VOLA

Alpine Technical Ski Preparation Manual :

This technical manual has been produced to explain the preparation and care of alpine skis and snowboards through the spirit of Vola Racing Products

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The preparation and care of skis is essential to maintain them in good condition and to receive the best benefits from using them.

Since 1935, Vola has specialized in the manufacture of alpine waxes which bring out the best from your skis.

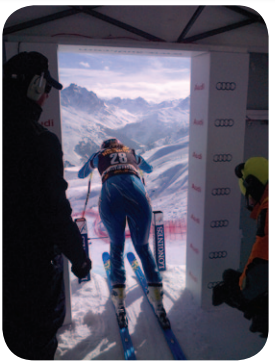
Whether you are a free rider, Sunday skier, piste cruiser or a competitor, this manual explains the preparation and care of your equipment.
Through the following pages you can discover Vola's tips, tricks and techniques to take care of your equipment.

Règles d'or

1. The more wax you put on the skis, the more they will slide, whatever the snow conditions.

2. Keeping your edges sharp and well maintained will allow you to make more accurate turns and your skiing more enjoyable.

3. Ski and Snowboards which are regularly prepared will last much longer.



Visit www.vola.fr to view the entire VOLA Racing Products range.

1 / Flatness of the base.

When you receive a new pair of skis, the first thing to do, is check that the bases are flat. To do this you can use a steel ruler or a planimeter (012005). It is very important to have the correct preparation of the base, because it affects the skis behaviour on the snow.

Checking the base with a ruler or a planimeter (012005)

There are 3 different possibilities for the base;

1/

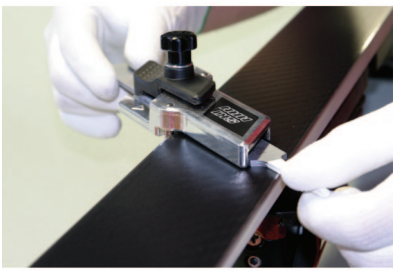
A flat base, means no problem.

2/

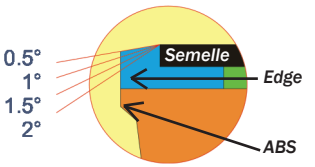
If the base is convex. This will cause the skis to become unstable and not track in a straight line. In this case the base needs to be scraped. This can be done using a metal scraper (012003) or a planimeter (012005). This can also be done using a very fine sandpaper around a flat block. After these processes clean the base using a Brass Brush (012009).

3/

If the base is concave. This will make the ski harder to turn. In this case, the edges need to be filed down using a double cutting file (011035), a black diamond file (011040) or a suitable file in a Base Edge Guide.
For ski racing the base edges are tuned down a little to help the release of the ski in the turn. It is normal to drop the Base Edge Angle 0.5deg for slalom, 1.0deg for giant slalom and 1.5deg for speed events.
When the base of the ski is too far concave or convex it is advisable to have the skis repaired using a specialist machine.



011027 : Adjustable Base Edge Guide

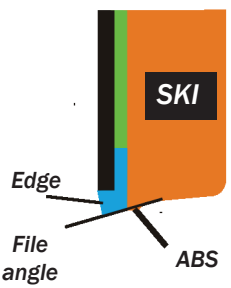


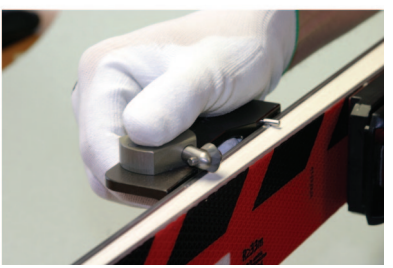
II / Sidewall of the ski

Firstly, to protect the base of the ski, apply Vola scotch tape (016014) along the base, leaving the edges visible and a small strip down the middle of the base.
This will give the base protection from dirt and dust etc.

On a new pair of skis and during the season it will be necessary to remove a little of the ABS (sidewall) of the ski.
This section of plastic or metal is used to reinforce the edge of the ski, so it is important not to remove it completely in one preparation, but to remove a little when required.

The purpose of removing the ABS is to allow correct sharpening of the side edge without clogging the files. To remove the ABS we can use either (011052) or (011051)





Ergorazor
011052

Edge tool Pro.
011051

III / Tuning the Side Edge

Normal tuning (sharpening) is done with a 200mm file (011038) along the entire length of the ski applying steady pressure all the way. You can work from tip to tail or from tail to tip, there is no essential direction.

