





With WINTERSTEIGER the future belongs to you.

The spirit of sport inspires us and moves us forward. Looking forward brings new technologies and tomorrow's victories. With our innovative developments and products, we are a trustworthy partner for our customers and winter athletes. Together always a ski length ahead.

Beyond this, the long service life, the constant quality of the finish and a wide range of machine types make WINTERSTEIGER a perfect partner for all those who want to provide a first-class ski and snowboard service. This applies equally to small service workshops and to the ski industry's development departments.

The following pages illustrate in detail what the world market leader can offer you.



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Ceramic Disc Finish WINTERSTEIGER's speciality.

Consistent research and development work pays off. The disc technology, which has become the industry standard for quality edge finish throughout the world, is an excellent example of this. This technology is used by over 90% of manufacturers during the production of all their skis and snowboards. WINTERSTEIGER works consistently on the enhancement of this established edge finish technology for the service sector. In the end your customer can expect a perfect grinding result which always remains exactly the same for both, the side edge and the base edge. It is precisely this quality which is guaranteed by WINTERSTEIGER's Ceramic Disc Finish.

Ceramic Disc Finish
means: Constant edge
quality from the first to
the last ski/snowboard!

Have confidence in WINTERSTEIGER's Ceramic Disc Finish:



Edge with traditional belt-grinding - Disadvantages:

- No exact edge geometry
- Rounded edges
- Rough surface

Edge with other surface-grinding discs - Disadvantages:

- Risk of errors being reproduced due to a single point contact surface
- Large-scale angle adjustment

Advantages of WINTERSTEIGER Ceramic Disc Finish:

For the sports shop

- Precise edge geometry
- Precise edge angles along the whole length of the ski or snowboard
- Fine, smooth edge surface
- Always sharp grinding discs

For the rental shop

- Frequent grinding possible thanks to low material removal
- Long life of rental skis
- No need to change belts
- Long life of disc

For the end user

- Improved turning qualities = more fun and faster learning results
- Better grip on hard slopes = increased safety
- Edges remain sharper for a longer period of time
- Easier turning on the edge = CARVING



Trimjet

Automated precision for more profitability.
Automatic Edge Grinding Machine for Skis and Snowboards.

WINTERSTEIGER has succeeded in producing the perfect combination of first-class performance and high profitability. Features of the Trimjet include automatic edge grinding for skis and snowboards and a innovative feed system which makes the use of binding bridges unnecessary. Edge grinding is done in both directions providing the ability to carry out any number of side and base edge angles in one process.

In short: the ease of handling and high throughput make the Trimjet an ideal and compact mixture of the most innovative grinding technology and high profitability.



Your benefits summed up:

Precise finish

- Using the same disc technology as the manufacturers
- Individually and independently adjustable angles
- Precise edge geometry

Fast results

- Increased throughput due to faster feed
- Grinding without bridges means less preparation and post-processing
- Automatic operation

Easy to use

- User-friendly operation with graphic display
- Storable programs with „Easy Go“ function
- Simple angle adjustment



Precise Finish.

The WINTERSTEIGER Ceramic Disc Finish technology with self-sharpening grinding discs ensures precise edge geometry and a polished edge surface. Automatic detection ensures accurate positioning of the ski/snowboard. The grinding discs activate once they have made contact with edge, allowing for extremely accurate start and finish points.

The grinding angles can be adjusted easily, individually and independently of each other:

Side edge: 89 / 88,5 / 88 / 87,5 / 87 / 86°
 Base edge: 0.5 / 0.75 / 1 / 1.25 / 1.5 / 2°





Fast Results.

The innovative feed system makes the use of binding bridges unnecessary. In addition to the precise control of the ski or snowboard, the four feed wheels ensure constant pressure thus guaranteeing even removal of mate-

rial over the entire length of the ski. It is easy to switch between grinding skis or snowboards by simply adjusting one of the two grinding units. Grinding in both directions combined with the high feed speed contribute to increased throughput.

Easy to Use.

The Trimjet is operated by way of a graphic display which makes choosing a grinding program as easy as pushing a button. Any grinding sequence can be programmed into the machine and saved for later use. Additionally it is also possible to store three selectable grinding programs on the A, B and C soft keys which can then be called up at any time. Angle adjustment is also easy to set using the large,

clearly marked adjustment wheels. The hinged cover allows easy inspection of the work process, provides protection against overspray, and enables excellent access for cleaning and maintenance.

The ski and snowboard trays can be folded up which means that the Trimjet requires very little space and can be moved easily around the shop with the built in castors.



