

- Graniflex Cutting-Master Thin Cutting Disc
- Graniflex Cut&Grind Combi-Master 3in1 Disc
- Graniflex Grinding-Master Grinding Disc
- Graniflex Plussz Cutting Discs
- Graniflex Plussz Grinding Discs
- Vitrified & Resinoid Bonded Grinding Wheels
- Coated Abrasives

GRANIT ABRASIVES

Product Catalogue



**GRANIT
ABRASIVE**



Grinding Solutions from the Hungarian Manufacturer

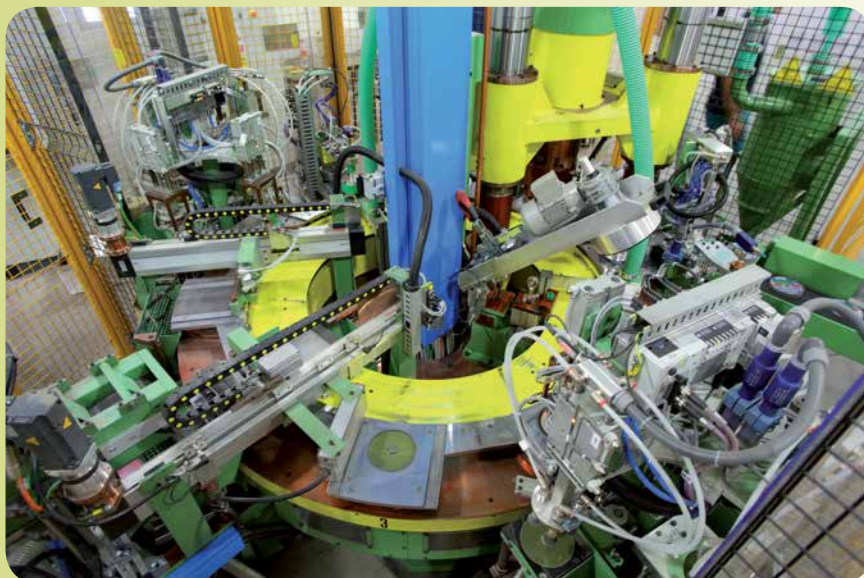


Granit Grinding Wheel Ltd.

is the largest grinding wheel manufacturing company in Hungary, with over 60 years of experience.

GRANIT is a privately owned, independent manufacturing company. We are a leader in market innovations and attribute our success to our superior client service and support. This client service and support is best demonstrated by our ability to deliver customized and cost effective solutions for our clients' assorted grinding needs. Our main product lines are the resinoid and vitrified bonded grinding wheels made of corundum and silicon carbide grains, the glass fibre reinforced cutting and grinding discs and the flap discs.

- 1981** Graniflex cutting and grinding disc were awarded the DSA qualifications – indicating that the product comply with the strictest of European safety standards.
- 1996** Received ÖQS Quality Management System certification which comply with ISO 9001 standards.
- 2003** Received EN ISO 9001 Quality Management System certification which comply with ISO 9001:2000.
- 2004** Granit and all of its manufactured products received the oSa certification which means they comply with the standards required by the Organization for the Safety of Abrasives.
- 2009** Received EN ISO 14001 Environmental Management System certification which comply with ISO 14001:2004



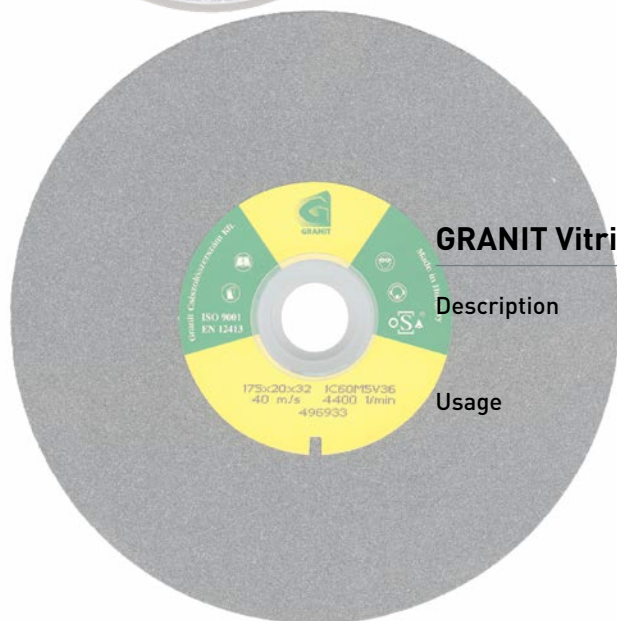
Products



GRANIFLEX Cutting and Grinding Discs

Description	75-500 mm outside diameter Glass fibre reinforced discs	
Usage	<ul style="list-style-type: none"> • Structural steel • Alloyed steel • Cast materials 	<ul style="list-style-type: none"> • Stainless steel • Aluminum • Natural and artificial stones

- Standard industrial quality Graniflex Plusz
- Premium category Graniflex Master product family



GRANIT Vitrified and Resinoid Bonded Grinding Wheels

Description	75-900 mm outside diameter Maximum thickness in one piece: 250mm	
Usage	<p>Ferrous materials:</p> <ul style="list-style-type: none"> • Steel <p>Non-ferrous materials:</p> <ul style="list-style-type: none"> • Natural and artificial stones • Plastics • Non-ferrous alloys (aluminum, copper, bronze) • Hard metal (Tungsten carbide) 	<ul style="list-style-type: none"> • Concrete • Rubber • Glass



Flap Discs

Description	100-180 mm outside diameter Types: flat or conical Backing pad: plastic or glass fibre	
Usage	<ul style="list-style-type: none"> • Steel • Cast materials 	<ul style="list-style-type: none"> • Stainless steel • Wood

- Standard industrial quality Granit Economy product family
- Premium category Graniflap product family

IN ADDITION TO OUR STANDARD SELECTION AVAILABLE FROM OUR INVENTORY, WE CAN ALSO PROVIDE YOU WITH CUSTOM MADE PRODUCTS TO BEST SERVE YOUR GRINDING NEEDS.
CONDITIONS AND MINIMUM ORDER SIZE APPLY.

Customer Support Solutions

How can we help you optimize your productivity?

Productivity analyzes by collecting the used abrasives

We work with you to develop a custom evaluation report which analyzes the remains of your used cutting and grinding wheels.

Through a detailed analyzes we establish a program which aims to improve the efficiency and safety parameters of your grinding operations



- 1) This efficiency program is for those who
 - want to reduce their grinding costs,
 - want to increase their productivity,
 - want to improve the safety of their operations,
 - want to optimize their spend on abrasives.
- 2) As a first step, we place collection bins in your production site.
- 3) The operators discard the used abrasives in the bin.
- 4) We collect the used abrasives from these bins and our technical experts perform a detailed analysis on the contents.
- 5) Based on the analysis of the used abrasives as well as through an examination of your processes and particular applications, we then develop a customized efficiency program for your operations.
- 6) We then present you with a detailed report outlining the steps of this efficiency program which will help you reduce your operating costs.

We look for answers

Do you use the best possible abrasive tools for your operations? Is there an alternative which could work better for your grinding tasks? Can you eliminate any unsafe habits of your grinding operators? Do you use all the abrasives you paid for? What options exist to increase your efficiency?

Rotary Rack Basic Display Kit

In order to best support our new distributors, we have put together a rotary rack basic display starter kit.

The free standing rotary display kit contains a selection of our most popular abrasive tools, and is small enough to fit even the most crowded of locations.

For further information please contact your Granit sales representative.



Specification System

Safety pictograms

Always use the necessary safety equipment to ensure personal protection!



Always use safety guards!



