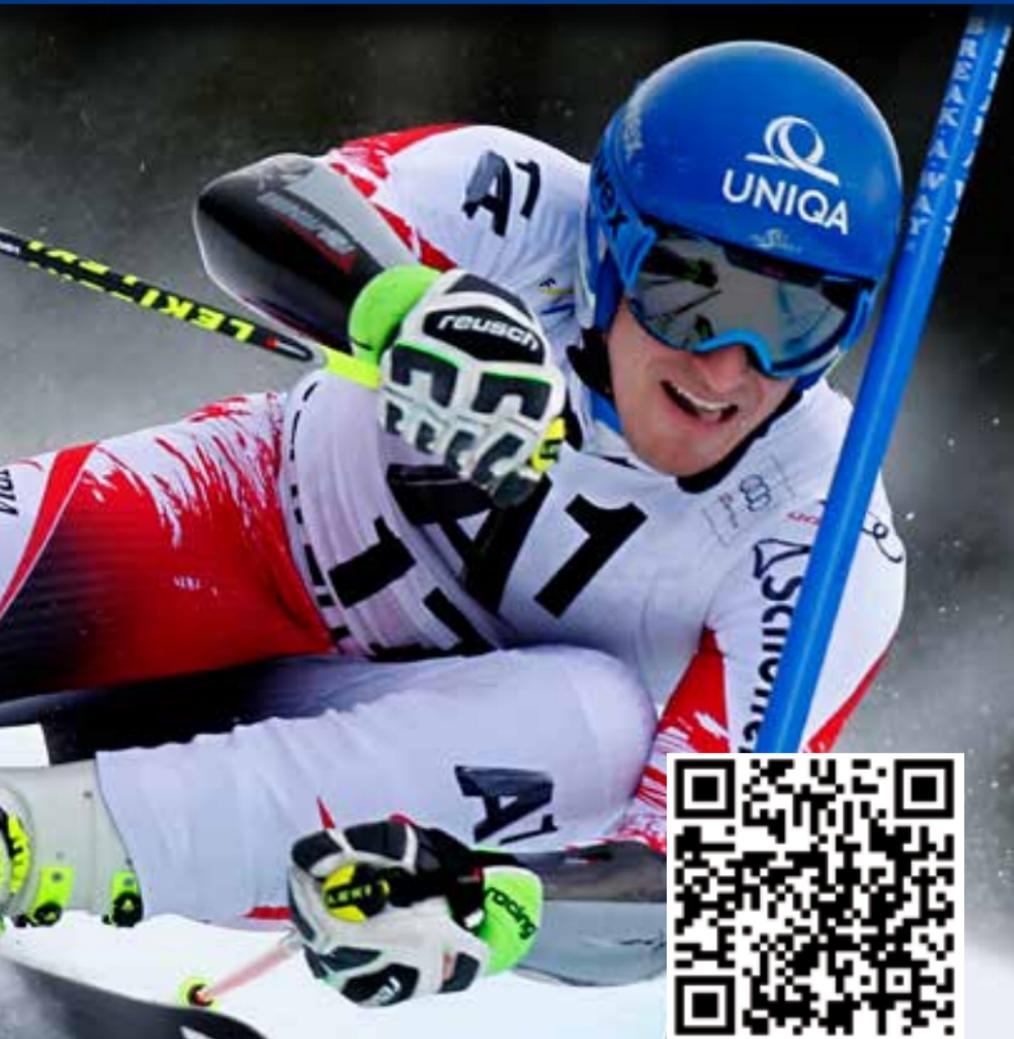


HOLMENKOL®

LICENSE TO WIN



RACE GUIDE

ALPIN / BOARD

Official supplier of:



AUSTRIA SKI POOL



THE NEW RACE GUIDE IS OUT!

HOLMENKOL® has been active in the alpine ski circus for decades, supporting almost 50 national teams worldwide and working with the best athletes and service staff around the globe.



Marcel Lipburger
Director World Racing
Team Alpine

Only hard facts are enough to convince service personnel: They are only satisfied with high-performance products made of the best materials! However, outstanding performance at the peak level of your sport can only be achieved when top notch products are applied correctly. In the Race Guide, we will disclose a few World Cup secrets and introduce you to the proven application used by World Cup winners – clearly explained, with many illustrations.

I have put an “ExpertTip” label next to those products that should be in every service kit.



My team and I very much look forward to seeing you at one of our seminars, which all revolve around one key theme: the **License to WIN!** We wish you a thrilling and successful season!

Your HOLMENKOL World Racing Team

Best wishes
Marcel

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Fischer, © Erich Spiess / Athlete: Vincent Kriechmayr

RACING FINISH

Finish Wax

Speed Factor

Syntec Race ALPINE
24541/24542/24543
(see page 14)



SpeedBlock
24351/24352/24353
(see page 18)



SpeedFinish 2.0
24366/24367/24368
SpeedPaste
24370
(see page 16/17)



Racing Wax

RacingMix (HF)
24950/24950/24970
(see page 20/21)



Racing Base LP 21 (LF)
24911
(see page 22)



Base Wax

Fluomix
24134
(see page 22)



Alpha/Beta/ Ultra-mix
24104/24114/24124
(see page 25)



Are you satisfied with standard products, or looking for new innovations?

We continually search for new options. We synthesize tailor-made substances and agents. We develop pioneering and previously unknown recipes. We exploit the latest technologies. This is the SYNTEC project.

The results achieved are products developed on the basis of the latest findings, tested with the greatest of dedication and produced under the most modern conditions. Trust in HOLMENKOL – your License to Win.



Product development at HOLMENKOL begins with basic research. Our laboratory continually strives to produce tailor-made agents to improve our products. The focus in the SYNTEC project is on development of our own agents and synthesizing in exclusive cooperation with research institutes and universities. We also work closely together with well-known raw material manufacturers.

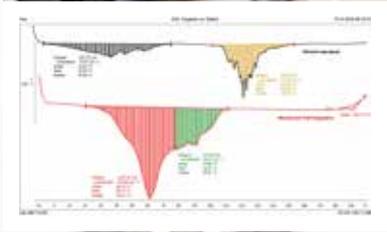




We subject our recipes to continual testing. Our DNA – License to Win – obliges us to take this approach. Consequently, characteristics such as friction or the yield of new SYNTEC agents in recipes are put through intensive tests.



The state-of-the-art equipment in our laboratory ensures the finest quality and maximum functionality. Tailor-made, exclusive SYNTEC agents speak for themselves, and each product must impress on its own merits.





