



**TYROLIT - YOUR PARTNER
IN WELDING TECHNOLOGY**
TOOLS FOR PRE-MACHINING
AND FINISHING WELDING SEAMS

A Company of the SWAROVSKI Group
www.tyrolit.com

TYROLIT

TYROLIT Group

A global company

As one of the world's leading manufacturers of bonded grinding, cutting, sawing, drilling and dressing tools as well as a system supplier of tools and machines for the construction industry, the family-run company TYROLIT has been synonymous with top quality products, innovative spirit and outstanding service since 1919.

Day in, day out, the experts at TYROLIT work on delivering tailor-made solutions for customers around the world, helping to make their businesses successful. Around 80,000 available products set the standards in a wide variety of industries.



TYROLIT company headquarters in Schwaz, Austria

TYROLIT business units



Trade

Thanks to its global sales network, in addition to premium product solutions in the three core areas of cutting, grinding and surface treatment, the trade business unit of TYROLIT guarantees truly customer-focused marketing support.



Metal / Precision

From precision machining in the engine and gearbox industry to the production of cut-off wheels with diameters up to 2,000 mm for the steel industry – the TYROLIT product range in the Metal & Precision business unit includes high-tech tools for a wide variety of applications.



Construction

In the Construction business unit, TYROLIT is a leading system supplier of drilling systems, wall and wire saws, floor saws and tools for the surface grinding of concrete motorways.



Stone–Ceramics–Glass

Our tailored diamond tools and grinding solutions in the Stone – Ceramics – Glass business unit impress through their exceptional performance and quality.

A competent partner in welding technology

Increasing requirements in product quality, safety and efficiency also play an important role in welding technology. We have therefore made it our task to support our customers in their daily work with particularly economical, high-quality tools.

Thanks to our many years of experience and high level of expertise in grinding and cutting, we offer a variety of solutions for pre-machining and finishing welding seams. Furthermore, TYROLIT tools guarantee the highest levels of safety, productivity and service life at every working step.

Our services for the welding technology industry at a glance

Global presence

Expertise and
experience



Innovative products

Customer-specific
solutions

Global presence Directly in your vicinity

Global presence

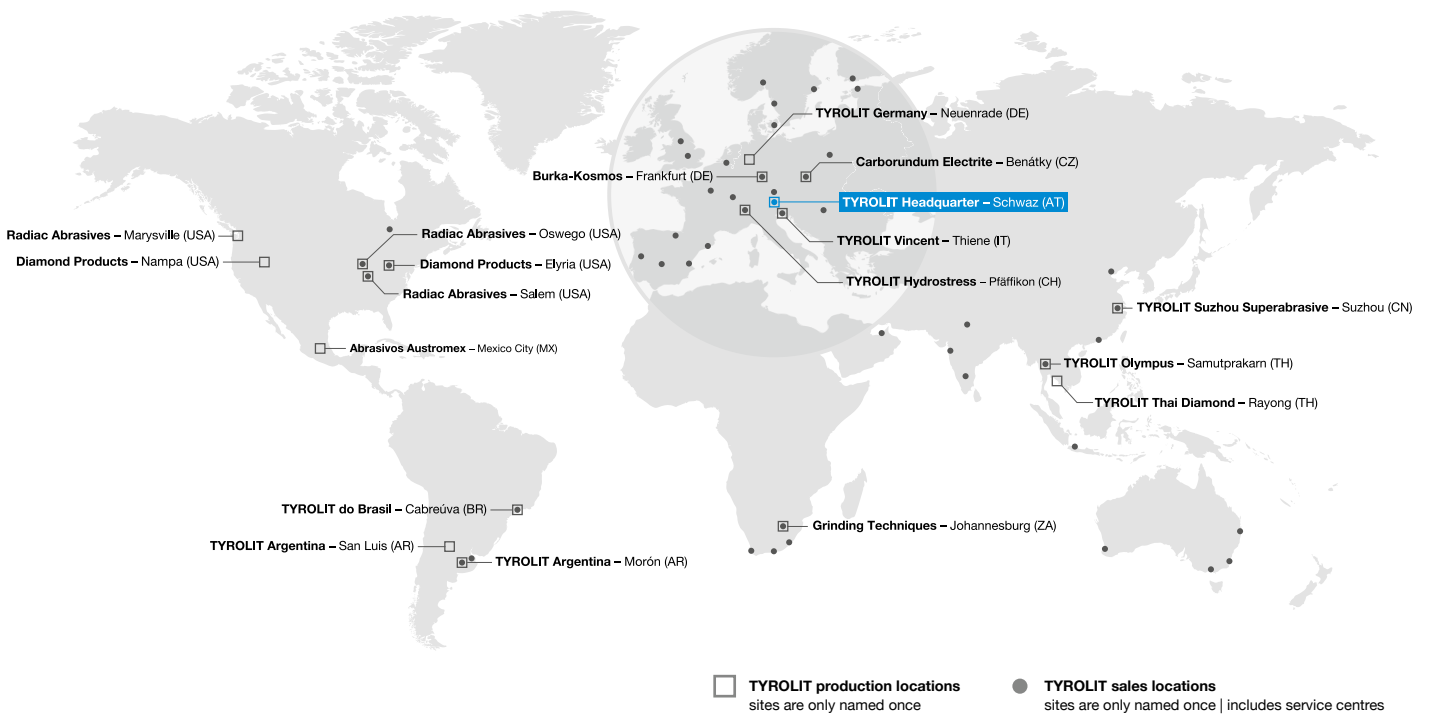
TYROLIT stands for global thinking and activities. With a worldwide sales network currently in 65 countries and with our own production plants in 12 countries on five continents, we offer our customers all the advantages of a globally operating company.