Always read and follow the instructions in the user manual of the machine!



Maximum speed and revolution

The operating speed of the angle grinder should not surpass the maximum speed indicated on the disc.

Restrictions

Not suitable for grinding!



Not suitable for hand-held grinders!



Do not use for wet grinding or cutting!



Do not use if damaged!



Machines

Hand-held machine



Mobile machine



Stationary machine



Materials



Expiry date

e.g. Can be used before V10 2018. (end of October 2018) The cutting and grinding disc can be used up until 3 years from the date of the production!

Color codes

Color of the diagonal stripe

Maximum speed and revolution

Red: max. 80 m/s



Green: max. 100 m/s



Color of the frame

Blue for steels



Light blue for alloyed steels



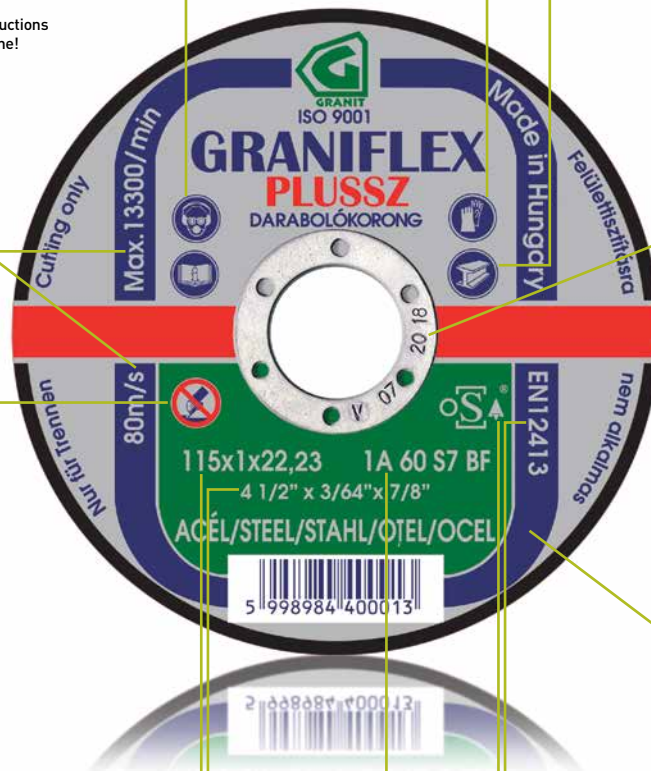
Green for stones



Purple for stainless steels



Grey for aluminum



Dimension

Diameter x Thickness x Bore size

Specification

Grain type / Grain size / Hardness and structure / Bond type

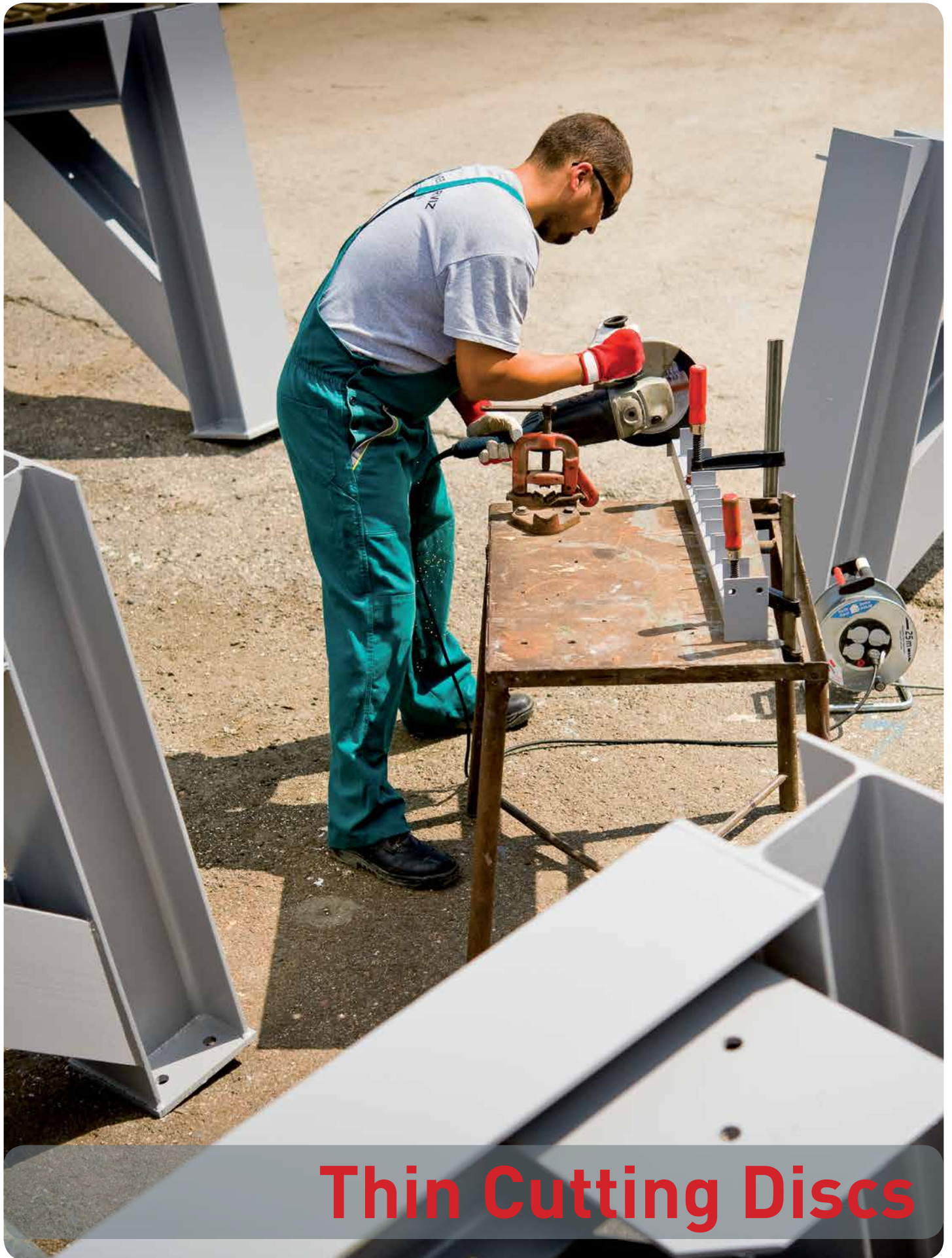
Compliance

oSa logo
European standard

Diameter [mm]	Max. RPM [1/min]		Diameter [mm]	Max. RPM [1/min]	
	80 [m/s]	100 [m/s]		80 [m/s]	100 [m/s]
75	20 400	—	355	4 400	5 500
100	15 300	—	400	3 850	4 800
115	13 300	—	500	3 100	3 850
125	12 250	—			
150	10 200	—			
180	8 500	—			
230	6 650	—			
300	5 100	6 400			

Abrasive grain

1A	Normal corundum
11A	Mixed corundum
16A	Mixed corundum
62A	Mixed corundum
72A	Mixed corundum
61A	Mixed corundum
1C	Black silicon carbide
AC	Corundum and silicon carbide mixture



Thin Cutting Discs



Performance Benefits of Thin Cutting Discs

The smaller contact surface of the thin wheels reduces the amount of wasted material and ensures a faster and more accurate cut.

This burr-free cutting also results in less re-work for the professional.

As the cuts require less pressure, the cutting surface remains cool, and the work is easy.

Power of the Angle Grinder

When using a high power angle grinder the operator can easily benefit from a hard, long lasting wheel, as the self-sharpening grains work at the optimum level without reducing the speed of the machine. When using a lower power machine always choose a softer wheel, otherwise the disc can burn in (resulting in discoloration) or wear out faster.