Do not apply excessive pressure as this can affect the radius of the ski which can alter its operation.

VOLA recommends using a lime file mounted on a World Cup Guide for this task.
If using a race file Vola suggest using the Racing File Guide as it's wheel holds the shorter files more steady.

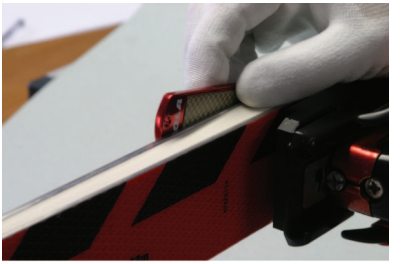
All in one sharpeners, although easier to use, are not as precise as the previous method.
For regular tuning of well kept ski edges it is normally okay to use a file of 150mm (011036), this will be enough to keep the edges sharp.

It is possible to use a chrome file (RACE FILE) in a « FINE or MEDIUM « (011058-59) these files have the advantage of a true definition of the edge but must be used gently.

The World Cup Guide, comes in angles from 90deg to 85deg. However it is recommended not to sharpen your skis at 90deg as the angle on the side must compliment the base angle to make a uniformed total angle.
Ski manufacturers supply skis with set angles, to determine these angles contact your dealer.

Race File Fine
011058

IV / Polishing the Edge



After tuning (sharpening) the edge it is necessary to run the Diamond file over the edges beginning with the 400grit and then the 1000grit.
The 100grit is used to remove any burrs caused by external hazards in the piste or from the tuning process. This 100grit can also be used to revive the edges between courses in a competition environment.

To finish the edges, Vola recommend using the Arkansas Hard stone (011049) or Extra Hard (011050).
These stones will polish the edge to a perfect sharp finish.

You can use the World Cup Guide when using the diamond files but it is better to use the stones by hand.

To extend the life of your stones, you should clean them using liquid wax remover.

To de tune the ski, use the abrasive block. However with carving skis this is not always necessary.

Do not forget to clean the metal or plastic strip at the tail of the ski.

011043 coarse 100
011044 standard 400
011045 fine 600
011046 very fine 1000

011049 Arkansas hard

011050 Arkansas true hard

V / Brushing

The Vola brush range are designed to enable efficient controlled brushing to the base of the ski. To keep your brushes in good condition we recommend to store your brushes in a place where the bristles are not likely to be damaged. For the Fine Steel Brush it is a good idea to apply Vola tape (016014) to the bristles whilst not being used as these bristles are very fine and prone to easy damage.

Brass Brush – This brush is the most aggressive of the Vola brush range. It is used to clean the base before applying wax and to clean the surplus wax off immediately after scraping. It is sometimes necessary to use the R021 wax remover for deep base cleaning.

Fine Steel Brush – This brush has very long fine steel bristles. As like the Brass Brush it can be used for cleaning the ski base or as the first brush after scraping. The fineness of the bristles combined with their aggressiveness can fully define the base structure after wax scraping. This is an essential brush for brushing Molybdenum or any other fatty waxes.

Nylon Brush – This brush has medium and large synthetic bristles. Use as asecond brush after scraping to polish the base and make it more smooth to reduce the friction with the snow. This brush can be used in a backward / forward motion.

Horsehair Brush – This brush has short bristles and having the composition of horsehair it can polish the base and create good glide qualities. This brush can be used in a backward / forward motion.
The Vola brushes, except the Fine Steel, are also available in an oval shape with a hand strap for total control whilst brushing.

012035
Brass brush

012033
Fine Steel brush

012034
Nylon brush

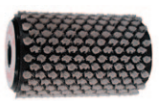
012046
Horsehair brush

Vola offers its brushes in a rotary format, known as Roto Brushes and in addition also has a Roto Cork Brush which is used for the application of powders. Using the Roto brushes allows more effective and constant brushing of the ski base.

Using Roto Brushes – The Roto Brushes are mounted on a hexagonal shaft with a round shaft which attaches to your drill. This Roto Brush Spindle comes with a safety guard. The spindle will fit most electric drill / screwdrivers and cordless drill / drivers. The speed can vary between 800 and 1500 rpm, but should not exceed 1500 rpm. Working from the tip of the ski, apply light pressure and travel towards the tail of the ski making sure the wax particles are ejected away from you. The use of gloves and eye protection is strongly recommended.

Once the initial brushing is done using the Roto Brushes it is advisable to give the base a final polish using a manual brush which will obtain a superior finish.