Local availability

Global thinking, local action – in your national language and in your vicinity. This is the principle we follow in dealing with our customers. Local contacts near your premises and a global team of specialist application engineers ensure optimum customer support and first-class service.

Your benefits

- + Global presence with local contacts
- + Short response and service times



Competency and experience

Professional industry expertise

TYROLIT has many years of experience in a wide range of industries. Day by day, countless projects – both large and small – are carried out around the world with the help of our tools. Thanks to innovative products and practical expertise, we support customers around the globe in achieving their objectives.

Pipeline construction:

The combined length of the network of pipelines for mineral oil, natural gas and water is currently around 2 million kilometres. The use of our cutting and grinding wheels enable us to support manufacturers in preparing pipelines for final welding.



Shipbuilding:

The construction of container and passenger ships more than 400 metres in length requires a strong partner, who understands its end customers' requirements. Every year we deliver countless products to the largest shipyards in the world. Some examples of their use include grinding of uneven surfaces, cutting and machining pipes or for grinding welding seams.



Railway wagon and rail construction:

The rail network for passenger and freight transport extends around 350,000 kilometres in Europe and every year, further kilometres of track are added. To ensure efficient track expansion and maintenance, numerous customers place their trust in TYROLIT products. Even in railway wagon construction, countless abrasives are required before hitting the rails.



Offshore platforms:

Over 30,000 tonnes of steel are installed in a huge drilling rig in the sea. Our customers there have particularly demanding requirements for the performance and lifetime of their tools. Whether it is for machining welding seams or for grinding large surfaces – TYROLIT always offers the right high-quality tool.



Innovative products for trade and industry

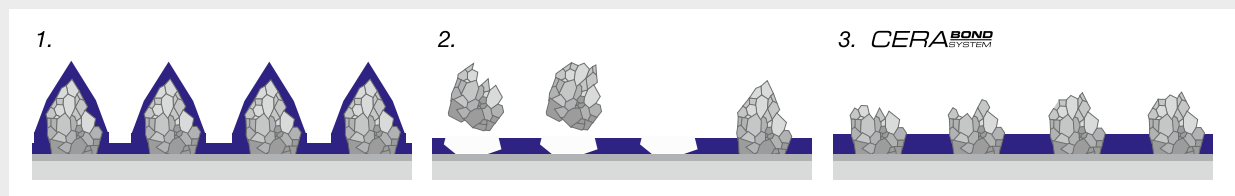
Based on the requirements of our customers from the widest variety of industries, we continuously produce new, high-quality and at the same time particularly cost-effective products. The focus of our development is always the end users, who we wish to support in their daily work with our tools.

Performance with system

The TYROLIT CERABOND system brings almost 100 years of experience to a new generation of highest performance tools. With the cutting wheels, rough grinding wheels and

flap discs from the CERABOND family, we have succeeded in achieving an ideal combination of specially treated ceramic grain and bond structure. This prevents

premature break-out of the grain and thus guarantees the full grinding power of the individual grains.



1. Before grinding. 2. With a normal bond it is not possible to thoroughly bind the hard and brittle grain. 3. The CERABOND technology enables optimal bonding of the ceramic grain.

Getting started with comfort

For many users, rough grinding wheels are included in the standard range. What makes our tools so unique is the bevelled and defined edge of the tool. With this "Comfort Start" edge, the operator can achieve a pleasant start to grinding and the level of working comfort is increased many times over. Typical plunge into the workpiece is thus prevented.



Rough grinding wheel with and without „Comfort Start“.

Minimises the risk to health

The health of our customers in their daily work with our tools should especially not be neglected. With our rough grinding wheels from our SILENTIO and VIBSTAR product range, we have for years been setting a standard in the industry in terms of noise reduction and vibration damping (up to 50% respectively).