Safety

Owing to the dimension of the thin discs, safety is the most important factor.

Graniflex discs are heavily reinforced and comply with the strictest international standards, supported by bursting, side-load and impact tests.

The Choice: Steel or Inox Cutting Discs

Discs suitable for cutting steel contain special additive materials like pyrite, which support cutting performance. However, discs containing these materials are not recommended for use on corrosion sensitive metals. Iron or sulphur can initiate the corrosion process. In order to most efficiently grind stainless steel and acid resistant materials, which are harder to cut, we recommend using a softer wheel with an open structure with higher porosity. The softer wheel avoids surface discoloration. Wheels suitable for steel cutting are hard and long lasting.

Their cutting performance on structural steel will be always better, than a similar quality inox wheel. When using discs to cut in power plants, food, oil or health care industries, it is important to always use discs which are iron, sulphur and chloride free!

→ Look for the following indications of iron, sulfur, chlorine-free discs!

Fe, S, Cl ≤ 0,1%



**Fe-S-Cl
FREE**

Graniflex Cutting-Master Premium Thin Cutting Discs

→ Extra thin, premium quality product group for professional users!

Cutting-Master is formulated for serving the most demanding cutting application. It is an extra thin product family offering a real opportunity for the users to take advantage of a high performance and long lasting tool. Fast, cool cutting discs reduce the amount of re-work needed. The discs are Fe+S+Cl free, and guaranteed not to contaminate stainless steel.

Graniflex Cutting-Master Thin Cutting Disc for Structural Steel and Inox

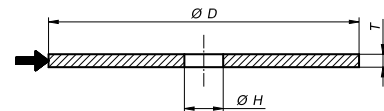


Life: ●●●●●●●●
Performance: ●●●●●●●●

Specification: 61A 46 / 60 T8 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!



Applications:

- Structural steel
- Tool steel
- Stainless steel and corrosion sensitive materials

Suitable for:

- Ultra precision cutting
- Cutting of sheets and flat steels
- Small cross section profiles
- Small cross section bars

Benefits:

- High cutting performance
- Clean cut for less re-work
- Extra-long lasting
- Fast and cool cutting

D x T x H	Art. Nr	Availability	Barcode	Icon
75 x 1,0 x 10	40567	Custom order	5998984405674	25
100 x 1,0 x 16	40440	Custom order	5998984404400	25
115 x 1,0 x 22,23	40120	In stock	5998984401201	25
115 x 1,6 x 22,23	40121	In stock	5998984401218	25
125 x 1,0 x 22,23	40122	In stock	5998984401225	25
125 x 1,6 x 22,23	40119	In stock	5998984401195	25
150 x 1,6 x 22,23	40140	In stock	5998984401409	25
180 x 1,6 x 22,23	40139	In stock	5998984401393	25
230 x 1,9 x 22,23	40222	In stock	5998984402222	25



Graniflex Thin Cutting Disc

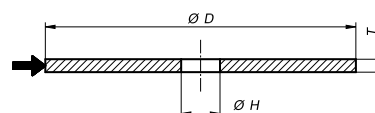
→ Fast, clean cut with good price-performance ratio.

Graniflex product group is optimized for fulfilling industrial needs. Cool cutting is ensured by a unique mix of abrasive grain and curing technique. It is a good choice for precision cutting.

Graniflex Thin Cutting Disc for Structural Steel



Life: ●●●●●○
Performance: ●●●●●●



Specification: 1A 36 / 46 / 60 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!

Applications:

- Structural steel
- Tool steel

Suitable for:

- Sheets
- Flat steels
- Small cross section profiles
- Small cross section bars

Benefits:

- Easy, fast and accurate cut
- Burr-free
- Long lasting
- Reduced material waste

D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 1,0 x 22,23	40001	In stock	5998984400013	25
115 x 1,6 x 22,23	40002	In stock	5998984400020	25
125 x 1,0 x 22,23	40012	In stock	5998984400129	25
125 x 1,6 x 22,23	40013	In stock	5998984400136	25
150 x 1,6 x 22,23	40128	In stock	5998984401287	25
180 x 1,6 x 22,23	40194	In stock	5998984401942	25
230 x 1,9 x 22,23	40086	In stock	5998984400860	25

→ For demanding applications, choose 1,6mm thickness instead of 1mm which better resists bending and twisting



Graniflex Thin Cutting Disc for Inox



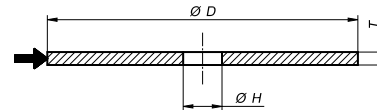
Life: ●●●●●○

Performance: ●●●●●●

Specification: 11A 46 / 60 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!



Applications:

- Stainless steel

Suitable for:

- Sheets
- Flat steels
- Small cross section profiles
- Small cross section bars

Benefits:

- Fast and accurate cut
- Good price-performance ratio
- Softer grade wheel against discoloration



D x T x H	Art. Nr.	Availability	Barcode	File
115 x 1,0 x 22,23	40435	In stock	5998984404356	25
115 x 1,6 x 22,23	40883	Custom order	5998984408835	25
125 x 1,0 x 22,23	40436	In stock	5998984404363	25
125 x 1,6 x 22,23	40884	Custom order	5998984408842	25
180 x 1,6 x 22,23	40885	Custom order	5998984408859	25
230 x 1,9 x 22,23	40696	In stock	5998984406961	25

Graniflex Thin Cutting Disc for Aluminum



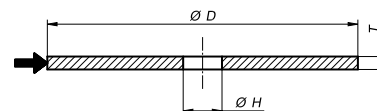
Life: ●●●●●○

Performance: ●●●●●○

Specification: AC 46 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!



Applications:

- Aluminum
- Natural and artificial stone

Suitable for:

- Special aluminum profile

Benefits:

- Fast cut
- Softer grade wheel
- Less clogging

D x T x H	Art. Nr.	Availability	Barcode	File
125 x 1,0 x 22,23	40812	In stock	5998984408125	25

Operational Difficulties and Their Solutions

PROBLEM	REASON	SOLUTION
The wheel wears out quickly; Life is too short	Too soft; Suitable for other materials	Choose a harder grade wheel
	Too thin	Work with a thicker wheel
	The angle grinder operates on a low speed	Pick a high speed machine
	Tool slows down	Reduce pressure or use a higher power machine (watt)
Low removal rate	Too hard wheel, edge becomes shiny; Wheel glazing, material discoloring	Pick a softer grade or a rougher grain wheel
	Diameter of the wheel is too small as compared to the cross section of the material	Pick a larger diameter wheel
	Machine is too weak	Use a more powerful tool
Wheel loading; Wheel does not work anymore	Improper wheel (problems occurring when working for example on tool steel, stainless steel, aluminum)	Pick a softer grade wheel, a wheel with open structure; Choose a wheel suitable for the quality of the material
Edge burning	Too hard wheel	Use a softer grade wheel
	Too high feed, too much pressure	Lower the feed
	Improper guiding; Too long operation on the same spot	Move the wheel back and forth, if you stay on the same spot too long the material will overheat and the wheel will glaze over
Too much burr	Too thick wheel	Pick a thinner wheel
	Too rough wheel	Use a finer grain wheel
Wheel edge is not holding, chips breaking out, wheel wears unevenly	Improper working angle, cutting wheel is used for grinding	For grinding operations use grinding wheel or Combi-Master
	Wrong guiding of the wheel; The wheel is blocked by a sharp burr	Guide wheel straight in the material
	Work piece is not clamped properly, it vibrates	Work piece shall be clamped close to the point of the operation (managing the space where the cut pieces can fall)
	Too low angle	Grind in 20-30 degrees, face grinding causes breakouts
Disc breakage	Wheel stuck in the cut	Wheel needs to be held straight in the cut to avoid side pressure
	Too high pressure on work	Reduce the pressure, the weight of the machine is enough
	Incorrect wheel flange	Diameter of the flanges shall be the same
	Too much side pressure	For side grinding use Combi-Master! Cutting discs need to be hold straight in the cut, for grinding use grinding disc
Wheel vibrates	Wheel is unbalanced	Use a balanced wheel
	Flange is damaged or spotted	Change or clean the flange
	The machine is not maintained properly	Change the bearing
	Improper clamping of the wheel; Wheel is not centered	Check the diameter of bore, check the run after clamping