012020
Brass



012019
Nylon

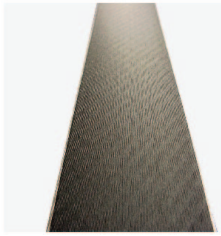
012021
Horsehair

012023
Cork

VI / Structure of the Ski

The structure of the ski base is important when the ski is gliding. More and more ski manufacturers are producing skis with an intermediate structure. As with waxes, different snow conditions work better with different structures. For cold snow a fine structure works better and for warmer, wetter snow a more aggressive structure works better.
The right structure will help the ski steer which is why a cross structure is preferred for the technical disciplines. However it is important to prepare the skis regularly by skiing on them and then waxing (RO21 plus a base wax) and brushing as often as possible. With this process, it reduces the porosity of the polyethylene.

Structure arrondie



Structure croisée

VI / Waxing

To obtain the best performance from your skis, waxing the base is an essential part of the preparation. The ski base does not directly slide on the snow, this is done by small water droplets being created by friction between snow and the wax on the base of the ski. The more of the ski base that is in contact with the snow the more it will slide.
Flouro wax products are hydrophobic (water repellent) and the principle of these waxes is to disperse the water droplets much quicker, which increases the glide and speed of the ski.

Do not leave skis un waxed for long periods of time and remove the wax from the edges.
Remember to clean the base of the ski before applying the wax.

Loosen the grip on the ski to allow it to flex whilst applying the wax. Apply a few drops along the entire length of the base, approximately 25grams per pair.

Using the Vola Waxing Iron spread the wax in a controlled action.

Wax iron 012017

Electronic wax iron 012015

Vola waxes have their melting temperatures indicated on the packaging. It is important not to overheat or burn the wax as this can cause the wax to not work efficiently. Flouro waxes are especially sensitive to overheating and will release flourocarbons, so set the waxing iron to the correct temperature.
It is recommended to apply the wax in a well ventilated area, at room temperature to allow the wax to cool at a constant rate allowing for it to soak in to the ski base. It is advisable to wear gloves and a mask. Remove the wax from the edges using the plastic scraper or by removing the tape if applied earlier.

Racing vise
014010

Wax table (016011)
+ rack (016012)

It is important to allow the wax to permeate the base and cool sufficiently before scraping. We recommend a minimum of two hours before scraping, however the longer the wax is left the better the performance will be.

Scrap all the wax and then brush as detailed in Item 5 Brushing.
On new skis it is important to clean and feed the base of the ski. This can be done by applying RO21 wax remover and while still hot, scrape off. Repeat this process several times.

Once done, using MX200 or Red Training Wax apply the wax to the base and then place in the Thermojomax (012030) and select position 2. Tighten the cover and seal with the clamps and allow to heat for about one hour. Allow to cool then scrape. This can be repeated several times and feeds the base of the ski very well.

Solid wax remover
R021 - 229100

- When applying hot wax, Vola recommend that you wear the respiratory half mask. The filters are positioned so as to draw less contaminated air, thus increasing optimizing filter life. This version comes with two A1B1E filters.

- For the application of powders, there is the full face vented intelligent breathing apparatus. It has audible and visual clogging filters and battery discharge. It comes with battery, charger, face mask and two A1B1E filters.

The preparation of alpine skis consists of two stages, sharpening and waxing.
The option of waxing is to choose the best wax based on the conditions.

The three main parameters for this decision are :

- The Temperature
- The Humidity
- The Snow Structure

The temperature is the easiest to determine. Using thermometer 016019, you can measure temperatures along the course at various points including the start and finish areas.
A tenth of a degree can alter not only the air temperature but also the snow temperature.

NOTE :

- MX / LF / HF waxes have the air temperature indicated on the packaging.
- Powders / Propulsioners / Finishers, have the snow temperature indicated on the packaging.

The hunidity can be measured with the same thermometer (016019) which was mentioned earlier. The readings given are a percentage of the humidity in the air. Low humidity is shown when the reading is below 25%, normal 25% to 50%, and high is greater than 50%.

The snow structure is the more complex to determine and requires more experience.
This is to identify the grain structure of the snow.
To make things simple, we can determine four different types of snow grain :

- "Fresh or new snow" crystals have pointed ends to the snowflake so the use of a hard wax is used to help prevent penetration.

- "Aged snow" crystals become dull and less sharp as the action of time and mechanical stress take their toll. However, this type of snow is the most common in the Alps and is not normally exposed to temperatures above 0 degrees centigrade.

