be received, marked by marker or sticker with the bib number of the athlete on.

Stickers can be handed out before the race in a separate envelope. Technicians are responsible for attaching the appropriate sticker to the skis on vertical position in the area behind the binding.

Ski surface needs to be cleaned from all sides to reduce contamination risk.

#### 1.1 Spot checks:

Randomly chosen skis might be tested by FTIR methods to exclude unauthorized material containing fluor (one ski from each pair will be tested in 3 randomly chosen points on the ski base according to the IBU test protocol).

When the skis pass the control successfully, they will be placed back in the ski stand and wait for the next cleaning. If the ski fail at the check, they will not be placed in the ski stand or ski holder but marked and returned to the team.

It will be possible to replace "fail skis" one time for each Athlete during competition week (or after appropriate cleaning by team technician).

A responsible member of each NF should wait near the station so that he/she will be informed immediately about a failed ski. In case a team member is not present, information will be forwarded by radio to TD or RD and then to the Team Coach at the shooting range.



The results of the tests are final and not subject to protest.  
Test of the ski and ski transport must be conducted in such a way that no contamination occurs by the operators, volunteers, or OC side.

#### Measuring procedure

- 0-1 GREEN, move to next point, up to three points
- 1.1-1.8 YELLOW but remeasure without moving the instrument if <1 GREEN, if >1.81 RED, Green means green point, red means red point.
- >1.81 RED continues to next point and remeasure

#### Threshold zones

Threshold zones are based on the current IBU/FIS calibration model for Alpha II and may change after it is updated. Information about changes will be officially announced before the intended implementation.

The same limits apply before and after the race.

Threshold zones		
0-1	1,01-1,8	1,81 +

#### 2. Ski cleaning (2-4 Technicians)

Depending on the amount of Competitors, cleaning will be performed by two or four Technicians. Skis will be brushed by soft steel brush (manual or roto) and then cleaned with wax remover - soaked paper. Afterward, they will be left to dry.

#### 3. Wax application (2 Technicians)

Dedicated wax will be applied on the ski base. Afterward, they will be left to dry according to the producer's recommendation.

Wax application will be performed by two Technicians.

#### 4. Ski polishing

Ski will be polished by dedicated tools: roto brush or roto wool. After wiped by special fabric.

Ski polishing will be performed by two Technicians.

#### 5. Ski transport (2-4 Volunteers)

Depending on wax station location – skis will be transported by volunteers in ski holders or directly placed in dedicated place close to start area.

Skis must be in the "Start" ski stand at least 10 minutes before the start.

#### 6. Pick up the ski by Athlete (1 dedicated person - the same which was responsible for marking)

Skis will be picked up from the ski racks directly by athletes only (not by team staff/not handed over by officials) before the start when entering the start zone.

#### Single Mixed Relay

In Single Mixed Relay Competitions athletes can only use one pair of skis. Rewaxing in between changes is not allowed.



### **Ski Test after the race**

Randomly chosen skis will be tested by FTIR methods after each race according to ECR 4.2.3. The skis will be taken by the IBU official and/or the designated volunteers in the finish area and brought to the test station. [At least one ski from each pair will be tested in 2 randomly chosen points on the ski base according test procedure.](#)

The skis can be picked up at the test station by the competitors or team member 15 minutes after the finish, but not later than 20 minutes after the end of the competition.

[The "venue contamination factor" \(vcf\) will be added if for the majority of the ski's contamination is noticed. The "vcf" will be re-evaluated by the reference skis as defined below.](#)

### **Fluor Contamination risk/reference skis**

A separate set of skis will be designed for testing any possible fluor contamination (venue contamination factor) before and during competition day.

Data from after race test will be collected for research purposes and for possible decisions. \_

### **Reserve Ski**

Reserve ski does not need to be tested before the race, in case of used- they will be checked after the competition.

### **Ski preparation by Teams during Junior Cup, JOECH, YJWCH, Regional Events, EYOF, YOG:**

#### **Not allowed to be used:**

- a. Any kind of carbon-fluorine containing waxes
- b. High-performance waxes (e.g., powder, top finish liquid etc.)

#### **Allowed to be used:**

- a. Only base Fluor Free waxes [officially supplied by the IBU \(except Regional Events\)](#)
- b. Manual structure

#### **Not allowed to be used:**

Any kind of products containing fluorocarbons

#### **Accepted waxing methods:**

Liquid wax application

Hot waxing

Cold wax application by roto wool

It is also possible to organize common waxing on the day before the competition. In that case all skis can be checked by FTIR methods before final common preparation. Liquid wax application can be replaced by dedicated hot waxing or cold application by roto wool. After polishing all skis need to be stored in a safe place with limited access. On the race day, skis need to be transported and placed in a dedicated place close to the start area.

#### **Spot checks in wax cabins**

[In order to permanently monitor which products are used for ski-preparation, IBU officials can carry out spot checks in the wax cabins where also ski and wax-samples are taken.](#)

### **Team sanctions**

An NF whose athletes have violated Annex A Art. 1.3 of the ECR (red ski) multiple times may receive fines or may even be suspended for one or more IBU competitions according to ECR 11.5.4 and 11.6