TYROLIT product innovations

From innovation to industry standard



1982

TYROJet revolutionises diamond wheels

Laser welded segments have now enabled the use of diamond wheels for dry cutting and at high speeds..



2011

Natural Jute Disc for less environmental load

With the launch of the TYROLIT natural fibre disc of natural jute fibre, we can considerably reduce environmental load by using a biodegradable core.



2014

More comfort with the Comfort Start rough grinding wheel

The bevelled edge makes working more comfortable and considerably speeds up readiness for use.



1957

SECUR sets new safety standard

Tyrolit is the first company in Europe to produce fibreglass-reinforced cut-off and rough grinding wheels.



1992

Higher productivity thanks to super-thin cut-off wheels

TYROLIT introduces the first super-thin cut-off wheels, from which customers are still benefiting today, with huge increases in productivity and performance.



2013

More abrasiveness and a longer lifetime with CERABOND

The CERABOND System combines a high-quality ceramic grain with an innovative bond structure.



2016

100% more performance with C-Trim flap disc

Test the flap disc with unbeatable performance. The PREMIUM*** LONGLIFE C-TRIM: excellent stock removal.

Customer-specific solutions Tailored to your industry

Customers have different requirements of their tool, depending on the application and on the surface results to be achieved. TYROLIT therefore offers a wide assortment for various fields of application, to achieve the best possible results.

An overview of the available grinding tools for the pre-machining and finishing of welding seams is provided below. Please see the following pages for a more detailed description of these tools as well as their respective fields of application.

Work step	Use	Product recommendation
Preparation	Grinding	PREMIUM*** rough grinding wheel PREMIUM*** natural fibre disc PREMIUM*** rough cleaning wheels
Cleaning	Brushes	PREMIUM*** SHIELD tapered brushes PREMIUM*** round brushes
	Grinding	PREMIUM*** rough cleaning wheels
	Coated abrasives	PREMIUM*** SCM PREMIUM*** unitised wheels
Grinding welding seams	Coated abrasives	PREMIUM*** FLAP DISCS PREMIUM*** natural fibre discs PREMIUM*** vulcanised fibre discs PREMIUM*** QUICK CHANGE DISC
	Grinding	PREMIUM*** SCM PREMIUM*** Tungsten carbide burrs
Grinding of uneven surfaces	Coated abrasives	PREMIUM*** SCM PREMIUM*** fleece flap wheels spindle mounted
Surface finish	Coated abrasives	PREMIUM*** polishing programme PREMIUM*** unitised wheels PREMIUM*** mounted flap wheels PREMIUM*** fleece rolls PREMIUM*** TFC



Tools
for welding technology

Preparation of welding seams

As in many cases, the following also applies to welding: Good preparation is essential for a good result. In preparation, particular attention is paid to the grinding of chamfers and the removal of scale from the workpiece. To achieve this quickly and easily, we support you with a broad product range for the widest variety of materials.

Grinding of chamfers and removal of impurities

In particular, rough grinding wheels are optimally designed for creating chamfers on the workpiece edge for final welding. Their high stock removal rates enable preliminary work to be done quickly and efficiently. What also makes our rough grinding wheel so unique is the bevelled and defined edge of the tool. With the "Comfort Start" edge, the operator can achieve a pleasant start to grinding and the level of working comfort is increased many times over.

As well as rough grinding wheels, coarse flap and natural fibre discs are also suitable for grinding chamfers. They can also therefore facilitate the removal of impurities, such as scale, from the surface before you commence the final welding process. Rough cleaning wheels are also ideally suited for surface pre-treatment.



Professionals in pipeline construction

Especially in pipeline construction, where high forces have an effect on welding seams, much time is invested in the preparation. By creating a V-groove, a V-shaped recess between the pipe ends, it is possible to create a concentric welding seam. For the V-groove, a 4 mm thin rough grinding wheel is mainly used.

Type no.	Dimension	Specification	PU
5349	178x4,0x22,23	A30Q-BFX	10

Catalog page 72

PREMIUM★★★ ROUGH GRINDING WHEEL

CERABOND 2in1 for steel and stainless steel

+ Shorter work processes

Working times are substantially reduced through improved abrasiveness.

+ Improved productivity

A special structural composition offers maximum system performance.

+ Lower production costs

The unique bond technology, optimised for ceramic grain, prevents the grain break-out and leads to a longer lifetime for the tool.



TYROLIT Film



The product film can be found on YouTube at youtube.com/TYROLITgroup

The TYROLIT CERABOND system brings almost 100 years of experience to a new generation of highest performance tools. With the rough grinding wheels from the CERABOND family, we have succeeded in achieving an



ideal combination of specially treated ceramic grain and bond structure. Thus it is possible to keep the abrasiveness and the lifetime of the wheel at the highest level. The unique bond system prevents premature grain

break-out in order to guarantee the full grinding power of the individual grains. This rough grinding wheel is particularly suitable for steel and stainless steel applications.