- "Transformed snow" has been subjected to higher temperatures and the flake has almost lost its ideal crystal shape and has become more hexagonal. This form of snow grain surface provides greater contact with base of the ski and thus increases friction and abrasion. This snow type requires a wax with a molybdenum additive.

- "Artificial snow", resembles a converted snowflake which consists of a drop of water surrounded by ice. This snow has a much higher density and therefore it has an increased friction content. As soon as the snow undergoes change the friction decreases. To take advantage of this, a softer less abrasive wax can be used. Wax with a molybdenum additive is recommended.

Vola solid waxes are produced from a subtle blend of different waxes and paraffins in which we specialise in this type of product. The compounds used are not the same between the different ranges of wax, (MX, LF, HF, Bases..). The quality of a wax, not only depends on the refining of waxes and paraffins, but also on the proportions within the product.

Vola Waxes and their applications.

Universal - Level 1

The Universal range of waxes is a simple wax for everyday use. This wax is suitable for all types of snow and for air temperature –8 to +15deg C.

222600

222000

Training wax- Level 2

The training wax range is used for everyday skiing and provides a more precise temperature range. The training wax products are superior to the universal wax as they provide better gliding qualities.
The range is available in three colours that correspond to the following air temperatures:
Blue -25deg to 12deg C, Red -14deg to 4deg C,
Yellow -6deg to 20degC.
Training wax is used by the younger racer not only for training but also in competition.
Training waxes are available in 200g and 500g blocks.

221100 Blue
221101 Red
221102 Yellow

MX 200 - Level 4

The MX 200 wax is ideal for training, ski maintenance and for impregnating new skis. Thanks to its special composition it is ideal for aggressive snows and glacier snow. The MX 200 is a level 4 (Pro Wax) which can be used for the ski base in competition.

224118

224117

Graphite Waxes

The graphite waxes are used on skis with graphite bases (black bases). The base of the ski will lose its graphite content over a period of time. By using the graphite wax once every 7 to 10 waxes it will replenish the base of the ski.

The standard graphite wax is used for feeding the base. The VRB and graphite LF are used as base waxes with the VRB for cold dry snow and the LF for old, artificial snow and wet snow.

224116
Graphite LF

224100
Graphite Standard

224101 VRB

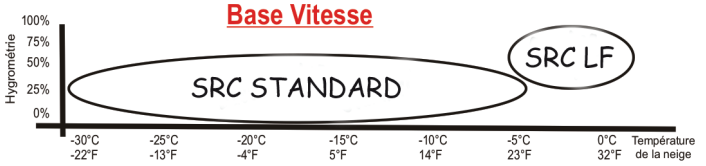
Base waxes

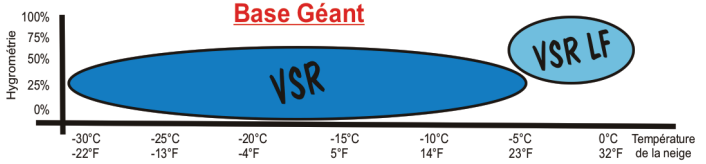
The base waxes are designed to harden the ski base and provide efficient protection. Each discipline has its own base wax. Their composition is adapted to provide the best speed without compromising overall performance. For example the SLG base will speed up very quickly but will start to falter above 80km/h. In contrast the SRC base will start slower but will give more performance at higher speeds. Hence it is advised to use accelerators for the starts of the speed events. The base waxes give a good foundation for the over waxes which are applied during ski preparation.

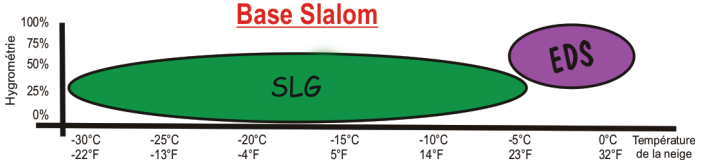
SLG – this base wax has been especially designed for slalom. It will help protect your ski base on hard, abrasive snow whilst maximising your speed. It can also be used as a base layer for additional waxes.
EDS – this is our second base wax for slalom. It contains silicon and is used on artificial and wet spring snow. It too can be used as a base layer for additional waxes, such as the flouro waxes. The one drawback of this silicon based wax is that it tends to hold dirt, so be careful.

VSR Standard – this allows better gliding and greater acceleration out of corners and better gliding at higher speeds.
VSR LF – this has the same qualities as the standard but has the addition of low flouro which makes it more effective on wet snows.

