



# Spring Seminar of the Finnish Ski Service Club



## Ski Service of the Italian National Team

**“Waxing > glide & grip”**



# Agenda:



- Gliding workings:
  - ✓ Cleaning;
  - ✓ Base;
  - ✓ Finish;
  - ✓ Top finish.
- Classic skis preparation;
- Grip wax – static mode;
- Grip wax – dynamic mode.



# Gliding workings

We describe below, in time sequence, the workings that are performed on the skis for the skating technique and/or for the classic ones in the sliding area:

- Cleaning of skis;
- Base;
- Finish;
- Top finish (dice, sprays, liquids or fluoride).



# Cleaning of ski





# Cleaning of ski

First of all we have to make a distinction between the cleaning of a ski used during a race or one used in training. Same procedure, but different solvents: a cleaner to remove, as well as dirt, residues of fluorinated products applied on the sole (*fluor cleaner*) and a classic cleaner that removes dirt (*wax remover*) for training skis.

On the dry skis, with a brush move the wet solvent along the entire sole; after that performing 3-4 steps with a **brass brush**, giving an average pressure. With **paper towels** remove the dirt and residue cleaner. In special cases, like dirty snow, the operation can be repeated several times until the complete cleaning of skis.

Remember that this work is done both for skating skis and for classic skis in the sliding area.



# Base preparing

The application is done by dissolution of solid or grated product by a **waxing iron**. Its temperature (more or less high depending by the product) has to be high enough to allow a homogeneous preparation of the wax on the entire ski without having to stop on the ski (avoid overheating). It is advisable to do the cleaning of channel and edges with hot paraffin in order to facilitate the removal.

After cooling for about 15 minutes the base, it proceeds to **de-waxing**. With a plexiglass scarper rub off the majority of the product proceeding from tip to tail. Then with a *hand brush* (steel or brass) make 3-4 steps still towards the tail tip (softer glides and / or striped skis require more accuracy in cleaning). The operation is over with a *rotating brush* at about 2000 rpm, passing first the part in horsehair and then the nylon (polishing).

**NB: Use brushes (manual and rotary) dedicated to this operation**





# Base preparing – “wool method”



After an accurate cleaning of skiing, distribute the product (with pressure) on half of the wool.

For each ski perform 4-5 passes (tip to tail), then spread the product again on the wool and work the other ski.

Then polish the skis (low pressure) using the clean part of the wool with 2-3 passes.

**NB: Use dedicated wool for each product**



# Finish preparing



The wax powder is uniformly distributed on the entire ski and later merged with the waxing iron, preferably through a single pass (5"-6"). Also in this case the iron temperature varies according to the products; on average the "cold waxes" have melting points of less than "hot".

Immediately after using the iron, make the "coating" of the product using a **rotating cork** exerting an average pressure.

The steps are performed at different speeds, to avoid excessive heating:

- *more passes (4 or 5) in progress "forward - backward" with the drill set to c.ca 1000 rpm;*
- *a ride (tip - tail) for the final draft to c.ca 2000 rpm.*

Once the ski has reached the room temperature (10-15') we proceed to remove the excess product like in the "de-waxing", but with a softer hand brush (brass).

**NB: Use brushes (manual and rotary) dedicated to this operation**





# Top finish preparing



At this point the preparation of the ski can be considered, in most cases, terminated. However there is the possibility of applying other products, with high content of fluorine. These, as well as to their nature (solid, liquid or spray), are distinguished by their method of application.

**Dice:** rub the product on skis firmly, then polish with the cork (dedicated) or rotating cork, applying moderate pressure. Once it is cool, brush it with nylon and horsehair brushers (rotary or hand).

**Spray:** spray the product at a distance of about 10 cm from the ski. With liquid wax, polish with the cork (dedicated) or also rotating cork.

**Liquids:** distribute the product through the applicator. Once it has dried, the preparation does not need other processing. Brushing or other finishes may negatively affect the performance of the product itself (Swix).

**NB:** there is another method of application for dices and sprays with the use of the waxing iron. After distributing the product on the sole, run a pass with the wax iron and the cork roll; once is cool, polish with the rotary brush (horsehair and nylon).