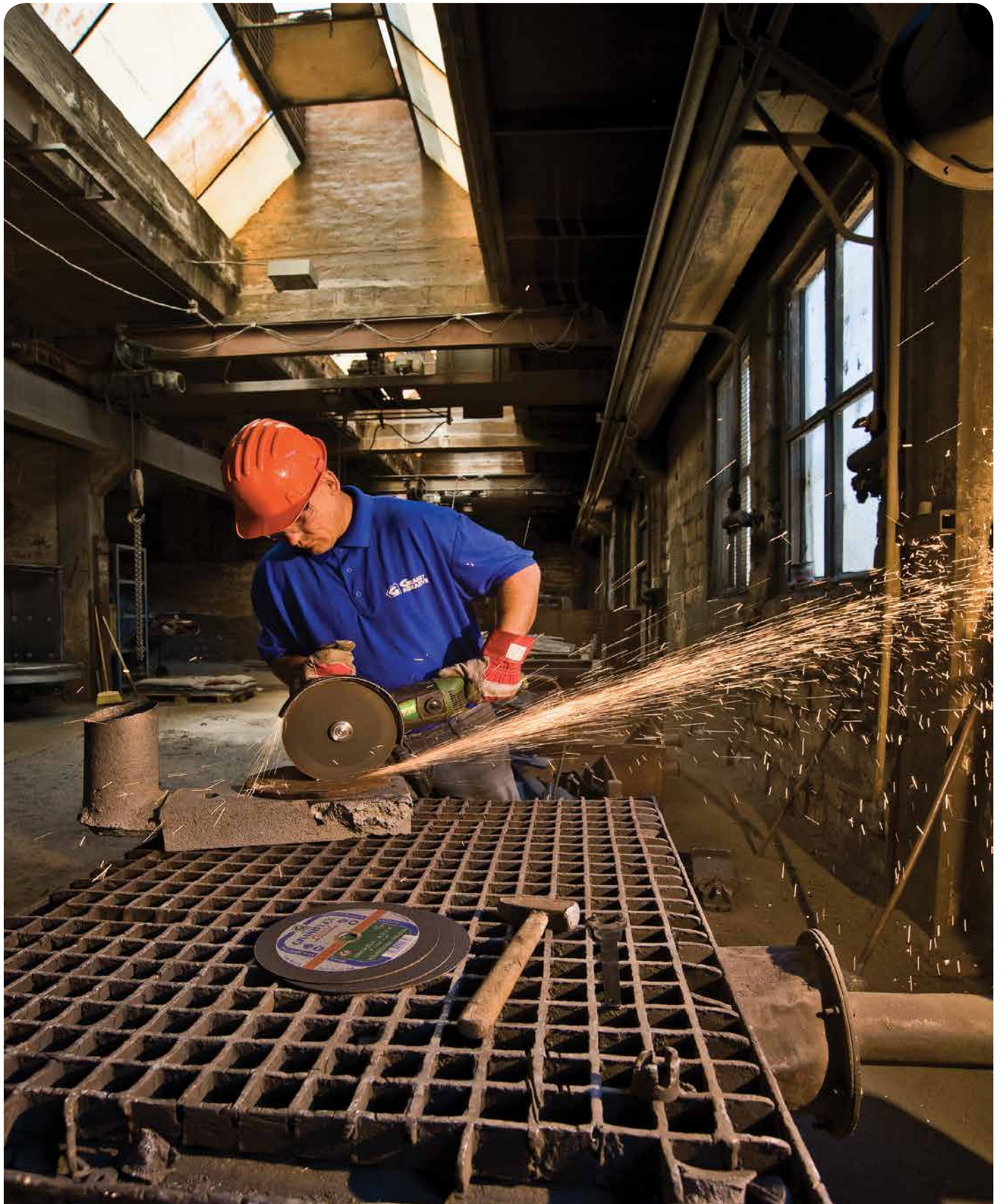
→ KEEP THE CUTTING DISC STRAIGHT IN THE CUT IN ORDER TO AVOID SIDE LOAD PRESSURE AND BLOCKING OF THE WHEEL! IF THE WHEEL IS BLOCKED IN THE CUT, THE FORCE OF THE MACHINE IS ABLE TO BREAK THE PART AROUND THE METAL RING!

→ **DO NOT SIDE GRIND WITH CUTTING DISC!**

→ You can cut a certain diameter work piece most economically, if you select the largest diameter cutting wheel and the most suitable angle grinder available!

→ The weight of the angle grinder ensures enough load, work without forcing the wheel!

→ For notching and light grinding use Combi-Master!



Graniflex Cutting Discs

Graniflex Cutting Discs

→ Good price / performance ratio composite tool.

Graniflex product group is optimized for fulfilling the industrial need.

It provides the best control for use in demanding applications, better resists bending and twisting. Hard, long lasting wheels ensure the most cost effective solution for cutting.

Graniflex Cutting Disc for Structural Steel

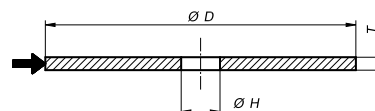


Life: ●●●●●●●●
Performance: ●●●●●●○

Specification: 1A 36 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!



Applications:

- Structural steel
- Tool steel

Suitable for:

- Profiles
- Solid materials
- Large cross section bars and solid bars
- Thicker sheets

Benefits:

- Long lasting
- Best control
- High cutting ability
- Most cost effective solution
- Recommended for to use in challenging conditions

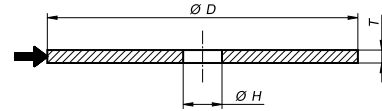
D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 2,0 x 22,23	40196	In stock	5998984401966	25
115 x 2,5 x 22,23	40005	In stock	5998984400051	25
115 x 3,2 x 22,23	40008	In stock	5998984400082	25
125 x 2,0 x 22,23	40014	In stock	5998984400143	25
125 x 2,5 x 22,23	40016	In stock	5998984400167	25
125 x 3,2 x 22,23	40019	In stock	5998984400198	25
150 x 2,0 x 22,23	40107	In stock	5998984401072	25
150 x 2,5 x 22,23	40021	In stock	5998984400211	25
150 x 3,2 x 22,23	40022	Custom order	5998984400228	25
180 x 2,0 x 22,23	40024	In stock	5998984400242	25
180 x 2,5 x 22,23	40026	In stock	5998984400266	25
180 x 3,2 x 22,23	40028	In stock	5998984400280	25
230 x 2,5 x 22,23	40035	In stock	5998984400358	25
230 x 3,2 x 22,23	40039	In stock	5998984400396	25

Graniflex Cutting Disc for Alloyed Steel



Life: ●●●●●○

Performance: ●●●●●●



Specification: 16A 30 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!