SRC Standard – this base wax was created to meet the demands of the speed events of Downhill and Super G. It protects the base of your skis and provides maximum speed.
SRC LF – this has the same qualities as the standard but has the addition of low flouro which makes it more effective on wet snows.







PRO wax- Level 4

Pro waxes are available in three colours associated with the air temperature
Blue -25deg to -12deg C, Red -14deg to -4deg C, Yellow -6deg to 20degC

These waxes are a high performance wax and are used in addition to hot wax but should not be substituted for them.
As solid waxes, the Pro range is available in several categories and each colour.
FX Waxes – These waxes are flouro free and can be used in competition when the humidity is very low. They are also used to obtain the same level for when ski tests are carried out. These waxes are used when there are big groups of younger racers who want a cost effective race wax.

Premium wax - Level 4S

The Premium 4S waxes are the latest development from the Vola laboratories. Normally, the ski is prepared by applying several layers of different waxes to the base. The premium 4s waxes have been designed by combining our quality gliding waxes, flouro waxes and the basics of the Pro range, thus giving with this new range, the need to only apply one coat of solid wax (Premium 4S) and a layer of liquid wax in readiness for competition.
Note: These waxes, by their very nature are much harder and will heat to higher temperatures than the Flouro wax range.

LF Cold – For cold and somewhat wet snow, including artificial snow. Air temperature -25deg to -12degC. Hygrometry between 20% and 50%. Application temperature with waxing iron 130degC. Available in 80g and 110g.

HF Cold – For cold snow with high moisture, including artificial snow. Air temperature -25deg to -12degC. Hygrometry higher than 50%.
Application temperature with waxing iron 125degC. Available in 80g.

LF Medium – For intermediate snow, fresh snow with a low humidity.
Air temperature -14deg to -4degC.
Hygrometry between 20% and 50%.
Application temperature with waxing iron 125degC.
Available in 80g and 200g.

HF Medium – For intermediate snow with high moisture, including artificial snow.
Air temperature -14deg to -4degC.
Hygrometry higher than 50%.
Application temperature with waxing iron 115degC. Available in 80g and 200g.

LF Warm – For warm, low humidity snow which melts during the day and refreezes at night.
Air temperature -6deg to 20degC.
Hygrometry between 20% and 50%.
Application temperature with waxing iron 110degC.
Available in 80g.

HF Warm – For warm, high humidity snow which melts during the day and refreezes at night.
Air temperature -6deg to 20degC.
Hygrometry higher than 50%.
Application temperature with waxing iron 105degC.
Available in 80g and 200g.

Molybdenum Waxes – Waxes with a molybdenum additive are used in the same humidity conditions as above, but when the snow is old and damaged by the wind, sun and passing skiers. Ideal for when it hasn't snowed for 7 to 10 days and the snow crystals have deformed.
Available in 80g for each rate of fluor and each color. (HF&LF blue, HF&LF red, HF&LF Yellow)

Wax Remover RO21

The Vola range of waxes all look the same as a block of wax, however, the RO21 looks the same but it is a paraffin based wax remover. This product is especially made for cleaning the base of your skis. The RO21 can be applied at 70degC and being a paraffin has a low melting point.

Application of the RO21 is made in the same way as the waxes but immediately after spreading it must be scraped hot. This will cause the impurities within the ski base to be extracted whilst scraping. Additionally the RO21 will pre heat, open the ski base, which will accommodate the wax much better when applied.

Application of Solid Waxes

Here are the steps for successful hot waxing with solid waxes. Start by letting the skis dry at room temperature after skiing.

1 / Use a brake retainer to hold the ski brake in the “engaged” position.

2 / Apply Vola tape along the ski edge and the binding to protect from wax covering them.

3 / Clean the ski base from tip to tail using a brass brush, approx 10 passes.

4 / Set the waxing iron to the temperature indicated on the packaging of the selected wax and drip the wax on the base.

5 / Spread the wax so it covers the entire ski base. Firstly by moving the waxing iron from tip to tail to spread the wax and then make another pass more slowly to allow the wax to soak in.
Warning: Never leave the waxing iron to rest on the ski base as this will cause damage.
If the iron starts to smoke it is too hot. Overheating does not allow the wax to impregnate the ski base.
Leave to cool for at least 2 hours at a temperature of 15 to 20degC. Rapid cooling of the ski, eg (in a cold garage), will prevent the wax from soaking into the base.

6 / Scrape all the wax starting with the edges and then the base.

7 / Brush with a brass brush to remove the excess wax. Approx 3 passes.

8 / Brush with a nylon brush to polish the base. Approx 5 passes.