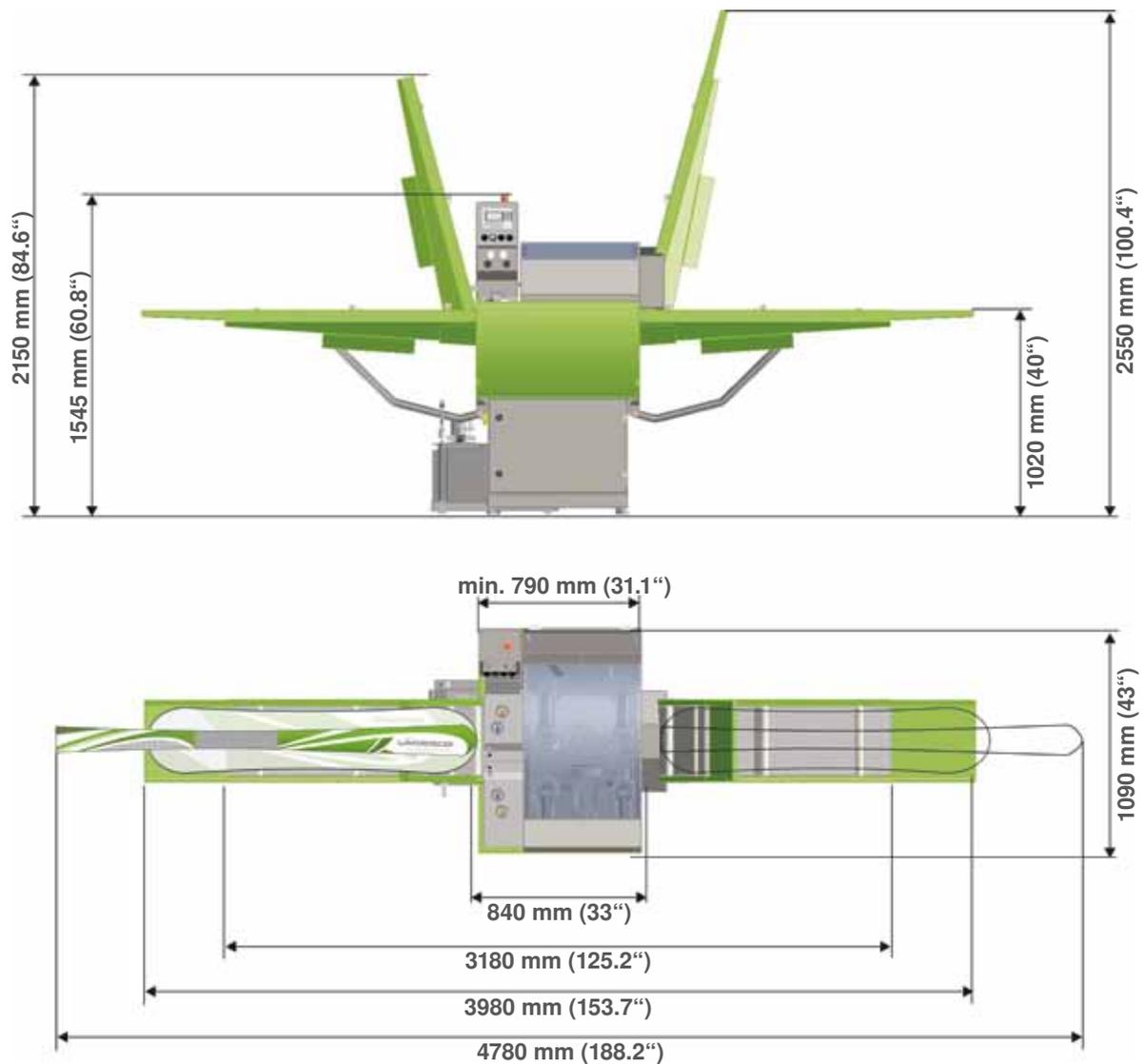
Trimjet

Figures. Data. Facts.

Technical specifications

Ski/Snowboard length min. - max.	900 - 2250 mm
Ski/Snowboard width min. - max.	50 - 145 mm / 150 - 345 mm
Grinding disc	Ø 154 x 40 mm
Grinding speed	3600 rpm
Feed speed	7 m/min
Weight	445 kg (980 lbs)
Water tank volume	60 litre (16 gal)
Noise emission	83 dB(A)
Nominal load	
Nominal load	1.45 kW
Nominal voltage	1 AC 208-230V, 50/60 Hz
Rated current	12 A
Fuse protection min./max.	13/16 A
Compressor (not included)	
Liter output	130 l/min with 6 bar
Capacity (max.)	
Capacity (max.)	42 pairs/hour

We reserve the right to make technical alterations.



Ski: 2000 mm, Snowboard: 1560 mm





Trim Disc 71. High performance in a small space. Automatic Edge Grinding Machine for Skis and Snowboards.

The Trim Disc 71 proves that there is space everywhere for WINTERSTEIGER's Ceramic Disc Finish. The compact machine tunes side and base edges of all skis and snowboards effortlessly in the smallest space. The Trim Disc 71 makes all work steps easier due to its ergonomic working height and proves the perfect complement to your existing machines.



Your benefits summed up:

- Tuning of a variety of winter sports equipment – regardless of dimensions
- Space-saving machine
- Tuning of side and base edges
- Ergonomic working height



Push the button.