PREMIUM★★★ ROUGH GRINDING WHEEL

CERABOND 2in1 for steel and stainless steel



	Shape	Type no.	Dimension	Specification	PU
		27 34019878	178x7,0x22,23	CA24Q-BFK	5



PREMIUM* ROUGH GRINDING WHEEL**

For nonferrous metals



The PREMIUM*** rough grinding wheel developed specifically for non-ferrous metals prevents clogging of the tool in order to reduce loading or dulling. Even at very low pressure, the wheel achieves extremely high abrasiveness. TYROLIT's formula and production methods enable exceptionally

high stock removal rates to be obtained for nonferrous metal applications. These rough grinding wheels are available in the hard N grade for surface and edge grinding, or in the softer cutting L grade for surface grinding.

	Shape	Type no.	Dimension	Specification	PU
		27 5365	178x7,0x22,23	A36N-BFX	10



PREMIUM* ROUGH GRINDING WHEEL**

ONGLIFE for steel



The PREMIUM*** ONGLIFE is a high-performance rough grinding wheel for surface and edge grinding. The 4 mm thick rough grinding wheel achieves the highest stock removal rates, such as in pipeline construction applications.

The 7, 8 and 10 mm thick ONGLIFE rough grinding wheels offer enhanced dimensional stability for welding and root welding.

	Shape	Type no.	Dimension	Specification	PU
		27 5350	178x4,0x22,23	A30S-BFX	10



PREMIUM* FLAP DISC**

ONGLIFE for steel and stainless steel



The PREMIUM*** ONGLIFE flap disc offers the longest lifetime and an excellent stock removal rate. This flap disc is used both on high alloyed steels and stainless steel, as well as on unalloyed and low alloyed steels.

Problem-free welding as well as edge and surface grinding, particularly when used on powerful angle grinders.

	Shape	Type no.	Dimension	Specification	PU
		28N 34239195	125x22,23	ZA40-B	10



PREMIUM* JUTE DISC**

For steel and stainless steel



The TYROLIT JUTE disc is a new, unique grinding wheel that combines abrasiveness with a high level of comfort while working. This tool can be used on both steel and stainless steel. The longest lifetime and an environmentally friendly jute fibre core deliver the best performance. An additional back up pad is not required, as there is already one integrated

in the product. The natural fibre core can be trimmed, giving it the edge over other discs in terms of its lifetime. This saves the user time and great expense.

	Shape	Type no.	Dimension	Grain	Max. speed	PU	
		N Disc	706130	180x22	36	8.600	10



PREMIUM* ROUGH CLEANING WHEEL**

Universal use



With the TYROLIT rough cleaning wheel you can effortlessly remove rust, paint, lacquer and underbody sealant from your workpiece. The porous nylon fibres, treated with aggressive abrasives, meet any challenge. At the same time, they prevent clogging or loading of the wheel.

This wheel offers the user quiet, non-strenuous grinding combined with low generation of heat.

	Shape	Type no.	Dimension	Specification	Colour	Max. speed	Rec. speed	PU	
		28 VL GR	898017	125x22,23	C COARSE	Black	9.800	7.800	5

Cleaning welding seams

After welding, scale and discolouration must usually be removed from welding seams. Cleaning the seam is necessary both for visual reasons as well as for technical reasons, to prevent corrosion. Depending on the desired end result of the workpiece, more or less time can be spent on this work step.

Removal of scale and discolouration

The first step for proper finishing of welding seams is cleaning. For this, we support you with a broad assortment of brush tools for all machine types, as well as a wide range of fleece and rough cleaning wheels in different specifications.

Brush tools are mainly suited for the removal of stubborn scale and slag in hard to reach places, for example in pipe connections after the first welding operation. The chemical and mechanical properties of the wire, as well as the condition of the wire brush produce very good results in terms of the scouring action and lifetime.



Interim cleaning of welding seams

In most cases, welding the joints of pipelines cannot be performed in one work step. In order to position several welding seams on top of each other, each individual layer must first be cleaned. TYROLIT has developed the BASIC* PIPELINER rough grinding wheel, to quickly remove slag and scale from recesses.

Type no.	Dimension	Specification	PU
734693	178x7,0x22,23	A30Q-BF PIPE	10

Catalog page 75

PREMIUM★★★ SHIELD TAPERED BRUSHES

For steel

+ Enhanced work safety

The protective plastic flaps provide protection from undesired wire breakages and dust.

+ Broad assortment

Depending on the application, our brushes are available with twisted and knotted wire.



+ No restriction

The transparent protection enhances work safety whilst allowing the operator to work without restrictions. Difficult-to-reach places are no longer an issue thanks to the soft plastic flaps.