HOLMENKOL is the License to Win from Lillehammer to Val di Fiemme and Beaver Creek to Moscow. Our test team covers over 150,000 km each year by car, plane and train to test our products under practically every snow and weather condition. -30 °C to +10 °C, fresh or old snow – our products must be convincing to earn our License to Win seal.



Marcel Lipburger
Director World Racing Team Alpine

„Testing is the basis of our work. Over and over again. It's the only way to ensure the sustained success of our products.“

Thomas Burmann
Director World Racing Team Nordic

„I've been testing ski wax for over 25 years. The key to our success lies in close cooperation between the lab and field testing.“



PRODUCTION



SUCCESSFUL PRODUCTS



HOLMENKOL products guarantee the License to Win. This ambition is continually underscored by success at the highest level. We are proud suppliers of racers and ski pools in 44 countries. 2014-15 saw victories achieved during all the ski winter highlights with HOLMENKOL products. HOLMENKOL was represented at all times on the podium: in Beaver Creek, Falun and Kontiolathi. Whether during ski jumping, Alpine, cross-country skiing or biathlon – HOLMENKOL is the choice of winners.

We ensure quality and consistency through state-of-the-art production conditions. Exclusive SYNTEC agents can be involved on even the smallest of scales. HOLMENKOL products have to meet maximum requirements at all times. Place your faith in this aspiration.



Syntec Race ALPIN:

When combined with HOLMENKOL® race waxes, you get first class gliding properties for your race base that set the benchmark in terms of speed, abrasion resistance, versatility and handling.

Highly fluorinated synthesis powder.

- THE new World Cup success wax
- New SYNTEC technology enables a completely new level of performance
- Previously unknown acceleration, speed and resistance to abrasion
- Apply with a wax iron (e.g. HOLMENKOL Digital Racing Waxer) or through corking



Syntec Race WET - ALPIN

- Optimum use: Damp to wet coarse and fine-grained snow.
- For snow temperatures from 0° bis -6°C

24541 30 g



Syntec Race MID - ALPIN

- Optimum use: Fine to coarse-grained snow.
- For snow temperatures from -4° bis -12°C

24542 30 g



Syntec Race COLD - ALPIN

- Optimum use: For dry and cold snow.
- For snow temperatures from -12° bis -20°C

24543 30 g



0° ~ -6°C



wet to damp



150°- 160°

Syntec Race WET - Alpin

- 4° ~ -12°C

damp, dry

150°- 160°

Syntec Race MID - Alpin

- 12° ~ -20°C

dry, cold

160°- 170°

Syntec Race COLD - Alpin



SpeedFinish 2.0:

World Cup proven formulas give you first class, easy to apply gliding coating. When used with HOLMENKOL® race waxes or other HOLMENKOL® Racing Finish products, you will see outstanding results in terms of gliding effect and versatility.

Highly concentrated fluorine spray.

- For maximum speed and enhanced acceleration
- Vigorously resistant to dirt
- Finishing layer anchors itself optimally with high fluorine waxes
- Simplest, speediest application prior to racing



SpeedFinish 2.0 WET

- Application area: Damp, fresh snow, wet snow and fine to coarse-grained old snow
- For snow temperatures from 0 to -4°C

24366 50 ml

SpeedFinish 2.0 MID

- Application area: universal use for all snow types
- For snow temperatures from -2 to -10°C

24367 50 ml

SpeedFinish 2.0 COLD

- Application area: Cold and aggressive snow
- For snow temperatures from -8 to -20°C

24368 50 ml



SpeedFinish 2.0 WET 0° ~ -4°C wet to damp

SpeedFinish 2.0 MID -2° ~ -10°C wet, damp, dry

SpeedFinish 2.0 COLD -8° ~ -20°C dry

SpeedPaste Racing:

Highly fluorinated carbon racing wax paste. World Cup proven. Extreme acceleration, maximum speed and smooth gliding in all speed ranges. High abrasion resistance and outstanding versatility. SpeedPaste can be easily and conveniently applied to any ski until right before the start of the race, ensuring that the base and structure are not damaged. SpeedPaste has been improved to match HOLMENKOL® race waxes, which makes it an essential for winning from start to finish.



SpeedPaste Racing

- Highly fluorinated carbon wax paste.
- For damp to wet climate. Specifically for fresh wet snow
 - For snow temperatures from 0° to -6° C
 - High abrasion resistance, broad range of applications
 - Optimally adjusted to suit race waxes
 - Easy application, good value for money

24370 30 g



SpeedPaste Racing

0° ~ -6°C



wet, damp, dry

Racing Finish Chart ALPINE

	0°	-2°	-4°	-6°	-8°	-10°	-12°	-14°	-16°	-18°	-20°	-22°	-24°
Syntec Race Alpin	WET			MID				COLD					
Speed Block	WET		MID			COLD							
Speed Finish 2.0	WET	MID			COLD								
Speed Paste	Paste Racing												

SpeedBlock:

Pressed 100% fluorine carbon powder. World Cup proven formula.

- Extreme acceleration, maximum speed
- For rubbing onto prepared gliding surfaces or other speed coatings shortly before the start
- Easy application even prior to starting
- Good value for money
- Application: rub on and cork; can also be ironed in



SpeedBlock WET

- Best for: Damp to wet fresh snow, grainy to coarse-grained old or artificial snow.
- For snow temperatures from 0° to -5° C

24351 15 g

SpeedBlock MID

- Best for: Fresh snow or damp old/artificial snow
- For snow temperatures from -2° to -10° C

24353 15 g

SpeedBlock COLD

- Best for: Dry or grainy snow
- For snow temperatures from -5° to -20° C

24355 15 g



0° ~ -5° C



wet to damp



95° ~ 100° C

SpeedBlock WET

-2° ~ -10° C

wet, damp, dry

105° C

SpeedBlock MID

-5° ~ -20° C

dry

125° C

SpeedBlock COLD

Image Source: Fischer, © Erich Spriess / Athlete: Philipp Schoerghofer



RacingMix:

Intrinsic simplicity is the best improvement!
The RacingMix collection consists of 3 highly fluorinated paraffin waxes covering all snow types and temperatures.

Highly fluorinated race wax for racing and training.

- Allows maximum acceleration, gliding and abrasion resistance
- Maximum water and dirt repellence
- For Alpine and Nordic skis

Here you can find our online
wax consulting tool:
www.holmenkol.com/en/wax-advisor.html



Highly fluorinated additive,
appropriate match for the race
wax collection (Alpine/Nordic).