The Trim Disc 71 is equipped with a single sided ceramic disc unit that finishes both side and base edges of skis and snowboards with state of the art ceramic disc technology. At the flick of a switch, you can change the position of the disc from side edge to base edge tuning. A machine that saves you both time, and space.

The grinding angles can be adjusted easily, individually and independently of each other:
 Side edge: 90 / 89 / 88 / 87°
 Base edge: 0 / 1 / 2 / 3°

Simple and fast.

Just line up the ski or snowboard next to the ceramic disc, give one touch on the foot pedal and you activate the side autofeed roll which guides the ski or snowboard precisely through the machine. If you give another touch on the foot pedal you end the grinding process, so you can control individually whether to grind the whole edge or just a specific section. This way you can give every edge the care that it needs. This saves you time and gives you the confidence of knowing that you give every ski and snowboard a top quality, professional finish.

Even finish.

The side autofeed eliminates the need for binding bridges or for removing bindings. The driven feed rollers guide the ski or snowboard at a constant speed and pressure over the grinding disc, guaranteeing a consistently great finish. Using the Trim Disc 71 from WINTERSTEIGER you can select the angle of the side and base edges according to skiing ability. This means you can offer every skier, whether novice or racer, more security and enjoyment, even on hard and icy snow.



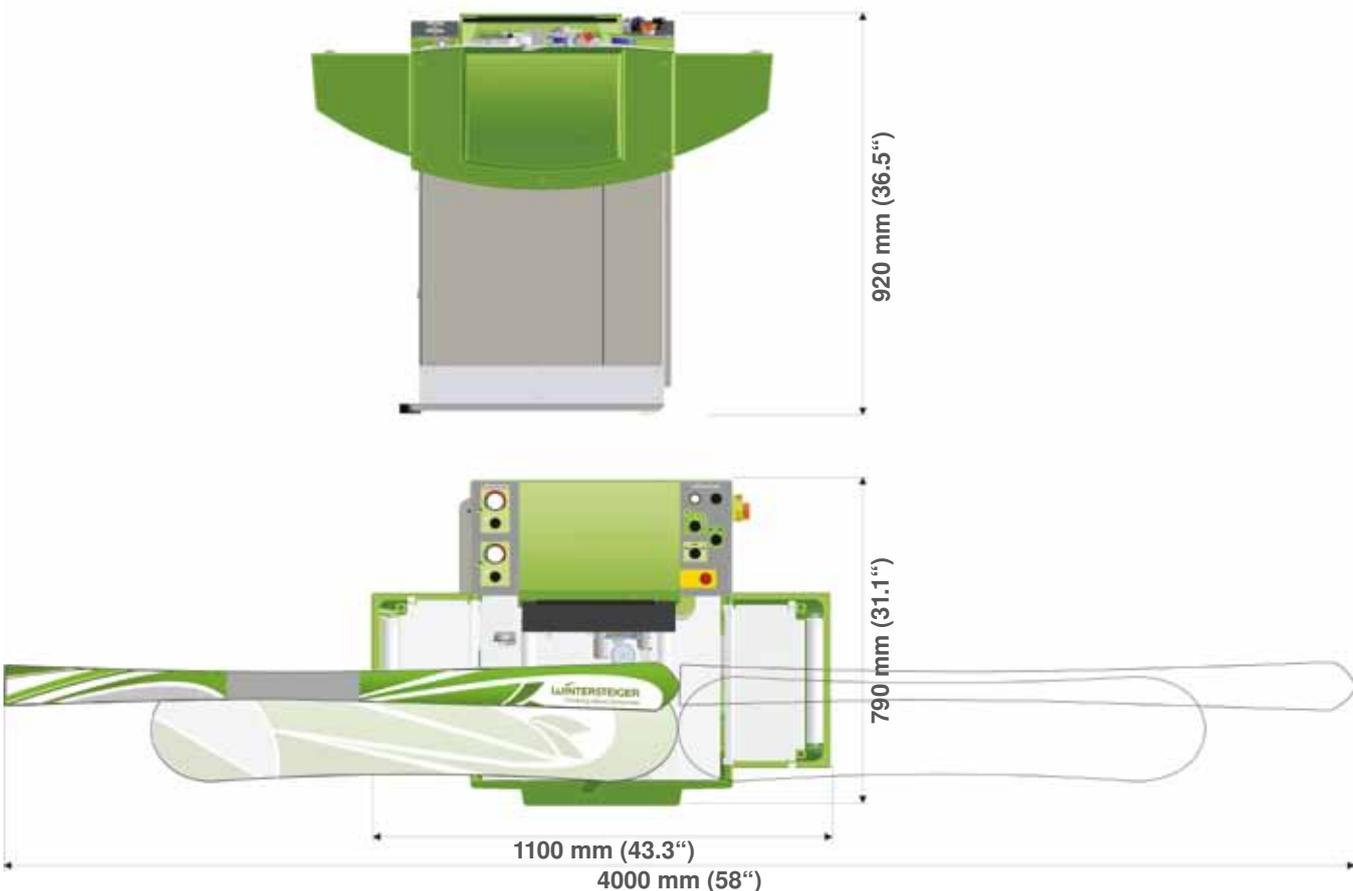
Trim Disc 71

Figures. Data. Facts.