Applications:

- Hardened steel
- Alloyed steel

Suitable for:

- Solid materials
- Large cross section bars and solid bars
- Thicker sheets

Benefits:

- Medium hard wheel
- High removal rate
- Easy cut
- Fast cut

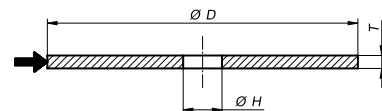
D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 2,5 x 22,23	40003	Custom order	5998984400037	25
125 x 2,5 x 22,23	40015	Custom order	5998984400150	25
180 x 2,5 x 22,23	40025	Custom order	5998984400259	25
230 x 2,5 x 22,23	40034	Custom order	5998984400341	25

Graniflex Cutting Disc for Inox



Life: ●●●●●○

Performance: ●●●●●●



Specification: 61A 30 S7 BF

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!

Applications:

- Stainless steel
- Hardened steel
- Alloyed steel

Suitable for:

- Solid materials
- Large cross section bars and solid bars
- Thicker sheets

Benefits:

- Soft bonding
- Easy cut

D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 3,2 x 22,23	40011	Custom order	5998984400112	25
125 x 3,2 x 22,23	40068	In stock	5998984400686	25
180 x 3,2 x 22,23	40033	Custom order	5998984400334	25
230 x 3,2 x 22,23	40045	Custom order	5998984400457	25

Graniflex Cutting Disc for Stones



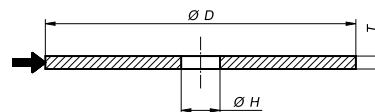
Life: ●●●●●○

Performance: ●●●●●○

Specification: 1C 36 R8 BF 80

Speed: 80 m/s

Type: 41 (flat) → For depressed centre disc (type 42) please ask for a quote!



Applications:

- Stones (natural and artificial stones, lime stone)
- Concrete
- Cast materials

Suitable for:

- Tiles
- Brick
- Hard cast iron (GG)

Benefits:

- Long lasting
- High stability
- Easy cut

D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 3,2 x 22,23	40010	In stock	5998984400105	25
125 x 3,2 x 22,23	40020	In stock	5998984400204	25
180 x 3,2 x 22,23	40031	Custom order	5998984400310	25
230 x 3,2 x 22,23	40042	In stock	5998984400426	25

Graniflex Large Diameter Cutting Discs

→ Tools for mobile and stationary machines.



For certain applications and specific materials we developed different larger diameters cutting discs both for stationary and mobile machines. Depending on the material we offer medium hard and hard wheels. Depending on the selection of the wheel diameter and thickness, the user can adapt the wheel to the geometry of the work pieces. Selecting the appropriate wheel provides optimal cutting speed and constant grinding performance. By aligning the wheels to the nature of the task, the cutting time becomes shorter, the work more effective and cost efficient.












Suitable for:

- We recommend our 1A and 16A compositions for larger cross section materials, shaped sections (rolled and cold curves "U", "I", "L", "T" profiles, angle sections, closed profiles), bars, pipes, flat steels, sheets cutting.
- The 1C discs can be used on natural and artificial stones (fire brick, sandstone, tile, brick, concrete).
- For cutting dense and larger diameter material use our rail cutting disc (16A), whose composition is softer, ensuring easier cut.
- For a specific application, if you do not find a suitable product, ask us to recommend a custom solution.

Benefits:

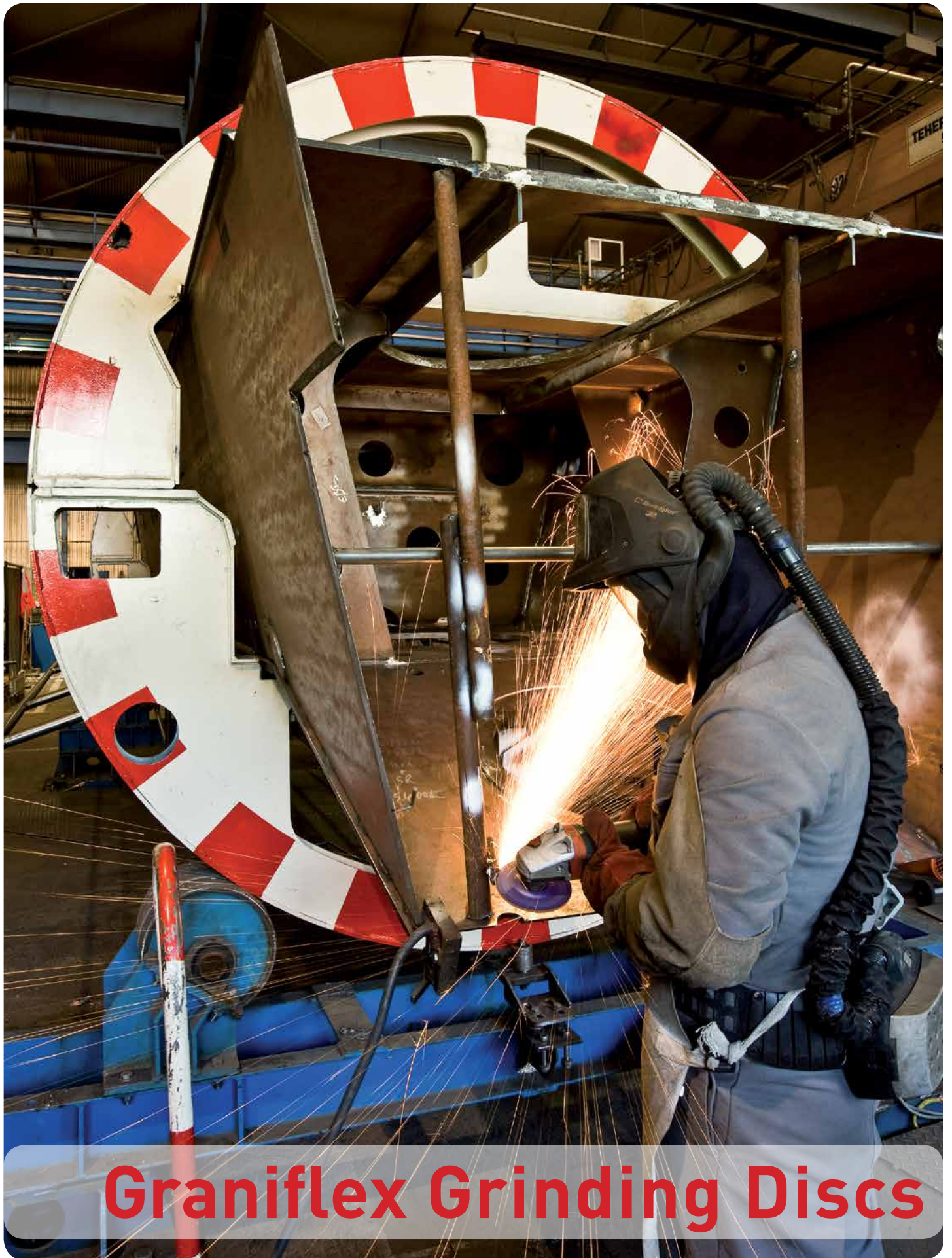
- long lasting
- efficient work
- fast cut