9 / Brush with a horse hair brush to polish and shine the base. Approx 10 passes. The bristles of the horse hair brush will cause an electrostatic reaction and improve the performance.
If applying a second hot wax, liquid wax or an accelerator do not carry out stage 9 but apply the second wax in the same way as before.

Note: The application of RO21 is made in the same way but after stage 4 immediately scrape.


1/


2/


3/


4/


5/


6/


7/


8/


9/

Liquid Waxes

Liquid waxes are represented in three colours which are related to the air temperature. Blue -25deg to -12degC, Red -14deg to -4degC, Yellow -6 to 20degC

Like the PRO solid waxes each colour system is split into categories.

FX Waxes – These waxes are flouro free and can be used in competition when the humidity is very low. They are also used to obtain the same level for when ski tests are carried out. These waxes are used when there are big groups of younger racers who want a cost effective race wax.

FX liquid

224715 Blue
224716 Red
224717 Yellow

LF Waxes – Low Flouro content waxes are designed for fresh snow with a humidity between 20% and 50%. Also to be used in addition to the base waxes for increased performance.

224700 Blue
224701 Red
224702 Yellow

HF Waxes – High Flouro content waxes are designed for fresh snow when the humidity is greater than 50%. Again these waxes are used in addition to to base waxes.

224704 Red
224705 Yellow

Molybdenum Waxes – Waxes with a molybdenum additive are used in the same humidity conditions as above, but when the snow is old and damaged by the wind, sun and passing skiers. Ideal for when it hasn't snowed for 7 to 10 days and the snow crystals have deformed.

It is important to vigorously brush the wax after scraping with a fine steel brush to remove deep residues of molybdenum.

224709 Blue LF
224710 Red LF
224713 Red HF
224714 Yellow HF

Applying a Liquid Wax

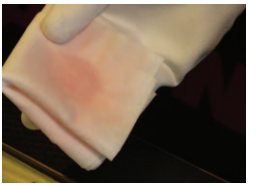
1/

Liquid wax is very easy and quick to use. Liquid wax can be used to change the preparation of the skis when weather conditions change and a different wax needs to be used at the last minute.

2/

Liquid wax can also be used to re wax the skis between runs of a competition. The liquid wax by its physical properties, accelerates much faster than wax.

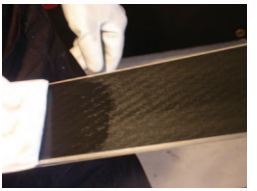
Before applying liquid wax, it is important that it is kept warm at 20degC, make sure it is fluid which helps it to permeate the base under the best conditions.



3/

Improper use of liquid wax is not recommended. Here are the steps to follow for successful application of liquid waxes.

Firstly the base must be dry. If the liquid wax is to be applied after hot waxing, brushing and scraping, then go to step 1.
If it is to be applied between runs of a competition, firstly dry the base using a lint free cloth and put the skis on their edge away from the direct sun rays. Once dry go to step 1.



4/

1 / Use a brake retainer to put the brakes into the engaged position.

2 / Clean the sole from tip to tail using a brass brush.

5/

3 / Use a lint free cloth to spread the liquid wax uniformly over the entire ski base. Ensure that every part of the base is covered evenly and be careful not to “bunch” the wax.
Leave to dry for at least 15 minutes. The chemical reaction that occurs is very simple. The solvents contained in the liquid wax evaporate when exposed to the air, leaving the wax to permeate into the base of the ski. If waxing in a ski room, if possible, leave to dry overnight on the base of the ski. This will give better results.
Scrape any excess wax remaining on the base surface.

6/

4 / Brush with a nylon brush to polish. Approx 5 passes

5 / Brush with a horse hair brush to polish and shine the base. Approx 10 passes. The bristles of the horse hair brush will cause an electrostatic reaction and improve the performance.

Accelerators

Accelerators are strong grip waxes which create great speed at the start of a race but have a limited duration time. The choice of which accelerator to use is dependant on the snow temperature and humidity.

224706

The SP2001 Powder is designed for use in powdery snows with over 45% humidity. It is particularly efficient on snow with a temperature between 0 and -4degC.

224707

The HCSP Powder is designed for cold dry powdery snow below a temperature below -10degC.
General application of these powders is spread the powder over the entire base, dab with a manual or rotary cork or felt pad. Finish by manually dabbing with increasing vigor and finally brush with a horse hair brush.

224000 Blue
224001 Yellow

The Yellow Propulsioner is an accelerator for fresh snow with a temperature of -5deg to -3degC and having a humidity greater than 40%.