Technical specifications

Ski/Snowboard length min. - max.	500 - 2400 mm
Ski/Snowboard width min. - max.	50 - 350 mm
Grinding disc	Ø 154 x 40 mm
Grinding speed	2850 rpm
Feed speed	5,3 m/min
Weight	240 kg (530 lbs)
Water tank volume	20 litre (5 gal)
Noise emission	84 dB (A)
Electrical specifications (3 AC 400-415 V, 50 Hz)	
Nominal load	0.85 kW
Nominal voltage	3 AC 400-415 V, 50 Hz
Rated current	2.5 A
Fuse protection min./max.	10/16 A
Electrical specifications (3 AC 208-230 V, 50/60 Hz)	
Nominal load	0.85 kW
Nominal voltage	3 AC 208-230 V, 50/60 Hz
Rated current	4.5 A
Fuse protection min./max.	10/16 A
Compressor (not included)	
Liter output	20 l/min with 6 bar
Capacity (max.)	18 pairs/hour

We reserve the right to make technical alterations.



Ski: 2000 mm, Snowboard: 1560 mm



Trim NC Makes success reproducible. CNC-controlled Automatic Edge Grinding Machine for Skis.

WINTERSTEIGER impressively demonstrates its leading position in racing service with the Trim NC. The CNC-controlled Trim NC was developed in close cooperation with Skiing Federations and industry race service departments for use in downhill alpine ski racing. Its special feature is reproducibility of the edge finish.

The Ceramic Disc Finish enables accurate replication of the most varied angle combinations available.



Your benefits summed up:

- Constant and precise edge geometry and angle accuracy
- Variable angle along the whole length of the ski
- Minimum roughness
- Maximum grinding quality
- Replication of the grind pattern

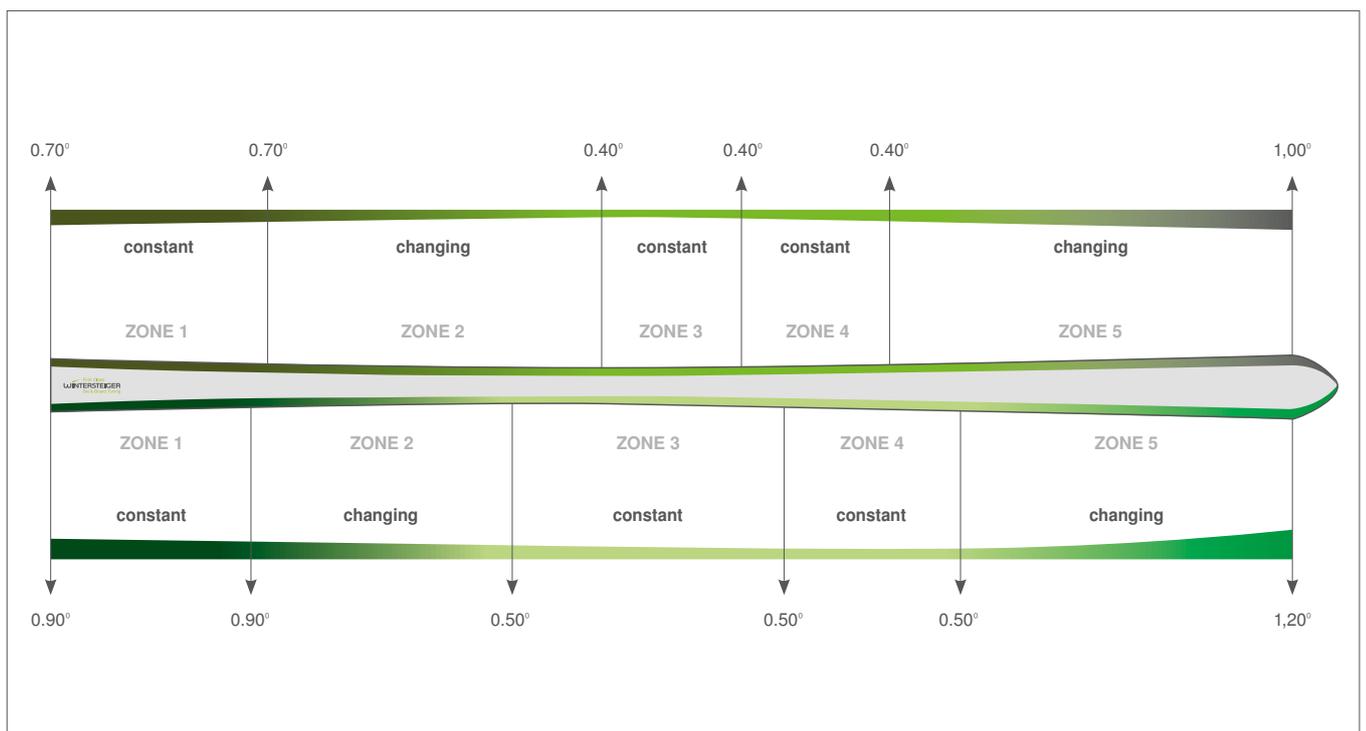


Maximum precision.