SHIELD tapered brushes offer a protective coating against dust and wire breakages due to their shape, combined with user-friendly use. The transparent protective coating also



allows an unrestricted view of the workpiece. In addition, the plastic flaps offer a high level of flexibility, making it possible to machine edges and corners. SHIELD brushes are

available in various designs and wire types, and offer the highest safety levels when working on steel. This tool is also frequently used to clean welding seams.

PREMIUM★★★ SHIELD TAPERED BRUSHES

For steel



	Shape	Type no.	Dimension	Specification	Max. speed	PU
		28KDZ 34023817	100x20xM14-2	S0,5	15.000	1

You can find all products recommended by us in our catalogue, in all thicknesses and diameters. SHIELD tapered brushes page 145.



PREMIUM* ROUND BRUSHES**

For stainless steel



The PREMIUM*** round brushes are ideal for welding. TYROLIT will provide you with the appropriate wire brush for your application depending on the wire type. Twisted wire brushes are used for preparing surfaces and removing rust, scales and concrete residue.

Wire brushes with knotted wire can also be used to remove rust and paint, as well as for fine grinding. Our products are also frequently used to clean welding seams.

	Shape	Type no.	Dimension	Specification	Max. speed	PU
	 1RDZ	34202829	125x6x21x22,2	E0,5INOX PIPE	12.000	1



PREMIUM* ROUGH CLEANING WHEEL**

Universal use



With the TYROLIT rough cleaning wheel you can effortlessly remove rust, paint, lacquer and underbody sealant from your workpiece. The porous nylon fibres, treated with aggressive abrasives, meet any challenge. At the same time, they prevent clogging or loading of the wheel.

This wheel offers the user quiet, non-strenuous grinding combined with low generation of heat.

	Shape	Type no.	Dimension	Specification	Colour	Max. speed	Rec. Speed	PU
	 28 VL GR	34206237	125x22,2	A EX. COARSE	Blue	9'800	7'800	5


PREMIUM* SCM**

Universal use



With the new TYROLIT SCM program, we are now taking a further step towards economic efficiency. With SCM, the machining time of the workpiece can now be greatly reduced. A saving of one to three work steps is thus the key benefit. Thanks to the quick and high stock removal rate, applications such as the reduction of surface roughness, removal of discolouration, smoothing of surfaces and the cleaning and removal of weld seams can be realised.

Another advantage of SCM lies in the deburring of tool edges without additional stock removal. Furthermore, the TYROLIT SCM program is yielding the best results in terms of lifetime, which in turn is evidence of the economic efficiency of these products.

	Shape	Type no.	Dimension	Specification	Colour	Max. speed	Rec. Speed	PU
	Disc	34047733	125x22	VERY FINE	Blue	12.000	7-8.500	5



PREMIUM* UNITISED WHEELS**

Universal use



With unitised wheels from TYROLIT, especially difficult-to-reach places and corners can be reached on every workpiece. These flexible products do not alter the surface geometry of your workpiece in any way and always achieve the desired surface structure. The cool grinding, low clogging and regular surface results give them the edge over conventional tools.

Application areas are primarily the deburring, cleaning, fading, finishing and machining of welding seams. Material can be easily machined and structured using unitised wheels.

	Shape	Type no.	Dimension	Specification	Max. speed	Rec. Speed	PU
		34190207	152x3x25,4	3 C FINE	5.000	3.000	16



You can find all products recommended by us in our catalogue, in all thicknesses and diameters. Unitised wheels page 362.

Grinding welding seams

If, after welding, the workpiece is worked on again, the seams must be smoothed, for visual or functional reasons. This is mainly to achieve a smooth transition between the seam and the workpiece.

Generally, when machining welding seams, depending on the thickness and size, care should be taken to start with the finest possible grain if a surface improvement is required later. The next coarsest grain should be selected only if the stock removal rate is insufficient on too strong a weld. This considerably reduces the effort of a rework.

Effortless removal of welding seams

In our product range, there are many options available to you for quickly and easily performing the removal process. For the removal of large welding seams, we recommend rough, flap and fibre discs, which are available in different grit sizes.

For those hard to reach welding seams, we recommend the use of tungsten carbide burs. Our burs are made from tried-and-tested, high-quality cemented carbide types on the most modern CNC grinding machines.



Grinding for clean fillet welds

With the unitised abrasives in our assortment, especially difficult-to-reach places and corners can be reached on every workpiece. With these highly flexible tools, fillet welds in particular can be effortlessly machined, with no surface damage.

Type no.	Dimension	Specification	PU
34190207	152x3x25,4	3C FINE	10

Catalog page 362

PREMIUM*** FLAP DISC

LONGLIFE for steel and stainless steel

- + **Excellent overall abrasion**
Offers not only a long service life, but also exceptional results in terms of abrasiveness.
- + **Robust construction**
Through the increased number of closely spaced flaps, this disc can withstand even the highest loads.