RacingMix WET

For fine to coarse and wet snow. For snow temperatures from 0° to -4°C.

24950 2 x 35 g

24951 150 g

RacingMix MID

For fine to coarse and damp snow. For snow temperatures from -4° to -10°C.

24960 2 x 35 g

24961 150 g



RacingMix COLD

For fine to coarse and abrasive snow. For snow temperatures from -10° to -25°C.

24970 2 x 35 g

24971 150 g

Additiv High-Fluor GW 25

Highly fluorinated race wax additive. For high air humidity and/or snow moisture. To enhance gliding as well as water and dirt repellence.

24140 2 x 35 g

24139 150 g



RacingMix WET	0° ~ -4° C	fine/coarse wet	115° - 125°
RacingMix MID	-4° ~ -10° C	fine/coarse damp	125° - 135°
RacingMix COLD	-10° ~ -25° C	fine/coarse aggressive	140° - 150°
Additiv High-Fluor GW 25	GW 25 can be added to RacingMix		



Fluormix WHITE

Lightly fluorinated high quality training and base wax for all snow types. Preferably for higher moisture. For snow temperatures from 0° to -14°C.

High abrasion resistance.

24134 2 x 35 g

24131 150 g

Racing Base LF 21

Lightly fluorinated base wax for alpine and Nordic skiing and ski jumping. Application ranges from icy, aggressive snow and artificial snow to wet snow. Ideal for indoor ski complexes. Perfect base wax for long distances. Optimally suited to the ice track during ski jumping. For snow temperatures from 0° to -20°C. High abrasion resistance. Low dirt adherence. Broad range of uses.

24911 2 x 35 g

24908 150 g



Fluormix WHITE

0° ~ -14°C

wet to damp

125° ~ 135°

Racing Base LF 21

0° ~ -20°C

fine / coarse / aggressive

140° ~ 150°



Image Source: © HEAD Sport GmbH / Athlete: Matthias Mayer



Image Source: © HEAD Sport GmbH / Athlete: Matthias Meyer

RACING BASE WAX

Successful formulas. Highest quality base and training wax based on hydrocarbons. Used and recommended by national teams and the ski industry.

- Stands out due to extreme abrasion resistance
- For alpine and Nordic skis



Alphamix YELLOW

For soft, fresh and fine-grained snow.
For snow temperatures from 0° to -4°C.

24104 2 x 35 g

24101 150 g



Betamix RED

For all snow types. For snow temperatures from -4° to -14°C.

24114 2 x 35 g

24111 150 g



Ultramix BLUE

For cold, very old and aggressive snow.
For snow temperatures from -8° to -20°C.

24124 2 x 35 g

24121 150 g



Alphamix YELLOW	0° ~ -4°C	wet to damp	115° ~ 125°
Betamix RED	-4° ~ -14°C	damp to dry	125° ~ 135°
Ultramix BLUE	-8° ~ -20°C	damp to dry	135° ~ 140°



ExpertTip

nano-CFC Fluor-Cleaner

Unique special cleaner for nano-CFC powder and other RacingFinish products. Removes fluorine materials but does not attack the paraffin base.

After treatment, the ski takes up more wax again thus achieving increased speed.

24419 500 ml

24418 100 ml



WaxAb - Wax Remover Spray

Special cleaner and wax remover for gentle, deep cleaning of skis and snowboards. Optimal dosability.

24410 250 ml



Wax Remover-Cleaner

Special cleaner for removing grease, oil, resin and wax from hands, ski gliding surfaces and clothes.

20421 500 ml

20422 1000 ml

20423 3000 ml



UPDATE

CareFleece

Highly absorbent special fleece for base cleaning and polishing. With practical tear-off perforation.

24490 25 m x 20 cm



UPDATE

CareFleece 50

Highly absorbent special fleece cloths for base cleaning and polishing.

24492 50 pcs.



Padset

Special grinding pads for roughening the base.

24495



ExpertTip

FX-Strips transparent

Special candles for small base repairs. Suitable for all conventional ski bases and particularly for FX-Smartbase snowboard bases. Light the candle, drip on the wax, and done.

24400 5 pcs.

FX-Strips black

24401 5 pcs.





SuperProPlus WorldCup

First class World Cup ski vice.

- For all types of alpine skis (racing/ carving, freeride/freestyle, back-country alpine touring)
- Vertically adjustable external supports, infinitely variable from 90° to 60°
- The robust central clamp is 90 mm wide and opens up to 100 mm
- Ideally suited for edge and base tuning
- Consists of an aluminium body resistant to compression/ traction
- Comes with 2 ski brake holders.

24432



Board / FreerideFix

Special support for snowboard and wide ski tuning.

- For fast and easy horizontal and vertical applications.
- Ideal for edge and base tuning.
- Two side edge work position: standard 90° and easy at 60°

20516



SuperProPlus Wide

Special ski vises for professional edge and ski base tuning.

- For all types of alpine skis (racing/ carving, freeride/free style, back-country alpine touring and jump skis)
- The robust central clamp is 90 mm wide and opens up to 155 mm
- Vertically adjustable external supports, infinitely variable from 90° to 60°
- Consists of an aluminium body resistant to compression/ traction
- Comes with 2 ski brake holders

24428



ALL-IN-ONE 2.0

The set consists of compact ski clamps for all ski types and an adapter for snowboards and cross-country skis.

- The ski clamp consists of an aluminium body resistant to compressive and tensile loading
- The robust central clamping fixture opens up to 90 mm
- Low weight and compact size, ideal for travelling
- Delivery includes 2 ski brake holders
- The adapter can be fixed directly to the outer surface of the ski clamp

24441





ExpertTip

BaseEdge File Guide

For bevelled steel edges on the base side of alpine skis/snowboards. Infinitely variable file guide, adjustable from 0.5° to 1.5°. Suitable for ski files from 20 to 25 mm width and up to 6 mm thick.

24450



World Cup File Guide

For bevelled steel edges on the base side of alpine skis/snowboards. Infinitely variable file guide, adjustable from 0.5° to 1.5°. Suitable for ski files from 20 to 25 mm width and up to 6 mm thick.

24476 86°

24477 87°

24478 88°

24479 89°



ExpertTip

SteelEdge WorldCup

World Cup device for edge tuning of alpine skis and snowboards. Angle adjustable in degrees from 88° to 85° for a precise working angle of ski files, grinding diamonds and oxide stones.

24475



File Guide Clamp

Screw clamp to attach the file on the World Cup File Guide. Holds the files or diamonds in a stable and precise position on the file guide (Art. 24476-79).