The angle of the grinding unit is adjusted by precision gearing, allowing the angles to be adjusted at intervals of 0.1°. The angle on the base edge of the ski can be bevelled from 0.3 to 3°, and the side edge from 83 to 90°. The Trim NC has five programmable zones where different angles can be applied on the side and base edge over the length of the ski. The automatic ski length recognition system allows the same grinding program to be transferred to various lengths of skis. In addition, different angles can be ground on the left and right edges. This allows the ski to be adjusted to the skier and the conditions, and not vice versa.

Variable pressure.

Servo-pneumatic values control the amount of grinding pressure over the length of the ski, which allows for even removal of material, even when applying variable bevels. New software now allows for feathering of the disc finish at the contact point for a smooth transition, regardless of the shape of the tip or tail.



The Trim NC has five programmable zones for different angles.



Perfect overview.

The feed speed, grinding pressure and grinding speed are fully adjustable over the length of the ski. This allows the finest and most exact finish available. The edges are ground with the base up, allowing continuous observation of the grinding process. The process can be interrupted at any time and additional grinds can be added individually without any difficulty.



External data transfer.

An interface to an external PC allows the transfer of data, the preparation of statistics and databases including stored grinding programs and statistical information. New grinding programs can be formulated during testing and then transferred back to the machine.

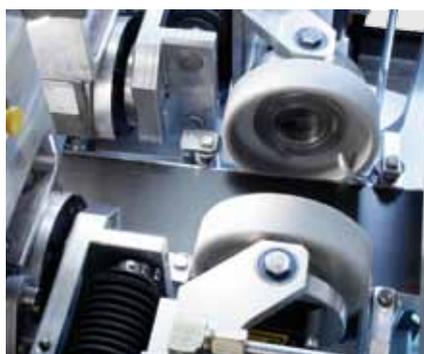
Complete overview.

The 12" touch screen monitor makes programming of the processes simple and easy. Menus and values can be changed by a simple touch of the screen. Programs can be compiled individually, stored and recalled at any time. The screen allows each program to be viewed, including all values of the finish grind.



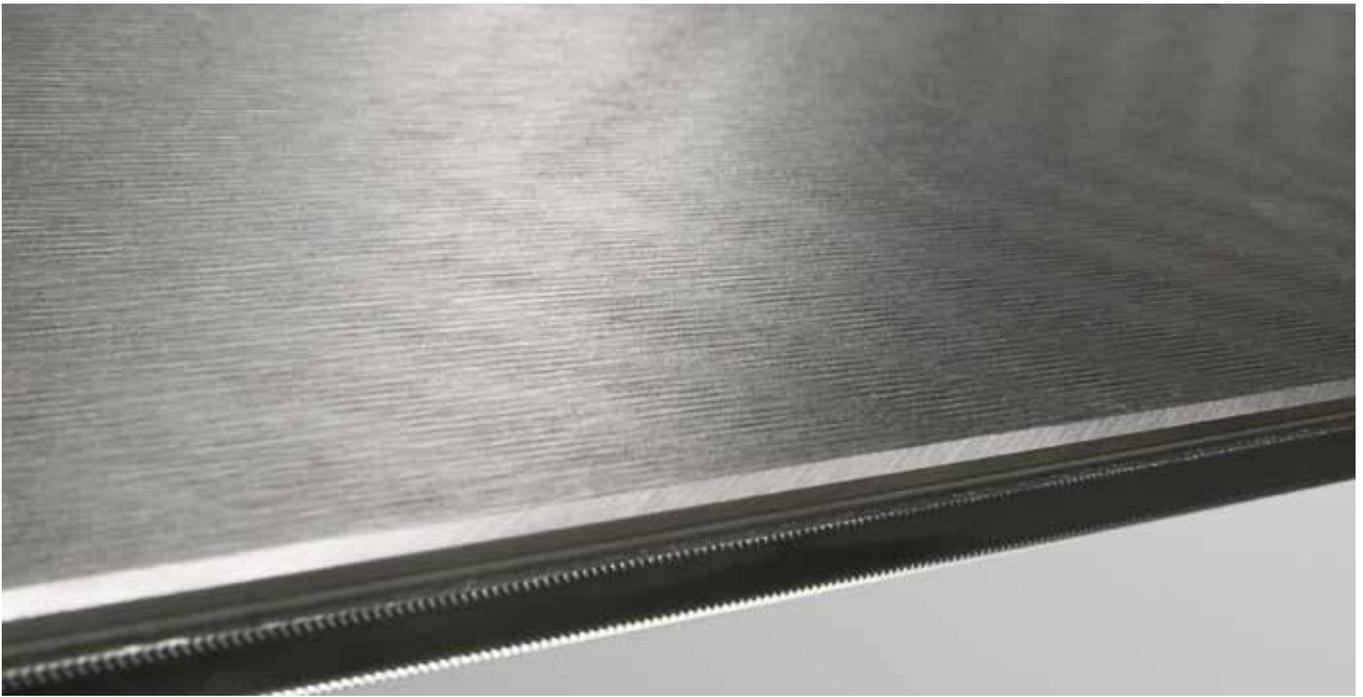
Exact ski identification.