- + **Longest lifetime**
The PREMIUM*** LONGLIFE offers an even longer service life with consistent grinding results.

TYROLIT Film



The product film can be found on YouTube at youtube.com/TYROLITgroup

The PREMIUM*** LONGLIFE flap disc offers the longest lifetime and an excellent stock removal rate. This



flap disc is used both on high alloyed steels and stainless steel, as well as on unalloyed and low alloyed steels.

Problem-free welding as well as edge and surface grinding, particularly when used on powerful angle grinders.

PREMIUM*** FLAP DISC

LONGLIFE for steel and stainless steel



	Shape	Type no.	Dimension	Specification	PU
		28N 34239195	125x22,23	ZA60-B	10



PREMIUM*** ROUGH GRINDING WHEEL

LONGLIFE for steel



The PREMIUM*** LONGLIFE is a high-performance rough grinding wheel for surface and edge grinding. The 4 mm thick rough grinding wheel achieves the highest stock removal rates, such as in pipeline construction

applications. The 7, 8 and 10 mm thick LONGLIFE rough grinding wheels offer enhanced dimensional stability for welding and root welding.

	Shape	Type no.	Dimension	Specification	PU
		27 5363	178x7,0x22,23	A30S-BFX	10



PREMIUM* ROUGH GRINDING WHEEL**

CERABOND 2in1 for steel and stainless steel



The TYROLIT CERABOND system brings almost 100 years of experience to a new generation of highest performance tools. With the rough grinding wheels from the CERABOND family, we have succeeded in achieving an ideal combination of specially treated ceramic grain and bond structure. Thus it is

possible to keep the abrasiveness and the lifetime of the wheel at the highest level. The unique bond system prevents premature grain break-out in order to guarantee the full grinding power of the individual grains. This rough grinding wheel is particularly suitable for steel and stainless steel applications.

	Shape	Type no.	Dimension	Specification	PU
	 27	34019878	178x7,0x22,23	CA24Q-BFK	5



PREMIUM* ROUGH GRINDING WHEEL**

For nonferrous metals



The PREMIUM*** rough grinding wheel developed specifically for non-ferrous metals prevents clogging of the tool in order to reduce loading or dulling. Even at very low pressure, the wheel achieves extremely high abrasiveness. TYROLIT's formula and production methods enable exceptionally

high stock removal rates to be obtained for nonferrous metal applications. These rough grinding wheels are available in the hard N grade for surface and edge grinding, or in the softer cutting L grade for surface grinding.

	Shape	Type no.	Dimension	Specification	PU
	 27	5365	178x7,0x22,23	A36N-BFX	10



PREMIUM* ZA-P48 N JUTE DISC**

For steel and stainless steel



The TYROLIT JUTE disc is a new, unique grinding wheel that combines abrasiveness with a high level of comfort while working. This tool can be used on both steel and stainless steel. The longest lifetime and an environmentally friendly jute fibre core deliver the best performance. An additional

back up pad is not required, as there is already one integrated in the product. The natural fibre core can be trimmed, giving it the edge over other discs in terms of its lifetime. This saves the user time and great expense.

	Shape	Type no.	Dimension	Grain	Max. speed	PU
	 N Disc	706130	180x22	36	8.600	10



PREMIUM* ZA-P48 V VULCANISED FIBRE DISCS**

For steel and stainless steel



Using fibre discs is a very simple and quick solution for removing material. A low level of vibration means the tools are convenient to use. This fibre disc has been designed for use on steel and stainless steel, and is made

of a zirconium aluminium oxide mix. This fibre disc is available from our assortment in grit sizes 24 to 120.

	Shape	Type no.	Dimension	Grain	Max. speed	PU
	 V Disc	34163912	180x22	36	8.600	50

You can find all products recommended by us in our catalogue, in all thicknesses and diameters. Rough grinding wheel CERABOND page 71, Rough grinding wheel for nonferrous metals page 78, Jute disc page 339, Vulcanised fibre discs page 341.



PREMIUM* CA-P93 V VULCANISED FIBRE DISCS**

For steel and stainless steel



Using fibre discs is a very simple and quick solution for removing material. A low level of vibration means the tools are convenient to use. This fibre disc has been designed for use on steel and stainless steel, and is made

of a ceramic aluminium oxide mix. This fibre disc is available from our assortment in grit sizes 24 to 120.

	Shape	Type no.	Dimension	Grain	Max. speed	PU
		V Disc 34163912	180x22	36	8.600	50



PREMIUM* TUNGSTEN CARBIDE BURRS**

For steel



TYROLIT tungsten carbide burrs are produced on modern CNC grinding machines. The result is a highly efficient precision tool that achieves optimum grinding results. The specially developed wheel geometry ensures the longest lifetime and the best results on all types of steel.