24481



ERGO EASY

Handy edge sharpener, standard angles of 88° and 89°. For deburring and grinding ski and snowboard steel edges. Easy handling, fits into your trouser pocket. Comes with a high quality 40 mm file.

20588



NEW

Side Wall Planer Pro

Superior-quality, ergonomically optimised edge side wall planer with Teflon gliding surfaces on the base side. Offers excellent handling and very good support. The blade position can be optimally adjusted for every side wall. Includes a spare blade, round, 6 mm.

24498



EdgeTrick

Pocket device with oxide stone to remove rigidification and burrs on ski edges. Angle adjustable in steps of 0.5° from 85° to 90°.

24624



TopSeller

Profi Edger

High quality ergonomic edge sharpener with gliding rollers on the base side. Adjustable grinding angle from 90° to 85°. Comes with a high quality 80 mm file. Suitable for all ski files (20527), grinding diamonds and oxide stones (see page 34-35).

24497



Semi Edger

Ergonomic edge grinder with gliding surfaces on the base side. Grinding angle adjustable from 90° to 85°. Comes with a high quality 80 mm file. Suitable for all ski files, grinding diamonds and oxide stones (see page 26-27).

24496

Professional files for for precise fine-filing ski and board edges.



Racing File L-MAXI

Professional file, for precise fine-filing ski and board edges. Optional for Base Edge(24450).

2052300000 250 x 25 mm, 13 teeth/cm



Racing File L-MINI

Professional file, for precise fine-filing ski and board edges. Optional for Ergo Edge Grinder (24453, 24452) and SteelEdge (24475).

20524 100 x 25 mm, 13 teeth/cm



Diamond File World Cup

Diamond files to remove rigidification or for professional refinishing of ground edges.

24482 fine

24483 medium

24484 coarse



Grinding rubber

For blunting ground edges in the front and rear area. Avoids ski edges from catching snow.

20550



Racing File M-MAXI

Professional file, for precise fine-filing ski and board edges.

20526 200 x 20 mm, 15 teeth/cm



Racing File M-MINI

Professional file, for precise fine-filing ski and board edges. Optional for Ergo Edge Grinder (24453, 24452) and SteelEdge (24475).

20527 100 x 25 mm, 15 teeth/cm



Racing File S

Professional file, for precise fine-filing ski and board edges.

2052900000 150 x 15 mm, 18 teeth/cm



CrossFile MINI

Extra coarse body file for edge grinding. Optional for Ergo Edge Grinder (24453, 24452) and SteelEdge (24475).

20521 100 x 30 mm

CrossFile MAXI

Body file for edge grinding. Optional for BaseEdge (24450).

2052000000 300 x 30 mm



Arkansas true hard

For smoothing ground edges.

20576



Oxyd mini

Oxide stone for edge repairs and removing rigidification. Suitable for Ergo edge grinders and SteelEdge.

20561

ExpertTip



Digital RacingWaxer

Professional World Cup waxer with digital display. The temperature of this iron is controlled by a microprocessor, keeping it stable during processing. This gives an optimal result and is particularly advantageous for applying the temperature-sensitive special and race waxes. Temperature range from 90-180°C.

24422 230 V 15 mm base plate

24423 110 V 15 mm base plate



Digital RacingWaxer Thick Plate

Professional waxer with digital display used by World Cup teams. A microprocessor controls the temperature, keeping it stable during working. The extra-thick base plate enables ideal application of temperature-sensitive special and racing waxes, even in cold ambient temperatures. Temperature control from 90-180°C. Including sturdy case.

24414 230 V 26 mm base plate

24415 110 V 26 mm base plate

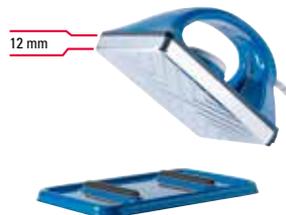


Electronic RacingWaxer

The temperature of this iron is controlled by a microprocessor, keeping it stable during processing. This gives an optimal result and is particularly advantageous for applying the temperature-sensitive special and race waxes. Temperature range from 90 -160°C.

24420 230 V 15 mm base plate

24421 110 V 15 mm base plate



ClassicWaxer (similar picture)

Handy waxing iron with precise temperature control and constant heat through extra thick bottom plate. With a smooth bottom plate especially suited to iron grip wax.

20602 230 V 12 mm base plate



WaxPro 125 Waxing Machine

Waxing machine for fast, even wax application. All pastilles are optimally suited for WaxPro.

24426 Roll width 125 mm



WaxPro 125 Spare Tray incl. roll

24427 Roll width 125 mm



Waxing iron tray

Robust aluminium tray for waxing iron; includes silicon protection. Can be installed on a service table. Suitable for all tables with a tabletop thickness of up to 50 mm and all waxing irons with a width of up to 110 mm. Heat resistant up to 230°C.

20723



BETAMIX Pastille RED

For all snow types. Most popular base wax in the international World Cup. Suitable for WaxPro.

24115-P 1kg



Waxmask medium

Protection from vapour and dust during waxing and brushing.

24416 Incl. 2 Filters



WaxFleece

High quality fleece for uniform, sparing wax application. Avoids direct contact between the waxer and ski surface.

20620 100 pcs.



Waxmask Filter

Dust and gas filter for waxing mask (24416).

24417 2 pcs.



Plastic scraper

Handy scraper to remove excessive hot wax.

20630 130 x 60 x 3 mm



Plastic scraper

Special World Cup proven scraper.

20631 130 x 60 x 5 mm



FinishKork

Special cork with felt to finish and polish wax and speed products.

20645



Stainless steel scraper

Extra sharp stainless steel scraper for edges and base. Extremely long life.

20635 112,5 x 60 mm



Racing plastic scraper sharpener

Professional device for sharpening plastic scrapers from 3 to 6 mm wide. Can be fastened to the worktable. Comes with a file: CrossFile Mini 100 x 30 mm (20521).

24622





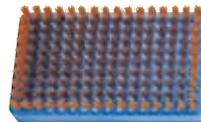
Image Source: HOLMENKOL

NEW**BaseBrush Steel**

Optimum steel brush for cleaning the surface prior to and during waxing with hot waxes. Perfect for brushing basic waxes.

24524 25 mm**ExpertTip****OvalBrush Steel**

World Cup proven steel brush for cleaning the base prior to waxing. Used in the World Cup particularly for the first workstep for brushing off hot wax.

24522 25 mm**BaseBrush Bronze**

Coarse bronze brush suitable for cleaning ski surfaces prior to and after waxing and brushing hot waxes. Perfect for exposing the structure. The ideal all-round brush.