In order to be able to identify skis with different grinds at a later time, a barcode label printer can be connected to the machine. By scanning the barcode sticker attached to the ski, the grinding program can be called up again. This also allows simple changes or minor adjustments of the geometry.

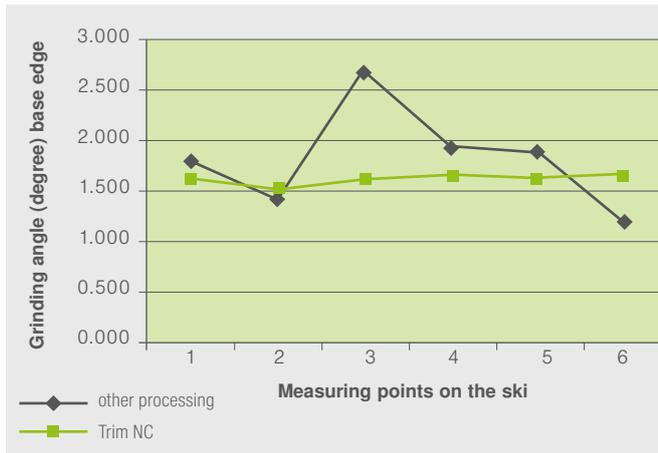


Trim NC Dual.

The Trim NC dual is fitted with two disc units for even higher output and flexibility. The second disc unit can be fitted with either standard disc, for running one unit base edge, one unit side edge for faster processing, or with finer discs for edge polishing.

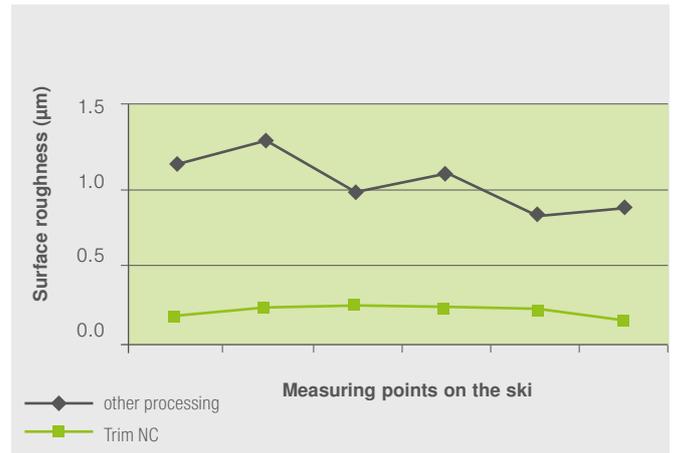


Angle precision.



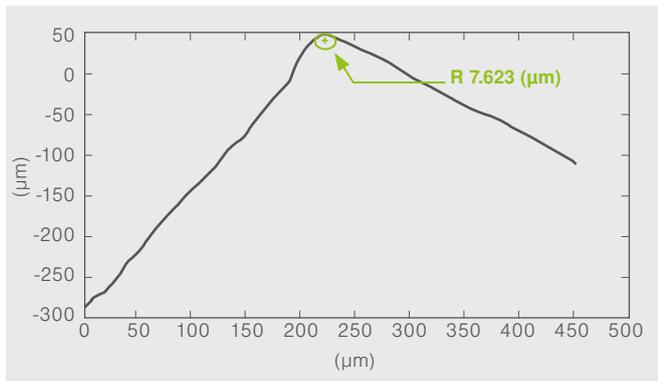
The strengths of the Trim NC are the exact edge geometry over the width of the edge and over the length of the ski, and all grinding programs can be stored and reproduced at any time.

Edge roughness.



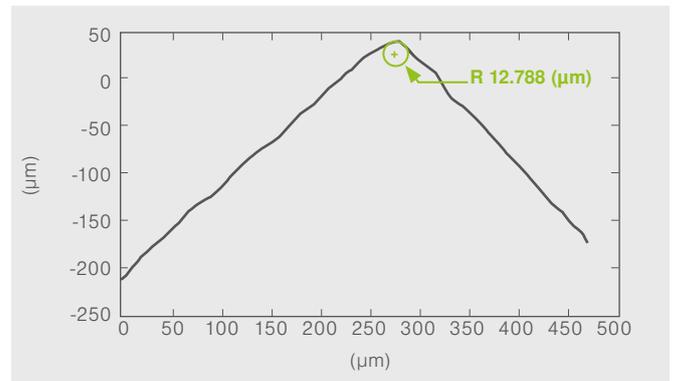
The Trim NC produces a surface roughness of below 0.2 µm (Ra). This corresponds with the surface quality of a razor blade, and is achieved uniformly over the entire ski length.