D x T x H	Specification	Max. Speed	Suitable for	Art. Nr.	Availability	Barcode	Icon
300 x 3,2 x 20	1A 30 S7 BF	80m/s	 metal	40052	In stock	5998984400525	10
300 x 3,2 x 25,4	1A 30 S7 BF	100m/s	 metal	40220	Custom order	5998984402208	10
300 x 3,2 x 32	1A 30 S7 BF	100m/s	 metal	40051	In stock	5998984400518	10
355 x 3,2 x 25,4	1A 24 S7 BF	80m/s	 metal	40829	Custom order	5998984408293	10
355 x 3,5 x 25,4	1A 24 S7 BF	100m/s	 metal	40221	In stock	5998984402215	10
400 x 4,0 x 40	1A 24 S7 BF	100m/s	 metal	40062	In stock	5998984400624	10
400 x 3,5 x 25,4	1A 24 S7 BF	80m/s	 metal	40886	Custom order	5998984408866	10
500 x 5,0 x 40	1A 24 S7 BF	100m/s	 metal	40065	In stock	5998984400655	10
300 x 3,2 x 20	1C 30 R8 BF	80m/s	 stone	40056	In stock	5998984400563	10
300 x 3,5 x 22,23	16A 30 S7 BF	100m/s	 rail	40291	Custom order	5998984402918	10
300 x 3,5 x 32	16A 30 S7 BF	100m/s	 rail	40082	Custom order	5998984400822	10

Type of the machine	Power	Max. Speed
Chop saw (low power mobile machine)	≤ 3 kW	80 m/s
Mobile machine	3-5 kW	80m/s; 100m/s
Stationary machine	> 5 kW	100 m/s
Stationary machine totally enclosed		100 m/s
Rail cutting machine		80m/s; 100m/s

→ Before selecting the necessary tool, please check the type and speed of your machine and pick a suitable wheel!



Graniflex Grinding Discs

Graniflex Grinding-Master Premium Quality Grinding Disc

→ Free grinding surface premium grinding wheels for professionals!

By incorporating the latest developments in grain and bonding technology, we increased the removal rate of our product. Compared to a standard build grinding wheel, the leveling of the 3 glass fibres is different. From the grinding surface, we moved the outer fibre inside, leaving the abrasive grains free to work. The new design provides an easier handling and an aggressive, controlled bite. The excellent comfort and handling ensures, premium performance grinding which increases your efficiency; a superb solution to decrease your grinding cost!



The Grinding-Master wheels are produced with 3 glass fibre reinforcements as the standard construct grinding wheels. In the top layer we placed two reinforcements, the third is placed in the middle section which increases our control over the wheel and makes the wheel more resistant. The grinding surface remains free which makes the wheel more aggressive and ultra-resistant. We can work without almost any pressure, fast and easy with a high comfort level.

Graniflex Grinding-Master for Structural and Stainless Steel



Hardness: ●●●●●○
Life: ●●●●●●●●●●
Removal rate: ●●●●●●●●●●

Specification: 72A 24 S7 BF
Speed: 80 m/s
Type: 27

Applications:

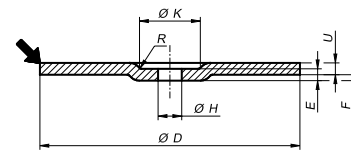
- Structural and tool steel
- High alloyed steel
- Hardened steel
- Stainless steel and corrosion sensitive materials

Suitable for:

- Angle and corner dressing
- Deburring
- Cleaning of harder welds
- Surface cleaning

Benefits:

- Premium performance
- Excellent comfort and handling
- Long lasting wheel
- Fast and easy work
- Minimal pressure
- Cool grinding



D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 6,5 x 22,23	45353	In stock	5998984453538	10
125 x 6,5 x 22,23	45349	In stock	5998984453491	10
150 x 6,5 x 22,23	45354	Custom order	5998984453545	10
180 x 6,5 x 22,23	45355	In stock	5998984453552	10
230 x 6,5 x 22,23	45356	In stock	5998984453569	10



Graniflex Grinding-Master for Structural and Alloyed Steel



Hardness: ●●●●●○
Life: ●●●●●●●●●●
Removal rate: ●●●●●○

Specification: 62A 24 S7 BF
Speed: 80 m/s
Type: 27

Applications:

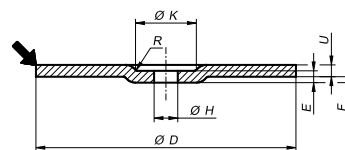
- Structural and tool steel
- Low alloyed steel
- Cast steel

Suitable for:

- Angle and corner dressing
- Deburring
- Cleaning of harder welds
- Surface cleaning

Benefits:

- Fast material removal
- Excellent comfort
- Easy handling
- Long lasting wheel
- Fast and easy work
- Minimal pressure



D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 6,5 x 22,23	45316	In stock	5998984453163	10
125 x 6,5 x 22,23	45317	In stock	5998984453170	10
150 x 6,5 x 22,23	45318	Custom order	5998984453187	10
180 x 6,5 x 22,23	45319	In stock	5998984453194	10
230 x 6,5 x 22,23	45320	Custom order	5998984453200	10

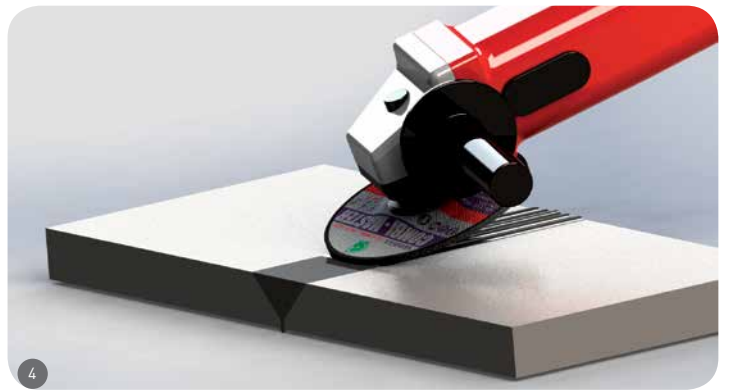
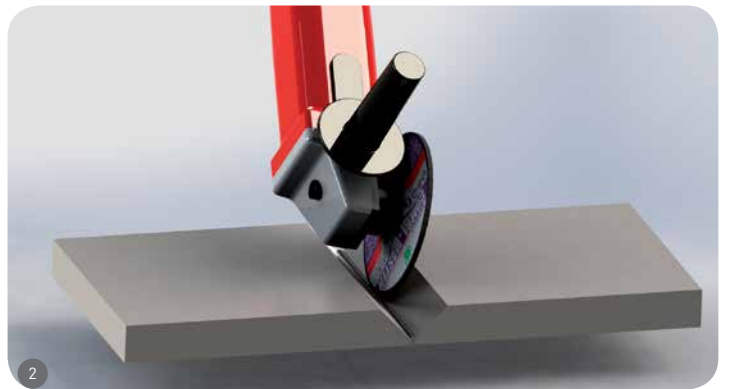
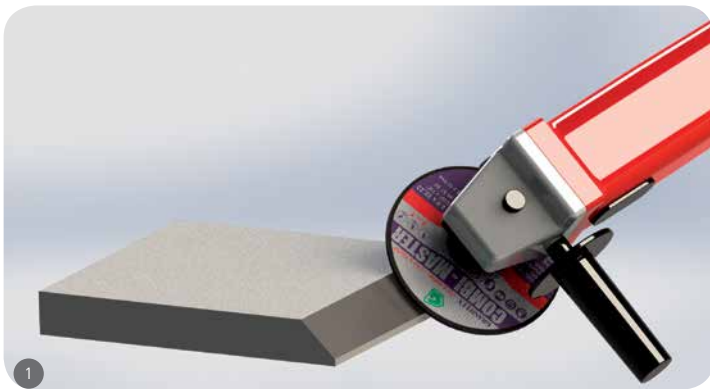


Graniflex Combi-Master

Premium Quality Cutting and Thin Grinding Discs

→ Almost completely eliminate downtime and maximize productivity!

Combi-Master is a perfect disc for solving multiple, complex tasks with one single high performance wheel. It can be used in three functions, cutting, notching and light grinding. The wheel has outstanding applicability and provides excellent flexibility by allowing us not to change the tool depending on the material or the grinding task. This is a good choice for work in the field. We recommend the wheels for those particular applications like the notching work phase of arc welding, intermittent light grinding or grinding in places which are difficult to get at.