24502 12 mm**OvalBrush Bronze**

Coarse bronze brush suitable for cleaning ski surfaces prior to and after waxing and brushing hot waxes. Perfect for exposing the structure. The ideal all-round brush.

24520 12 mm**Oval Brush Bronze long wire**

World Cup proven coarse bronze brush suitable for cleaning ski surfaces prior to and after waxing and brushing hot waxes. Perfect for exposing the structure. Extremely long-lasting. The ideal all-round brush.

24534 20 mm


BaseBrush Horsehair

The ideal brush for applying and brushing out glide wax and Speed- Powder products.

24513 8 mm


OvalBrush Horsehair

The ideal brush for applying and brushing out glide wax and Speed- Powder products.

24533 10 mm


BaseBrush Steel MicroFinish

Ultra-fine brush to completely reveal the structure. Removes all wax residues deep inside the structure and increases speed. Optimal for finish products. A true must in racing sports.

24503 12 mm


OvalBrush Steel MicroFinish

Ultra-fine brush to completely reveal the structure. Removes all wax residues deep inside the structure and increases speed. Optimal for finish products. A true must in racing sports.

24523 12 mm


BaseBrush Nylon

Nylon brush especially suitable for polishing up finishing products.

24510 8 mm


OvalBrush Nylon

Nylon brush especially suitable for polishing up finishing products.

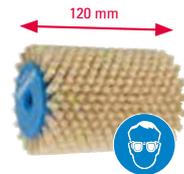
24530 12 mm



SpeedBrush Bronze

Optimum brush for surface cleaning. Especially suitable for use on new and freshly ground skis. **TIP! Brush at low speed and only with working protection (20686).**

20674



SpeedBrush Fibre

All-round brush for brushing all hot wax types.

20670



SpeedBrush Horsehair

For brushing in case of preparation with glider waxes and speed products..

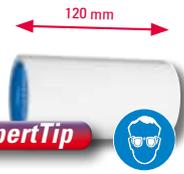
20672



SpeedBrush Nylon

Nylon brush especially suitable for polishing up finishing products.

20671



SpeedBrush Fleece

Seamless fleece roller for optimal, gentle rubbing in of Finish products.

20688

ExpertTip



SpeedStick Pro II

Unique click fast-change mechanism in high-grade stainless steel design. For all SpeedBrush brushes.

20685 120 mm



SpeedShield Pro II (working protection)

Shield for SpeedStick (20685).

20686 120 mm



WaxTisch PROFI (similar picture)

Lightweight, robust World Cup proven waxing and service table made from a combination of aluminium and stainless steel.

- Can be extended to become a Nordic table (together with Nordic table set 24437)
- Comes with 1 pair of profile extensions, ski holders and a high quality bag
- Dimensions: 103 x 48 cm
- Height adjustable from 84 to 115 cm
- Made in Germany

24433



Waxing apron (similar picture)

Functional World Cup apron with many handy pockets.

20750



Waxing Table Alpine/Nordic 2.0 (similar picture)

Superior-quality, stable waxing and service table.

- Easy to handle folding mechanism
- Additional table top
- Adjustable height
- Can be extended to become a Nordic table (together with Nordic table set 24437)
- Comes with 1 pair of profile extensions, ski holders and a high quality bag
- Weight (without bag): 23.8 kg
- Dimensions (work disc): 100 x 43 cm
- Made in EU

20725



Bag for waxing table (similar picture)

Bag for waxing table (20721 / 20725 / 24433) excludes contents.

20722



Snow thermometer FlashPen

For contactless infra-red measuring of the snow temperature. Incl. battery.

24617



ServiceBox blue

Large robust service box with HOLMENKOL logo for TuneUp material and ski wax. With drawers of various sizes. World Cup proven.

20703 465 x 180 x 360 mm



SkiClip Alpine/Carving

Handy ski clips. Protect the base and edges of alpine and carving skis.

2081000000 1 pcs.



Tape (Adhesive plastic tape)

Narrow ski service adhesive tape.

20740



Tape smart (Paper masking tape)

Large, flexible paper masking tape, easy to tear, reusable.

20741



Racing Bottle Bag 1L

Drink belt with extra pocket.

With a practical push/pull drinking bottle stopper. Keeps drinks warm for up to four hours.

20961 1l



Belt pouch

Belt pouch made of sturdy nylon.

Suitable for holding Alpine tools and Nordic kick waxes.

20963



Before you use new skis for the first time, you should give them some basic preparation. This also goes for freshly sharpened and structured skis.

This first preparation is important as it enables the wax to penetrate deep into the ski base. Due to mechanical structuring of the base, fine hairs are produced and these are removed by this preparation. It also protects the base for subsequent edge tuning.

i For this application you need the following products:

SuperProPlus World Cup	Ref. no. 24432	p. 28
BaseEdge File Guide	Ref. no. 24450	p. 30
PadSet	Ref. no. 24495	p. 26
WaxAb – Wax Remover Spray	Ref. no. 24410	p. 26
CareFleece 50	Ref. no. 24492	p. 26
HOLMENKOL [®] Base Wax		p. 25
Digital RacingWaxer	Ref. no. 24422	p. 34
Alternatively: SmartWaxer	Ref. no. 20603	p. 35
Optional: WaxFleece	Ref. no. 20620	p. 35
Plastic scraper	Ref. no. 20630	p. 36
Side Wall Planer Pro	Ref. no. 24498	p. 31
SteelEdge WorldCup	Ref. no. 24475	p. 30
CrossFile Mini	Ref. no. 20521	p. 32
RacingFile (S)	Ref. no. 2052900000	p. 32
Diamond World Cup File medium	Ref. no. 24471	p. 33
Grinding rubber	Ref. no. 20550	p. 33
OvalBrush Steel	Ref. no. 24522	p. 39
Alternatively: SpeedBrush Bronze	Ref. no. 20674	p. 43

1 Always ensure the ski / board is firmly clamped into the vise before you begin.

2 When the base is freshly ground, remove fine hair using a scraper (plastic or stainless steel).

3 Use a BaseEdge File Guide and a Racing file to surface grind the ski / board (0.5°). In the front and rear areas, use a BaseEdge FileGuide for a bevelled edge between 1.0° and 1.5° (depending on requirements and skier's performance)..

4 Slightly sand the base using green ski pads. This ensures the wax is better absorbed.

5 Clean the base with cleaner or WaxAb and CareFleece.

6 Wax with base wax (Alphamix Yellow or Betamix Red) and allow to cool.

→ **Tip:** To avoid burning the base, use HOLMENKOL[®] WaxFleece.