Example: Trim NC with Ceramic Disc Finish



The smaller the edge radius, the sharper the edge.

Example: Hand tuning



Comparison: diameter (= double the radius) of a human hair = 40 to 80 µm

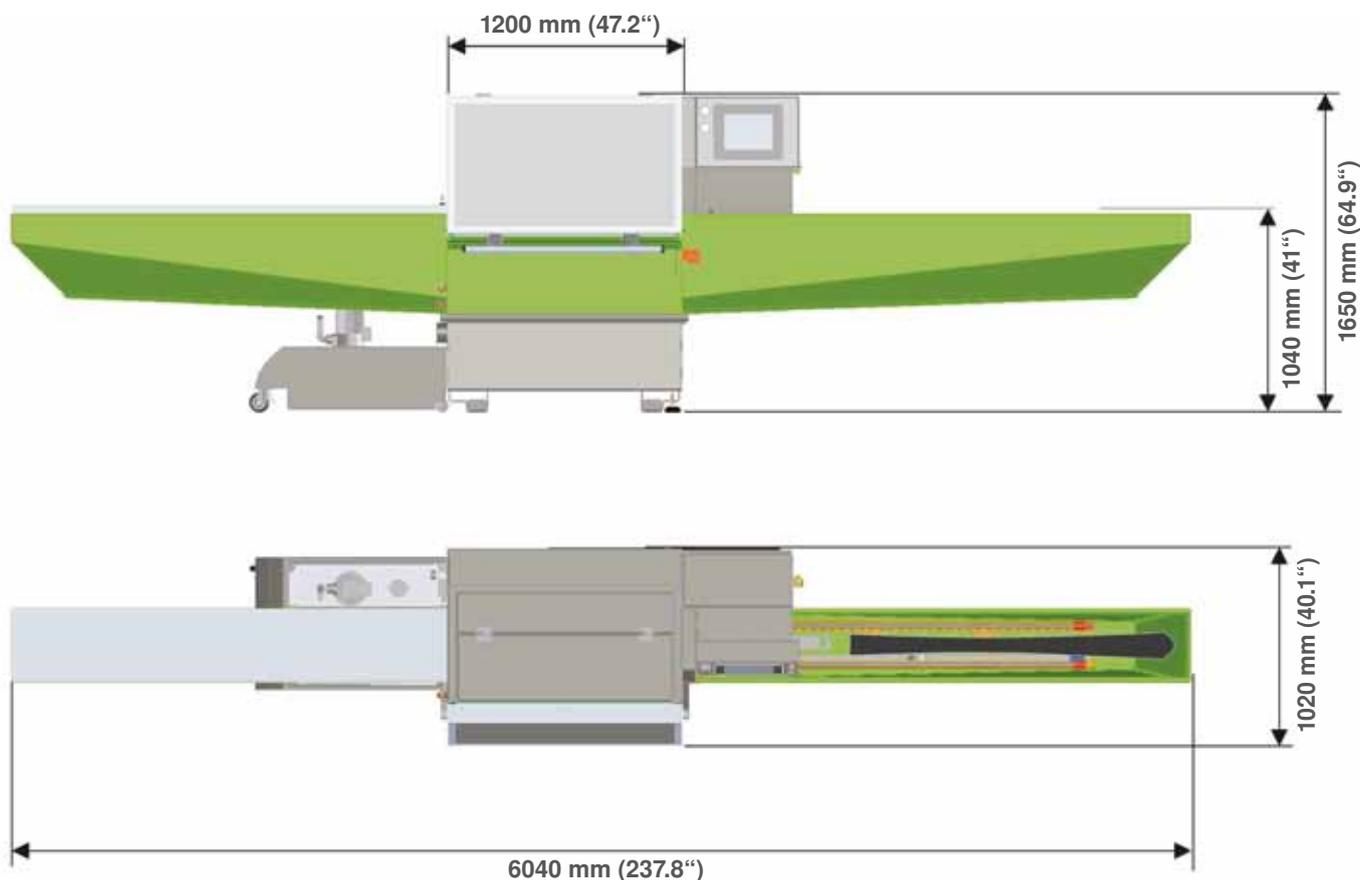
Trim NC.

Figures. Data. Facts.

Technical specifications

	Trim NC	Trim NC Dual
Ski length min. - max.		80 - 240 cm
Ski width min. - max.		45 - 180 mm
Grinding angle, side edge		83° - 90°
Grinding angle, base edge		0.3° - 3°
Adjustment accuracy		0.1°
Number of angle zones over the ski length		5
Grinding disc		Ø 100 mm
Grinding speed max.		6000 rpm
Feed speed max.		12 m/min
Grinding force min. - max.		5 - 50 N
Interface to external PC		Optional
Weight	850 kg (1874 lbs)	950 kg (2095 lbs)
Water tank volume		100 litre (27 gal)
Noise emission		72 dB (A)
Nominal load	3.8 kW	5.5 kW
Nominal voltage		3/N AC 400-415 V, 50 Hz
Rated current	10.6 A	15.6 A
Fuse protection min./max.		16/20 A
Compressor (not included)		
Liter output		150 l/min with 6 bar

We reserve the right to make technical alterations.