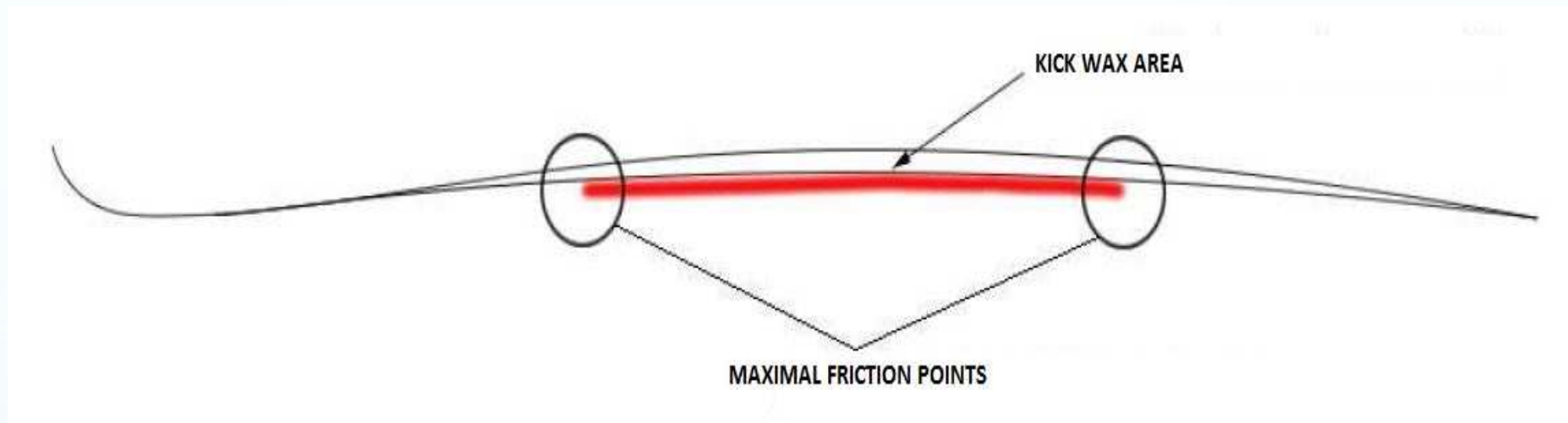
# Classic skis preparation



After the gliding preparations, we prepare the waxing area before application of the grip products. We proceed working the “bridge” area with **abrasive paper** of variable grain in function of the first wax layer that will be applied: for sticks 150, while for klister 120 (to ensure a better anchoring surface for the wax). Before apply the grip wax, clean the area with solvent and using a plastic scraper to remove any residues of previous processing (paraffin/wax). Once evaporated (to accelerate this process we can use an industrial drier), delimit the zone with the masking tape to preserve the adjacent gildings areas.



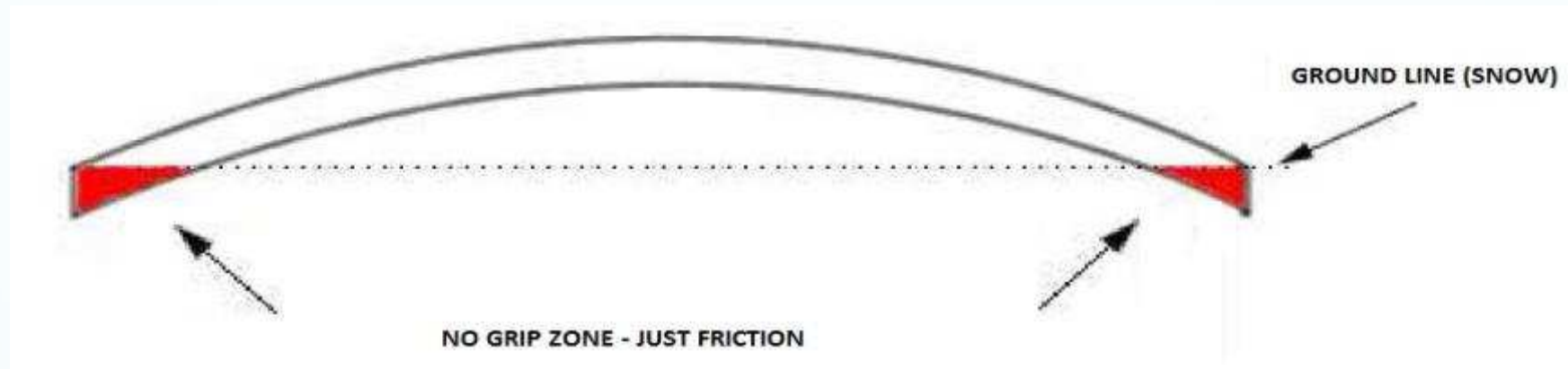
# Grip Wax – static mode



After the static measurement mode, there's the “**static waxing mode**”, if we place few layers of kick wax of the same length, we produce two big step on the extreme points of the bridge, causing friction.



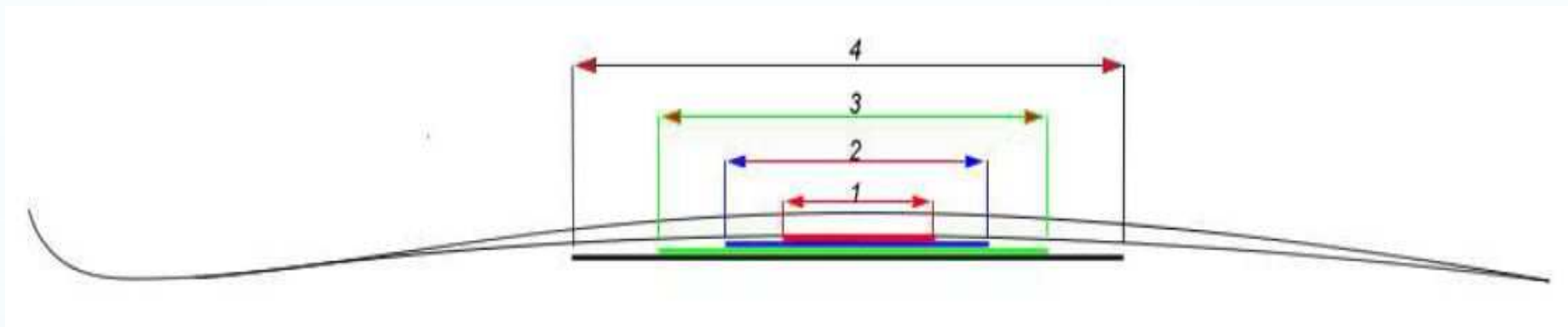
# Grip Wax – static mode



Sliding on the snow, especially in klister conditions, the wax creating the big steps on the extreme part of the bridge, could move into the sliding area placed behind the binding, causing friction and getting the ski dirty.



# Grip Wax – dynamic mode



After the dynamic measurement mode, there's the “**dynamic waxing mode**”, the kick wax is put on with different depths until the highest part of the ski, where the most part of wax is placed.





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**Thanks for your attention!**

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