6



Scrape (rather than brush) off the excess wax. This ensures the base is protected from dirt when you tune the side edges.

7



In order to grind the edges precisely, remove any side wall projection using the SideWall Planer Pro.

8



Clamp a CrossFile Mini into the edge grinder and pregrind to the desired angle. Then continue using the RacingFile (Maxi or Mini).

9



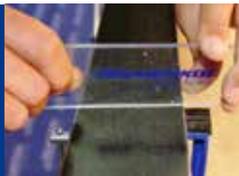
Finish using the Diamond World Cup File medium.

10



Use the grinding rubber to slightly blunt the extremely sharp edge in the front and rear areas.

11



Use a sharp scraping blade to scrape the slightly dirty base surface.

12



Use the OvalBrush Steel or the SpeedBrush Bronze to brush off old wax from the structure.

or:



13



Apply base wax again and iron into the base.



→ This process (waxing, scraping, brushing off) can be repeated several times until the base is sufficiently saturated.

**You should check your skis / boards on a regular basis.
If you find any damage, proceed as follows before applying racing preparation:**

i For this application you need the following products:

Diamond File World Cup coarse	Ref. no. 24484	p. 33
Alternatively: Oxyd mini	Ref. no. 20561	p. 33
EdgeTrick	Ref. no. 24624	p. 31
FX-Strips (black)	Ref. no. 24401	p. 27
CrossFile Maxi	Ref. no. 2052000000	p. 32
Stainless steel scraper	Ref. no. 20635	p. 36
PadSet	Ref. no. 24495	p. 26

1



When the edge shows rigidification, pretreat using the DiamondFile Coarse ...

or:



...using the aluminium oxide stone.



Alternatively, you may want to use EdgeTrick with Oxide Stone BLUE.

2



Fill any damaged areas (scratches / holes) with FX-Strips. To do this, light the FX-Strip and, holding it just above the area to be treated, drip the wax onto it.

3



Once the wax has cooled, remove excess FX-Strip material using the CrossFile...

or:



... a stainless steel scraper.

4



Use green ski pads or sandpaper to smooth the repaired spot.

The preparation for racing is the same as for basic preparation (surface grinding, bevelling, relief-grinding of edges, base waxing, see pages 48 onwards).

For this application you need the following products:

SuperProPlus WorldCup	Ref. no. 24432	p. 29
Plastic scraper	Ref. no. 20630	p. 36
SideWall Planer Pro	Ref. no. 24498	p. 31
SteelEdge WorldCup	Ref. no. 24475	p. 30
RacingFile (L-Mini)	Ref. no. 20524	p. 32
Diamond File World Cup medium	Ref. no. 24483	p. 33
Arkansas hard	Ref. no. 20575	p. 33
Grinding rubber	Ref. no. 20550	p. 33
OvalBrush Steel	Ref. no. 24522	p. 39
HOLMENKOL® Base Wax		p. 25
HOLMENKOL® Race Wax		p. 20 / 21
Digital RacingWaxer	Ref. no. 24422	p. 34
Alternatively: SmartWaxer	Ref. no. 20603	p. 35

1 Use the scraper to remove the old wax, applying gentle pressure.



2 Firmly clamp the ski / board into the vise ready to begin preparation.



3 Prior to each edge grinding operation, the side wall should be reduced minimally (if necessary) with the SideWall Planer Pro. The unit setting should be checked carefully prior to use.



4 Clamp the RacingFile into the tool (e.g., SteelEdge WorldCup) and grind the side edges to the required relief angle.



5 Use the Diamond File World Cup medium to polish / deburr the side edges and smooth using the Arkansas true hard stone.



→ **Tip:** The better the edge is polished, the longer it remains sharp.

6 Use the grinding rubber to slightly blunt the extremely sharp edges in the front and rear areas.



7 Use the OvalBrush Steel to brush off wax residues from the structure.



-->CONTINUATION

with HOLMENKOL® base wax (Hydrocarbon) and RacingMix:

8



Cleaning the ski base:
Apply base wax (e.g., Alphamix Yellow, Betamix Red...) ...



...iron on...



...scrape...



...brush off.

9



Apply your choice of race wax.
Harder waxes with a higher melting point should be worked in longer to increase abrasion resistance (adherence).



10



Clean the side wall and edge using a plastic scraper

11



Allow the ski / board to cool for at least 1 to 2 hours. Then scrape the wax from tip to tail using a sharp scraping blade and applying gentle pressure.

12



Use the OvalBrush Steel to brush off wax residues from the structure.

→ **Tip:** In order to get the surface as smooth as possible, repeat this scraping and brushing process once or twice.

→ **Tip:** Apply paste wax to the side (to ensure snow does not stick to the side wall) and polish using CareFleece.



with **SYNTEC RACE ALPIN**:

HOLMENKOL® Speed products are applied after basic preparation (Base wax Hydrocarbon; race wax, RacingMix).

i For this application you need the following products:

Syntec Race Alpin WET / MID / COLD		p. 14
FinishKork	Ref. no. 20645	p. 36
Alternatively: Digital RacingWaxer	Ref. no. 24422	p. 34
Alternatively: SmartWaxer	Ref. no. 20603	p. 35
Alternatively: SpeedBrush Fleece	Ref. no. 20688	p. 43
OvalBrush Horsehair	Ref. no. 24533	p. 40
OvalBrush Steel MicroFinish	Ref. no. 24523	p. 40
CareFleece 50	Ref. no. 24492	p. 26

1



Evenly apply Syntec Race Alpin.

2



Work in using FinishKork (cork or felt side).

Alternatively:



Quickly fix Syntec Race Alpin using the wax iron...

2



... and iron on...



Note: Take care to apply sufficient powder coat. Draw the wax iron across the ski quickly to avoid burning the base!



Syntec Race Alpin may then be worked in using the SpeedBrush Fleece with max. 1200 rpm, applying gentle pressure.

3



Brush using the OvalBrush Horsehair.

4



In order to reveal the ski microstructure, brush the base 2 – 3 times in running direction using the OvalBrush Steel MicroFinish.

5



Remove any dust residue using CareFleece.

with SpeedBlock:

i For this application you need the following products:

SpeedBlock WET / MID / COLD		p. 18
FinishKork	Ref. no. 20645	p. 36
OvalBrush Horsehair	Ref. no. 24533	p. 40
OvalBrush Steel MicroFinish	Ref. no. 24523	p. 40
CareFleece 50	Ref. no. 24492	p. 26

1



Rub in SpeedBlock, applying gentle pressure.