Trim B

The perfect complement.

Edge Grinding Machine for Skis and Snowboards.

The Trim B is an ideal edge tuner for all shops from a small start up to complementing existing machines. The ergonomic design (30°) offers the operator a good view of the grinding point. A simple swivel mechanism allows for a quick easy change from side edge to base edge tuning.



Your benefits summed up:

- Simple swing mechanism for switching from side edge to base edge tuning
- 30° operation for better visibility of the grinding point
- Easy angle adjustment
- Mobile, compact design ease of use in small spaces
- Ideal for start ups or to complement existing machinery

Trim B Figures. Data. Facts.

Technical data

Side edge angle	90° - 86°
Base edge angle	0° - 4°
Grinding speed	Approx. 1650 rpm
Grinding belt	1200 x 20 mm
Dimensions (L x W x H)	480 x 580 x 950 mm
Working height	900 mm
Noise emission	< 70 dB (A)
Weight	64 kg
Water tank volume	20 liters
Nominal voltage	1AC, 208 - 230 V, 50/60 Hz
Nominal load	0.45 kW
Rated current	2.1 A
Fuse protection min./max.	10/15A

We reserve the right to make technical alterations.

WINTERSTEIGER complete. Customer services.

WINTERSTEIGER sees its mission not only in the manufacture of innovative products for optimum customer benefit. Our demands and expectations go far beyond that. We understand the need for an accompanying partnership process that includes a range of optional services:

From planning to implementation

WINTERSTEIGER provides complete system solutions for individual customer-specific requirements in all aspects of rental and servicing of skis and snowboards, including 3D planning, amortization and profitability analyses.

Strong customer service team

A large team of extremely well-trained service technicians takes comprehensive care of the following:

- Machine set up
- Training courses
- Service stop-bys
- Preventive maintenance
- Advice
- Modifications
- Problem solving
- Repairs
- Support
- Fast spare parts supply

Staff at the ready

On request, WINTERSTEIGER can also provide you with qualified staff for the entire ski season. Your benefits:

- No searching for skilled staff
- WINTERSTEIGER technicians with ski servicing expertise
- Calculable wage costs

Individually tailored finance packages

WINTERSTEIGER can offer you individually tailored finance packages, e.g. leasing or invoicing according to servicing demand.

Marketing Partnership

WINTERSTEIGER will support you in advertising your ski service. Together we will optimize your efficiency using professional advertising materials.



Victories are developed in the mind. And with WINTERSTEIGER.

WINTERSTEIGER is the world market leader in service and rental solutions for the entire ski and snowboard sport. Sport shops, rental stations, well known ski and snowboard producers as well as leading ski federations trust in the system solutions and first class service from WINTERSTEIGER.

WINTERSTEIGER develops innovative system solutions for the rental and service of ski and snowboards. With this we concentrate highly on and take into consideration the various needs of our customers as well as recognizing the trends early enough to allow them to be brought into the product development.

With this strategy WINTERSTEIGER has established itself as competent partner in the planning and development of service work shops and rental stations. We accompany our customers starting with the evaluation of customer needs, the planning, financing solutions, trainings, personnel leasing, professional marketing support, all the way to our reliable after-sales-service.

The product range of Division SPORTS at a glance:

- Fully automatic service stations
- Base and edge grinding machines
- Racing service machines
- Base repair and binding adjustment equipment
- Waxing machines
- Rental software
- Rental, depot and drying systems



Who is on top,
sees much further.



WINTERSTEIGER. A Global Player. Worldwide.

WINTERSTEIGER is the world market leader in its three divisions SPORTS, SEEDMECH and WOODTECH. Our success is based on customer proximity which we enjoy due to a globally-structured, tightly-knit sales and service network and sophisticated and future-oriented planning. In this we are guided by the following principles:

■ According to the „**Progress Principle**“ we are consistently extending our lead with targeted investments in research and development.

■ By the „**Quality and Productivity Principle**“ we mean both computer-assisted planning and design, which result directly in fully automated production processes, as well as strict quality assurance management, which ensures continuous control from design to after-sales service.

■ We meet the „**Qualification Principle**“ with optimally trained employees. Continuous professional development is an essential part of our strategy.

■ On one hand we see the „**Sustainability Principle**“ as our permanent contribution to long-term success, while on the other it represents a clear commitment to conserving natural resources.

The result:

- 15 subsidiaries
- 60 representatives worldwide
- Sales distribution in 130 countries
- 85 % export share
- World market leader in all three divisions

Division SPORTS

Total solutions for rental and servicing of skis and snowboards.



Division SEEDMECH

Worldwide No. 1 in field research equipment.



Division WOODTECH

Process solutions for quality thin-cutting.



Headquarters located in Ried im Innkreis, Upper Austria

Success begins with the right decisions. At the right time.
We look forward to you!



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WINTERSTEIGER
Ski & Board Tuning

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