The abrasive cutter profile is especially long-chipping and ensures a high stock removal volume. Reduced generation of heat protects the milling cutter and the workpiece.

	Shape	Type no.	Dimension	Specification	PU
		52WRC 34213585	13x25-6x70	SC	1



PREMIUM* ZA-P48 PE Y QUICK-CHANGE DISC**

For steel and stainless steel



With TYROLIT QUICK CHANGE DISCS you can save a considerable amount of time. This specification delivers maximum stock removal rates at the same time as a long lifetime. This is achieved by combining the zirconium and ceramic aluminium oxide with a three-layer product structure.

In addition, this product also delivers a high level of stability, low grain break-out and enhanced edge stability.

	Shape	Type no.	Dimension	Grain	Max. speed	PU
		QDisc-R 112438	75	36	20.000	25

Grinding of uneven surfaces

Rough surfaces and scratches can often remain after grinding welding seams. In order to achieve a uniformly structured appearance, these must first be removed and the surface evened.

In this step, do not continue using a coarse-grained tool, but rather try to remove the scratch step by step using increasingly fine products. Depending on the requirements, the workpiece must be machined with the appropriate grain and grade of fineness. Machine guidance can also be a deciding factor; the slower you work the lower the resulting surface roughness.

Removal of welding tracks and scratches

The removal of surface roughness is best achieved by the use of fleece products. These can be universally used on all materials and are available for use on different machines.

The TYROLIT SCM Programme combines excellent cutting ability with long lifetime, so that you can achieve optimum surface finishes. This saves two or three work steps. With our assortment of spindle-mounted fleece flap wheels and mounted flap wheels you can also carry out work on all surfaces with particular precision.



Surface pre-treatment over large areas

Rollers on burnishing machines are especially suited to surface pre-treatment over large areas. You can effortlessly remove welding tracks, scratches or oxidation residues. The patented shape of the spiral roller we have developed means they are extremely easy and convenient to use without lateral deflection. You can therefore avoid typical roller imprinting on the workpiece.

Type no.	Dimension	Specification	PU
94210	100x100x19,1 S4	A VERY FINE	1

Catalog page 453

PREMIUM*** SCM

Universal use

+ Reduces working times

The working time is significantly reduced through the long lifetime and the saving of one to three work steps.

+ Noticeable cost reduction

Fewer work steps also means reduced tool costs.



+ One disc, three options

Thanks to the removable centre hole, this disc can also be mounted on three different back up pads.

With the new TYROLIT SCM program, we are now taking a further step towards economic efficiency. With SCM, the machining time of the work-piece can now be greatly reduced. A saving of one to three work steps is thus the key benefit. Thanks to the



quick and high stock removal rate, applications such as the reduction of surface roughness, removal of discolouration, smoothing of surfaces and the cleaning and removal of weld seams can be realised. Another advantage of SCM lies in the deburring

of tool edges without additional stock removal. Furthermore, the TYROLIT SCM program is yielding the best results in terms of lifetime, which in turn is evidence of the economic efficiency of these products.

PREMIUM*** SCM

Universal use



	Shape	Type no.	Dimension	Specification	Colour	Max. speed	Rec. Speed	PU
		Disc 34047732	125x22	MEDIUM	ROT	12.000	7-8.500	20



PREMIUM*** FLEECE FLAP WHEELS SPINDLE MOUNTED

For steel, stainless steel and nonferrous metals



TYROLIT spindle-mounted fleece flap wheels are highly adaptable and ensure that no changes occur to the surface integrity. The TYROLIT Premium*** assortment has now been extended by 29 types in order to be able to offer you different grains and new dimensions. Different surface

structures and roughnesses can be achieved through the variety of grain gradings. TYROLIT spindle-mounted fleece flap wheels are also available with inlaid coated abrasive, so that higher stock removal can be achieved and a coarser surface integrity created.

	Shape	Type no.	Dimension	Grain	Specification	Max. speed	Rec. Speed	PU
		52LA VL-C 136193	80x50-6x40	120	A MEDIUM	6.000	4.000	10

Surface finish and polish

In many cases, once scratches are removed and surfaces settled, the perfect finish is achieved. Here you can choose between a matt, even surface structure or a high-gloss polish. Therefore, the requirements for the right abrasive differ considerably.

As well as high machine quality and the quality of the fleece and flap discs, precision work and know-how are also important prerequisites when polishing metal surfaces. Several work steps are often needed to achieve the desired result. During the polishing process, care should be taken to ensure that the accumulated grinding dust is continuously removed, or else it can impair the results as an unwanted abrasive.

Achieving the perfect surface

Whether matt or polished, you can find the right tool for your desired result in our assortment. Choose from various fleece products for angle grinders and straight grinders, or for quick machining by hand. Products like the TYROLIT Fast Change discs or the classic fleece products are also ideally suited for preparing your workpiece for the perfect mirror finish.