How to use Combi-Master in welding phases?

1. Pre-arrangements for welding like beveling work and grooving, preparing the "V" shape.
2. Weld cleaning.
3. Grinding joint welds with minimal material loss.
4. Fine leveling of the finished welds.

→ One single wheel formulated for safety and wide range of operations with minimum material loss!

Graniflex Combi-Master for Structural and Alloyed Steel



Hardness: ●●●●●●●●
Life: ●●●●○○
Removal rate: ●●●●○○

Specification: 61A 46 S7 BF
Speed: 80 m/s
Type: 27

Applications:

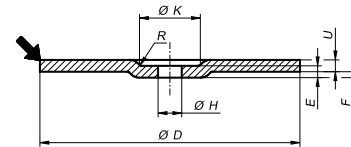
- Structural and tool steel
- Stainless steel and corrosion sensitive materials

Suitable for:

- Angle and corner dressing
- Grinding at hard to fit locations
- Notching
- Cutting

Benefits:

- Flexible work with no downtime
- Save time and material when grinding joint welds
- Long lasting formulation
- Finer finish
- High resistance and maximum safety



D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 3,5 x 22,23	40388	In stock	5998984403885	10
125 x 3,5 x 22,23	40389	In stock	5998984403892	10
180 x 3,5 x 22,23	40404	In stock	5998984404042	10
115 x 2,5 x 22,23	40497	Custom order	5998984404974	10
125 x 2,5 x 22,23	40455	Custom order	5998984404554	10



→ Did you know?

Using cutting disc for light grinding is a violation of safety rules and causes constant danger. The side load of these wheels is over the limits for grinding wheels, which are five-six times higher than the limits for cutting discs of the same diameter.

Graniflex Grinding Discs

→ Good price / performance ratio composite tool.

Graniflex product group is optimized for fulfilling industrial needs. It is recommended for general workshop applications. Good grinding ability and hard composition ensures an economic grinding solution.

Graniflex Grinding Disc for Structural Steel



Hardness: ●●●●●●●●
Life: ●●●●○○
Removal rate: ●●●●○○

Specification: 1A 30 S7 BF
Speed: 80 m/s
Type: 27

Applications:

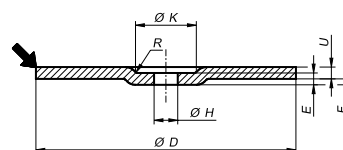
- Standard and structural steel

Suitable for:

- Angle and corner dressing
- Deburring
- Cleaning of welds
- Surface cleaning

Benefits:

- Hard composition
- Long life



D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 4,0 x 22,23	45003	In stock	5998984450032	10
115 x 6,0 x 22,23	45006	In stock	5998984450063	10
125 x 4,0 x 22,23	45011	In stock	5998984450117	10
125 x 6,0 x 22,23	45015	In stock	5998984450155	10
150 x 4,0 x 22,23	45018	Custom order	5998984450186	10
150 x 6,0 x 22,23	45021	In stock	5998984450216	10
150 x 8,0 x 22,23	45076	Custom order	5998984450766	10
180 x 4,0 x 22,23	45023	In stock	5998984450230	10
180 x 6,0 x 22,23	45027	In stock	5998984450278	10
180 x 8,0 x 22,23	45035	In stock	5998984450353	10
180 x 10,0 x 22,23	45037	Custom order	5998984450377	10
230 x 4,0 x 22,23	45040	In stock	5998984450407	10
230 x 6,0 x 22,23	45044	In stock	5998984450445	10
230 x 8,0 x 22,23	45047	Custom order	5998984450476	10
230 x 10,0 x 22,23	45050	Custom order	5998984450506	10



Graniflex Grinding Disc for Stones



Hardness: ●●●●●●●●
 Life: ●●●●●●●○
 Removal rate: ●●●●●○●○

Specification: 1C 30 R8 BF
 Speed: 80 m/s
 Type: 27

Applications:

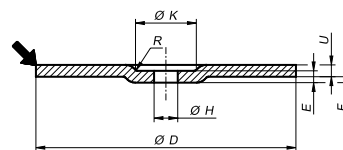
- Stones (natural and artificial stones, lime stone)
- Concrete
- Cast iron (GG - ductile iron)

Suitable for:

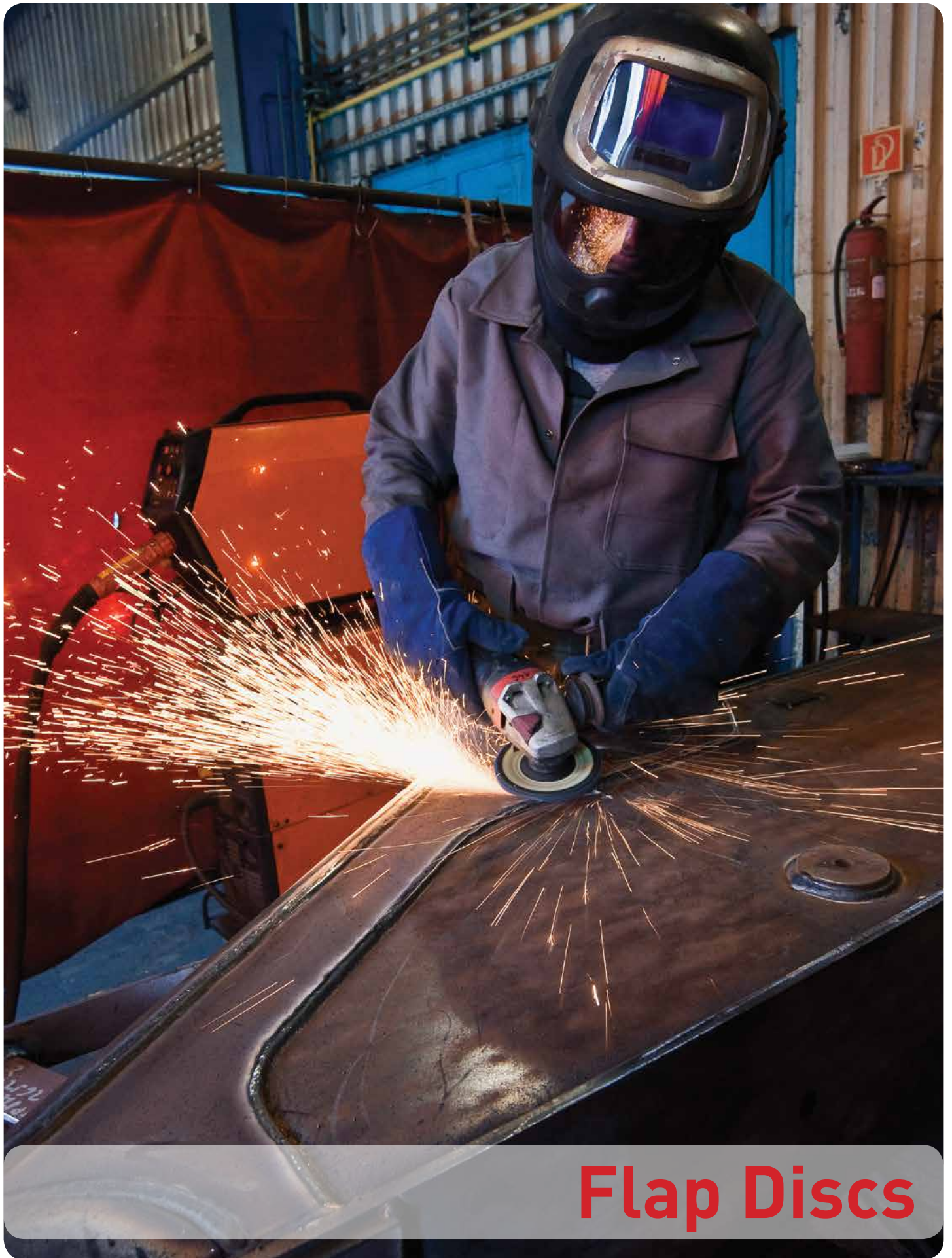
- Surface cleaning and grinding
- Cleaning of hard cast iron (GG)