2



Work in using FinishKork (cork or felt side).

3



Brush using the OvalBrush Horsehair.

4



In order to reveal the ski microstructure, brush the base 2 – 3 times in running direction using the OvalBrush Steel MicroFinish.

5



Remove any dust residue using CareFleece.

with SpeedPaste Racing:

i For this application you need the following products:

SpeedPaste Racing	Ref. no. 24370	p. 17
FinishKork	Ref. no. 20645	p. 36
OvalBrush Horsehair	Ref. no. 24533	p. 40
OvalBrush Steel MicroFinish	Ref. no. 24523	p. 40
CareFleece 50	Ref. no. 24492	p. 26

1



Evenly apply a thin layer of SpeedPaste Racing with a sponge and leave to dry for a few minutes.

2



Work in using FinishKork (cork or felt side).

3



Brush using the OvalBrush Horsehair.

4



In order to reveal the ski microstructure, brush the base 2 – 3 times in running direction using the OvalBrush Steel MicroFinish.

5



Remove any dust residue using CareFleece.

with SpeedFinish 2.0:

i For this application you need the following products:

SpeedFinish 2.0 WET / MID / COLD		p. 16
CareFleece 50	Ref. no. 24492	p. 26
Alternatively: SpeedBrush Fleece	Ref. no. 20688	p. 43
OvalBrush Horsehair	Ref. no. 24533	p. 40
OvalBrush Steel MicroFinish	Ref. no. 24523	p. 40

1  Evenly spray SpeedFinish 2.0 onto the ski from a distance of around 20 cm.

Evenly spray SpeedFinish 2.0 onto the ski from a distance of around 20 cm.

2  Wait for 20 - 60 sec, then work in using CareFleece.
Alternatively: Work in using the SpeedBrush Fleece at a maximum speed of 1200 rpm, applying gentle pressure.

Wait for 20 - 60 sec, then work in using CareFleece.
Alternatively: Work in using the SpeedBrush Fleece at a maximum speed of 1200 rpm, applying gentle pressure.

3  Brush using the OvalBrush Horsehair.

Brush using the OvalBrush Horsehair.

4  In order to reveal the ski microstructure, brush the base 2 – 3 times in running direction using the OvalBrush Steel MicroFinish.

In order to reveal the ski microstructure, brush the base 2 – 3 times in running direction using the OvalBrush Steel MicroFinish.

5  Remove any dust residue using CareFleece.

Remove any dust residue using CareFleece.

When using fluorinated finish products, wax absorption of the base may be impaired. nano-CFC Fluor cleaner dissolves fluorine residue without harming the paraffin basis.

i For this application you need the following products:

nano-CFC Fluor Cleaner	Ref. no. 24419	p. 26
CareFleece	Ref. no. 24490	p. 26
Alternatively: CareFleece 50	Ref. no. 24492	p. 26
BaseBrush Steel MicroFinish	Ref. no. 24503	p. 40

1  Soak FibreFleece or CareFleece with nano-CFC Fluor Cleaner and thoroughly rub on the ski surface.

Soak FibreFleece or CareFleece with nano-CFC Fluor Cleaner and thoroughly rub on the ski surface.

2  Then, while the ski is still wet, quickly brush it off with a clean BaseBrush Steel MicroFinish. Brush in running direction.

Then, while the ski is still wet, quickly brush it off with a clean BaseBrush Steel MicroFinish. Brush in running direction.

3  Remove remaining residue using CareFleece.

Remove remaining residue using CareFleece.

→ **Tip:** Where racing wax or speed waxes are ironed several times into a ski, it can also be beneficial to clean the ski prior to the racing preparation. This usually results in higher speed and a better running feel.

After this race is before the next one

For this application you need the following products:

OvalBrush Horsehair	Ref. no. 24533	p. 40
Digital RacingWaxer	Ref. no. 24422	p. 34
Alternatively: SmartWaxer	Ref. no. 20603	p. 35
HOLMENKOL® Base Wax		p. 25



Note:

After using the ski / board (race / training), brush off the base and apply base wax (do not scrape).



Image Source: © Pentaphoto / Photographer, Gio Auletta / Athlete: Dominik Paris

If you want to properly prepare your skis, you need to know all about snow!

It is no surprise that ski waxing used to be considered almost a black art, comparable with the secrets of medieval alchemists: Snow is infinitely variable, just like nature itself. Its consistency depends on a range of factors like temperature, air humidity, age, and crystalline structure. Advanced ski wax today makes it easy even for beginners to make the right choice, always provided that he or she gets a true picture of the condition of snow and potential changes during the day.

Temperature

HOLMENKOL[®] was the world's first wax manufacturer to take into account air temperature, snow temperature, type and structure of snow as well as snow and air humidity when developing glide wax. The application temperature of HOLMENKOL[®] glide wax refers to the snow temperature. Due to its higher thermal capacity, the temperature of snow changes much more slowly than that of air, which means that it is more stable even under extreme climatic conditions (e.g., foehn winds).

Please note that air and snow temperatures may differ strongly.

Snow structure and humidity

The structure of the snow gives important pointers for selecting the best wax. Snow granularity and snow moisture both have an impact on the friction and suction of the base. HOLMENKOL[®] differentiates between fresh snow, fine- / coarse-grained, old snow and artificial snow. These snow types can be dry, damp or wet. Each of these combinations has an influence on wax selection. For instance, under certain conditions, snow can be very damp, but made up of hard, sharp crystals. For this type of snow, a wax is needed which is highly resistant to abrasion, as well as highly water repellent.



HOLMENKOL[®] acknowledged the importance of snow consistency to wax development by introducing hybrid technology.



This is a simplified description of four basic snow types:



Fresh snow

Crystalline, unaltered snowflakes with delicate crystals. These snowflakes are harder when it is cold and softer when temperatures are milder. The delicate crystals are easily pressed when gliding and produce a friction and suction effect which can be reduced using an appropriate wax formula and suitable base structure.



Fine-grained snow (old snow)

This has already undergone one or more transformation processes due to temperature changes, which have caused the outer crystal tips to melt or tear off so that a granular structure is produced. This kind of snow has a lower suction effect but greater friction effect than fresh snow. Depending on the temperature, the snow can be damp and soggy or dry if it is cold and windy.