Reduce working hours with good preparation

Use the TYROLIT SCM Programme and save up to 3 work steps. With just one product, you can simultaneously achieve smoothing, cleaning and an optimal surface finish. The finer the design of the wheel, the finer your surface quality will be. Furthermore, the shape of the wheel also facilitates the use of various supporting discs. Due to the removable centre hole, the wheels can also be used on all three pads offered in our range.



Type no.	Dimension	Specification	Colour	Max. speed	Rec. Speed	PU
34047733	125x22	VERY FINE	Blue	12.000	7-8.500	10

Catalog page 356

PREMIUM★★★ POLISHING PROGRAM

Three steps to a mirror finish

+ Step 1

Remove rough scratch marks using the PREMIUM*** CONDITIONING disc. A multidimensional flap design reduces clogging and prevents unwanted material discoloration.

+ Step 2

Prepare the surface for polishing using the PREMIUM*** PREPOLISH. The disc adapts to the material surface, providing the perfect basis for polishing.



+ Step 3

Using PREMIUM*** POLISH during the last step creates the perfect mirror finish. Different grinding pastes enable the machining of different materials. Materialien.

With the TYROLIT POLISHING PROGRAM you can achieve the perfect high gloss surface in just a few steps. Preventing clogging of the wheels

provides an above-average lifetime. Exceptionally cool grinding due to special flaps ensures outstanding surface finishes. Exceptionally high

levels of work safety due to low heat build-up, minimal formation of dust and quiet operation.

PREMIUM★★★ POLISHING PROGRAM

Three steps to a mirror finish

	Type no.	Shape	Dimension	Specification	Type no.	PU
	52433	28PCA	125x22,23	MEDIUM	742153	1
		28PUA	125x22,23	FINE-P	742384	1
		28PWA	125x22,23	SHF	742375	1
		90 PP	30x20x90	S-POLISH	741291	2

You can find all products recommended by us in our catalogue, in all thicknesses and diameters. Polishing program page 369.



PREMIUM* UNITISED WHEELS**

Universal use



With unitised wheels from TYROLIT, especially difficult-to-reach places and corners can be reached on every workpiece. These flexible products do not alter the surface geometry of your workpiece in any way and always achieve the desired surface structure. The cool grinding, low clogging and regular surface results give them the edge over conventional tools.

Application areas are primarily the deburring, cleaning, fading, finishing and machining of welding seams. Material can be easily machined and structured using unitised wheels.

	Shape	Type no.	Dimension	Specification	Max. speed	Rec. Speed	PU	
		1UW	34190207	152x3x25,4	3 C FINE	5.000	3.000	16



PREMIUM* MOUNTED FLAP WHEELS**

For steel, stainless steel and nonferrous metals



These tools adapt optimally to every workpiece contour thanks to their flexibility. The radially arranged flaps of the mounted flap wheels can be used on various materials and permit precise work for different applications, such as matting, pre-polishing and the cleaning of surfaces.

The highly flexible flaps also make light work of machining hard-to-reach areas.

	Shape	Type no.	Dimension	Grain	Max. speed	Rec. Speed	PU	
		52LA-C	816989	80x40-6x40	240	10.000	6.000	10



PREMIUM* FLEECE ROLLS**

Universal use



TYROLIT fleece rolls are used for cleaning and processing surfaces using orbital sanders or for hand-guided grinding. A wide range of specifications offer the user a variety of surface finish options.

The assortment extends from coarse specifications for cleaning weld seams through to ultra-fine and polishing fleece.

	Shape	Type no.	Dimension	Conforms to	Specification	Colour	PU	
		Roll	120688	115 x 10m	P150	A COARSE	Brown	1



PREMIUM★★★ C-P65 P E TFC

For hard stone, steel, composites, plastics and soft stone



TYROLIT FAST CHANGE enables you to change a disc very quickly thanks to the Velcro fastening. The thin paper backing makes the disc ideal for finishing tasks. The product delivers an exceptionally even finish on metals, lacquers, composites, marble and stone.

The product delivers an exceptionally even finish on hard stone, steel and composites. Clogging and loading of the disc is reduced, thus increasing the product's lifetime.

	Shape	Type no.	Dimension	Grain	Max. speed	PU
		DISC 7087	180	400	7.300	50



You can find all products recommended by us in our catalogue, in all thicknesses and diameters.
TFC page 444.

TYROLIT SCHLEIFMITTELWERKE SWAROVSKI K.G.

Swarovskistraße 33 | 6130 Schwaz | Austria

Tel +43 5242 606-0 | Fax +43 5242 63398

Our **worldwide subsidiary companies** can be found
on our website at www.tyrolit.com



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