The Blue Propulsioner is used for fresh snow having temperatures of -10deg to -5degC and a humidity greater than 25%. Optimum temperature -7degC.

224012 Blue
224013 Yellow

The Molybdenum Propulsioners also come in blue and yellow and are used for old snow when the snow crystals are deformed.

224708
Edge oil

Edge Oil - This used on the edges and only the edges. It is used for all disciplines but mainly the speed ones. It is designed to prevent the snow freezing to the edge of the ski.

Finisher cold
224615

Finisher warm
224616

Finishers – These are the latest type of accelerator to be launched by Vola. These sprays are applied in a layer finish giving a better covering than powders or crayons. Their hydrophobic qualities make them a good choice and they last longer at several kilometers per hour.

Finisher Cold is used from -25deg to -7degC
Finisher Warm is used from -8deg to 0degC on warmer snow.

Application of Powders

1 / Brush the base with a nylon brush to prepare the base to receive the powder.

2 / Sprinkle the powder onto the base. Do not use too much. Typically a 25g jar of SP2001 will prepare at least 10pairs of skis.

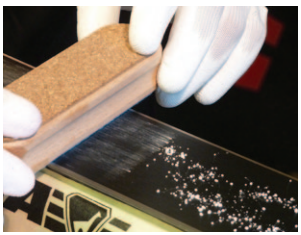
3 / Using a felt block, dab the powder into the base, being careful not to push the powder off the base of the ski.

4 / Keep working the powder into the base by increasing the work rate, creating a warming penetration of the powder. Keep rubbing until the powder is embedded into the ski base.

5 / Brush with the horse hair brush to polish the surface and remove any powder which hasn't gone into the base. Note: It is recommended to use a felt type block for powders.

1/


2/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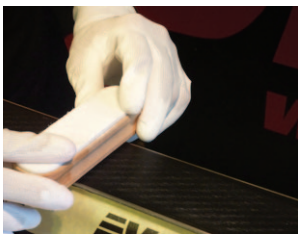
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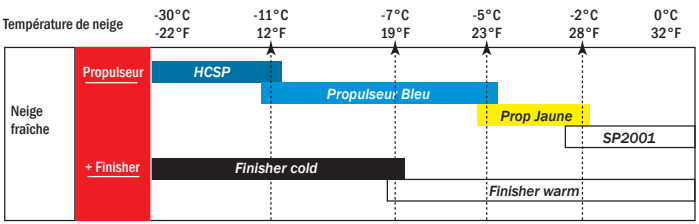
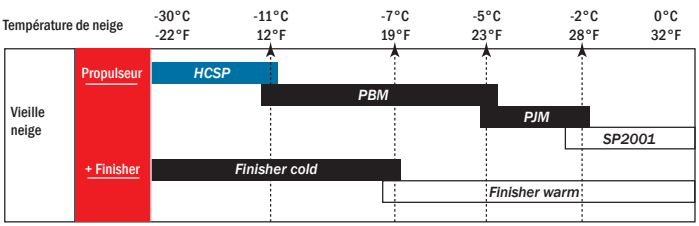


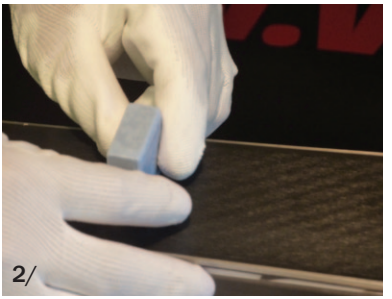


Application of Crayons

1 / Brush the base with a nylon brush to prepare the base for the powder. This must be carried out after scraping a solid or liquid wax application. Make approx 10 passes.

1/

2 / Scribe the crayon onto the base of the ski, being careful not to put too much on. Typically a 15g block should allow up to 50 pairs of skis to be prepared. Putting too much on is a waste and will not gain any advantage.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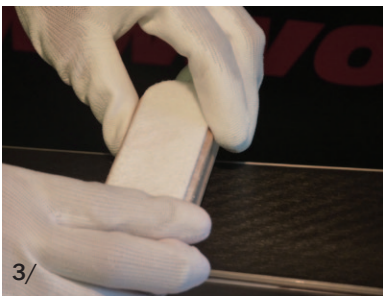
3 / Take a natural or synthetic cork block and working back and forth work the propulsioner into the base. Keep rubbing until the majority is embedded into the base.