Coarse-grained snow (old snow)

This type of snow has lost its original shape as the result of several freezing and melting processes and is deformed into a snow grain, that is, it has become metamorphous. Most frequent grain sizes range from 1 to 3 mm. The best known coarse-grain snow types are firm and snow crust.



Artificial snow

The abrasive character of this kind of snow creates a challenge for waxing staff. Due to its high density and inhomogeneous shape, this snow is very dull and requires a wax with very high abrasion resistance. A number of transformation processes cause the snow surface to change to crystalline shapes, which enhances the gliding properties and means a softer wax can be used. Despite its unwelcome properties, this is the most common snow type in international competitions.

Edge tuning consists of the following worksteps:

1. Inspecting the running surface
2. Tuning the edge lower side (running surface)
3. Tuning the side edge
4. Finishing the edge
5. Repairing the edge

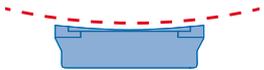
1. Inspecting the running surface

The running surfaces should be checked time and again (using a straightedge). Their appearance may be as follows:

1.1 Concave running surface

The base is hollow towards the inside.

The edges are in contact with the ground, the ski / board does not turn easily and tends to break out.



1.2 Convex running surface

The base is cambered towards the outside.

The edges are not fully in contact with the ground and the ski / board is hard to control.



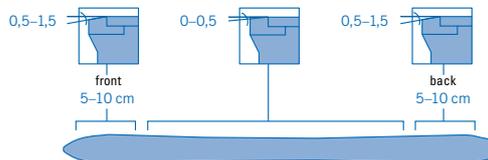
1.3 Straight running surface

The running surface forms a plane from one edge to the other. The ski / board base and edge are fully in contact with the ground and can be easily controlled and turned provided the edges are properly tuned. **If the ski / board is not straight, we recommend that you have it ground by a qualified ski service.**



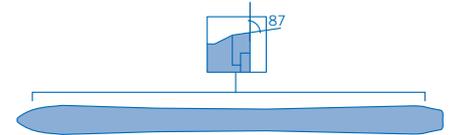
2. Tuning the edge lower side (= bevelled edge)

Ski / board edges should be ground to create a bevelled edge at the tip and tail. This helps significantly in improving turnability. (24450 Base Edge File Guide)



3. Tuning the side edge (= relief)

The side edges are precisely relief-ground using edge grinders. The angle may differ depending on the discipline (e.g., downhill / Super G / giant slalom: 88° - 87°, special slalom 88° - 86°). **In order to precisely grind the side edge, use professional edge grinders (e.g., SteelEdge WorldCup or CarveEdge).**



4. Finishing the edge

Freshly ground and extremely sharp edges on the ski / board tail and in the tip area impair turnability of the ski / board and easily lead to a loss of control. Therefore edges are slightly blunted in the tail and tip areas over a length of 5 to 15 cm (using a grinding rubber). The edge grip remains, yet the ski / board is easy to turn. Edges on the tail and tip ends of the ski / board which do not affect the handling characteristics of the ski or board (those parts of the edge that are not in contact with the slope when the ski is in a straight position) should be rounded.

5. Repairing the edge

Stones on the slope may cause the edge to harden as the contact between edge and stone produces very high temperatures for a short time. Thus, the edge surface is transformed and becomes more dense than the surrounding material. Conventional files barely remove these spots, and this results in imprecise work. Rigidification can only be effectively removed using a DiamondFile blue or an aluminium oxide stone. Rework using a DiamondFile green or red.

Advanced ski / board coatings must comply with various requirements:

They should be elastic yet resist maximum loads. Therefore today it is mainly sintered bases which are used for racing. Sintered bases can be produced using various additives, and each type offers special benefits to match the particular conditions.

Transparent sintered base

This base offers maximum tenacity (without affecting wax absorption capacity).

Graphite base

Graphite protects the base from dirt thanks to its antistatic properties. Good thermal conductivity gives good gliding properties, particularly on wet snow.

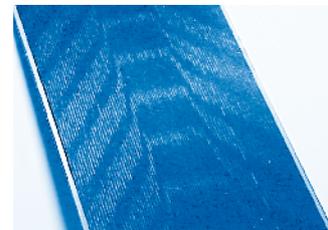
Multi-sintered base

(Different molecular weights of the various components.) Multi-sintered bases have outstanding all-round properties (i.e., they can be used for cross-country skis, downhill skis and snowboards) as they give good gliding properties at all temperature ranges.

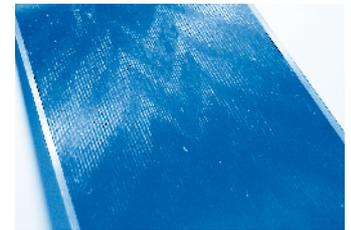
The base structure (contact surface between ski / board and snow surface) impacts the gliding properties of the ski. During gliding, the snow crystals produce friction and the water contained in the snow leads to suction.

With special base structures, these effects can be reduced or eliminated completely. Base structures can be produced using grinding stones or belts and are offered by qualified sportswear outlets.

Examples of base structures (Reichmann, Wintersteiger, Montana)



Linear structure



"M"-structure



Offset cross structure



General tip:

Cold snow / new snow: fine structure

Old snow / artificial snow / damp snow: medium structure

Wet / coarse snow: rough structure



For all HOLMENKOL® base, race and speed waxes, information on the processing temperature is included on the packaging. As with any work in the workshop, there are some safety measures and rules which should be observed:

- Ensure the workshop is well-ventilated.
- Do not expose wax to naked flames or equipment with revealed heating wires.
- Do not smoke whilst working.
- Only use special wax irons.
- Do not exceed the specified wax temperature.
(Avoid smoke forming.)
- Race waxes should be ironed at between 115° C and 150° C, Syntec Race Alpin at between 150° C and 170° C. Higher temperatures are not needed.

HOLMENKOL® Syntec Race Alpin is **NON** toxic and **DOES NOT** harm the environment. At temperatures above 180° C, however, toxic compounds may be produced. Therefore avoid naked flames, materials that are glowing hot or equipment with revealed heating wires during work. When working in and brushing off waxes, particulate matter may be produced. Ensure sufficient ventilation during handling and use a mask or other respiratory protection if possible, especially when brushing off.

- When using spray products, make sure the workshop is sufficiently ventilated. Do not inhale the spray fog.
- When using base cleaners, make sure the workshop is sufficiently ventilated. Never directly inhale vapours.

Image Source: © HEAD Sport GmbH / Athlete: Matthias Mayer



Here you can find our
online wax consulting tool:

www.holmenkol.com/en/wax-advisor.html

Or just scan QR code
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