3/

4 / Brush with a horse hair brush to polish the surface of the base. Remove any excess propulsioner. Make about 10 passes.

Note: It is advisable to use a cork block.

4/

Application of Finishers

These finishers were developed to compliment the standard accelerators. These products are composed of solvents which evaporate very quickly leaving a very thin film on the base of the ski giving immediate acceleration.

1 / Brush the base of the ski with a nylon brush to make it ready for the finisher. Make about 5 passes.

1/

2 / Spray the finisher in a light manner over the entire base of the ski. Remember the finisher is the last layer to be applied and it will disappear immediately after the start, so make sure the whole base is moistened but be careful not to put too thick a layer on like liquid wax.

2/

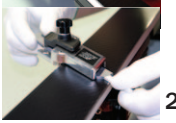
3 / Take a lint free cloth and from tip to tail spread the across the whole base.
Allow to dry. The solvents evaporate on contact with the air and the remaining ingredients impregnate the base of the ski.

Do not brush, the ski is now ready.

3/

Préparation des skis neufs


1/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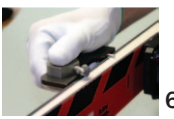
1/ Check that the bases of the new skis are flat. To do this you can use a Planimeter (012005) or a Metal Scraper (012003).

2/ Using the Adjustable Base Edge Guide (011027) check the base edge angle of the skis from tip to tail.

3/ Apply Vola scotch tape (016014) along the ski length including a strip down the middle of the base. Leave the edges exposed for sharpening.

4/ Sharpen the base edge angle with a standard 200mm lime Cut 1 file, working from tip to tail.

5/ Clean any residue dirt particles using a soft brush. Make sure the brush is clean and has not been used for other applications.


6/

6/ Remove the ABS edge, by using the Edge Tool Pro (011051).

7/ When using sandpapers, start with a 120grit paper working to the end with a 400grit paper.

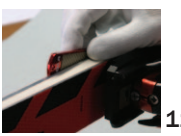
Ski Construction : There are basically two types of ski construction. Sandwich and Monocoque.
Sandwich Construction : The core of this type of construction is the entire width of the ski, and it is framed above and below by different materials to influence the temperament of the ski. Such manufacture provides a highly responsive ski that transmits strong force effectively to the edges.
Monocoque Construction: The core in this construction is not the full width of the ski, it is wrapped in a shell that influences the temperament of the ski making it more solid. This is the most common construction in the public sector of ski construction and is great because it gives a more forgiving ski . Note, the Monocoque is the name of Solomon, but we find the same manufacturing principle from other manufacturers : Cape Rossignol , Full Shell Jacket at Head .....

8/ Clean any dirt with your brush.


9/

9/ Sharpen the edge angle of the skis with square Racing (011021 = 88° and 011022 = 87 °) with a lime Pro RS 10cm (011071).

10/ Clean the dirt with your brush.


11/

11/ Polish the edge that has been sharpened using the following Diamond files : Stone diamond 400 then 600 then 1000 and finally end with a Hard Arkansas or Extra-hard.

12/ Remove plastic tape, and brush the base with the Brass Brush (012035).

13/ Now that the skis are sharp, clean the table in readiness for waxing the skis.
It is very important to keep all equipment and work areas clean.

14/ Clean the base of the skis 1 or 2 times using the R021 Wax Remover. As explained previously, this is done by hot scraping the product. By doing this, it allows the ski base to accept further waxes more easily.


14/

15/ Brush the base with the Brass brush (012009) and / or Steel Fine brush (012033).


15/

16/ Clean up any leftover wax or residues of sharpening using a standard brush reserved for the waxing section.

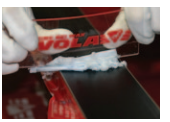
17/ Apply a hard wax MX 200 or VSR with the waxing iron and then remove any excess wax from the ski edges with a plastic scraper.


17/

18/ Insert the skis in the case ThermoJomax (012030), and leave as described above. (heating time and cooling time is specified in the manual of the ThermoJomax)
The skis are now ready.

When the skis are to be used, follow these additional steps :

19/ Scrape the wax with a plastic scraper.


19/

20/ Brush the base with the following brushes :

20-1. Brass brush and / or Fine steel.

20-2. Nylon Brush


20-2/

20-3. Horsehair brush.


20-3/

21/ Buff the ski bases with the brush and then with a cloth, polish the bases to remove any remaining impurities.

22/ Clean work areas with a cloth and liquid wax remover (229700).

23/ Finish by protecting the skis for storage and during transportation.

VOLA RACING

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