Benefits:

- Long lasting
- High removal rate



D x T x H	Art. Nr.	Availability	Barcode	Icon
115 x 6,0 x 22,23	45008	In stock	5998984450087	10
125 x 6,0 x 22,23	45016	In stock	5998984450162	10
180 x 6,0 x 22,23	45030	Custom order	5998984450308	10
230 x 6,0 x 22,23	45045	Custom order	5998984450452	10



Flap Discs



Flap Discs

Meeting the challenges of the industry, the flap disc has become an important player in surface finishing applications. Compared to traditional tools the removal ability is enhanced, which helps to reduce the grinding and finishing cost. The vibration is minimal as the discs are light weight. The operators need to apply less effort while working and need to apply less pressure compared to using a grinding disc. The disc are constructed with aluminum oxide, zirconium and ceramic grain cloth, in flat and convex versions, both on glass fibre and plastic backing.



Geometrical range: 100-180mm diameter
 Grain size: P40-120
 Speed: 80 m/s
 Shape: flat and convex

Designation of grain:
A = aluminum oxide grain (brown)
Z = zirconium grain (blue)
CT = top coated ceramic grain (red)

Material with aluminum oxide grain cloth

- Standard and structural steel
- Wood

Material with zirconium grain cloth

- Structural and tool steel
- Stainless steel
- Cast materials

Material with ceramic grain cloth

- Stainless and corrosion sensitive materials
- High alloyed steel
- Hardened steel

Suitable for:

- surface cleaning
- deburring
- angle dressing
- weld cleaning
- surface leveling

Graniflap Premium Quality Flap Discs

→ Reduce your finishing cost with high stock removal discs!

Graniflap discs are high removal rate, aggressive discs, which guarantee fast and easy work, with consistent performance through the life of the disc. The product line includes discs with aluminum oxide, zirconium and ceramic grain cloth.

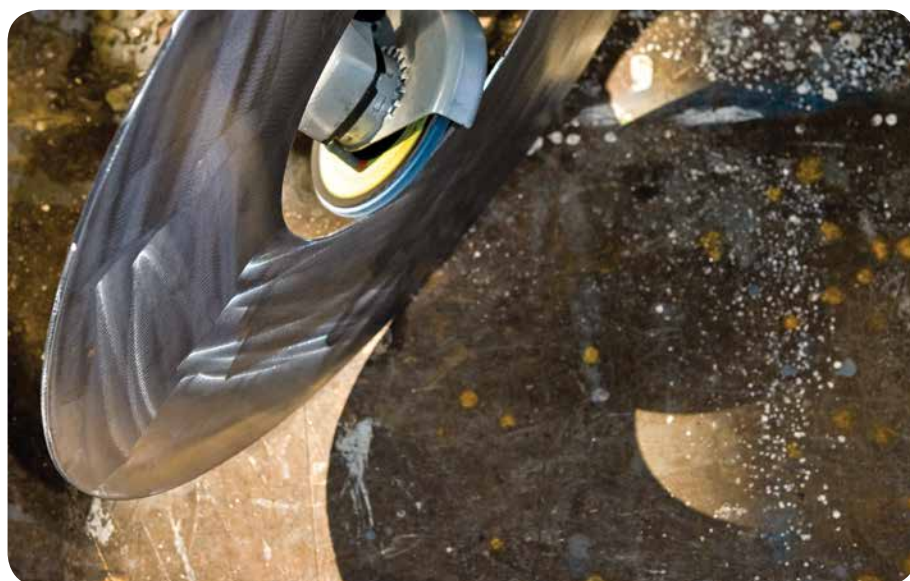
Benefits

- High stock removal rate
- Aggressive removal
- Long lasting
- Fast and comfortable work
- Low vibration
- Lightweight

Graniflap Flap Discs with Ceramic Grain



D	Grain Type / Size	Shape	Art. Nr.	Availability	Barcode	Quantity
115	CT 40	Convex	57606	Custom order	5998984576060	10
115	CT 60	Convex	57608	Custom order	5998984576084	10
125	CT 40	Convex	57609	Custom order	5998984576091	10
125	CT 60	Convex	57611	Custom order	5998984576114	10



Graniflap Flap Discs with Zirconium Grain



D	Grain Type / Size	Shape	Art. Nr.	Availability		
115	Z 40	Convex	57013	In stock	5998984570136	10
115	Z 60	Convex	57014	In stock	5998984570143	10
115	Z 80	Convex	57015	Custom order	5998984570150	10
125	Z 40	Convex	57017	In stock	5998984570174	10
125	Z 60	Convex	57018	In stock	5998984570181	10
125	Z 80	Convex	57019	Custom order	5998984570198	10
150	Z 40	Convex	57029	Custom order	5998984570297	10
150	Z 60	Convex	57030	Custom order	5998984570303	10
150	Z 80	Convex	57031	Custom order	5998984570310	10
150	Z 120	Convex	57032	Custom order	5998984570327	10
180	Z 40	Convex	57021	Custom order	5998984570211	10
180	Z 60	Convex	57022	Custom order	5998984570228	10
180	Z 80	Convex	57023	Custom order	5998984570235	10

Graniflap Flap Discs with Aluminum Oxide Grain



D	Grain Type / Size	Shape	Art. Nr.	Availability		
115	A 40	Convex	57001	In stock	5998984570013	10
115	A 60	Convex	57002	In stock	5998984570020	10
115	A 80	Convex	57003	In stock	5998984570037	10
125	A 40	Convex	57005	In stock	5998984570051	10
125	A 60	Convex	57006	In stock	5998984570068	10
125	A 80	Convex	57007	In stock	5998984570075	10
150	A 40	Convex	57025	Custom order	5998984570259	10
150	A 60	Convex	57026	Custom order	5998984570266	10
150	A 80	Convex	57027	Custom order	5998984570273	10
150	A 120	Convex	57028	Custom order	5998984570280	10
180	A 40	Convex	57009	Custom order	5998984570099	10
180	A 60	Convex	57010	Custom order	5998984570105	10
180	A 80	Convex	57011	Custom order	5998984570112	10

Granit Economy Flap Discs

→ Good price / performance ratio disc for finishing!

Granit Economy flap disc is the economical solution with a good price / performance ratio. Recommended for general workshop tasks. The product line includes discs with aluminum oxide, zirconium grain cloth.

Benefits

- Good price / performance ratio
- Easy and quiet work
- Long lasting
- Lightweight

Granit Economy Flap Discs with Zirconium Grain




D	Grain Type / Size	Shape	Art. Nr.	Availability	Barcode	Icon
115	Z 40	Convex	57082	In stock	5998984570822	10
115	Z 60	Convex	57083	In stock	5998984570839	10
115	Z 80	Convex	57086	In stock	5998984570860	10
115	Z 100	Convex	57091	Custom order	5998984570914	10
115	Z 120	Convex	57088	Custom order	5998984570884	10
125	Z 40	Convex	57084	In stock	5998984570846	10
125	Z 60	Convex	57085	In stock	5998984570853	10
125	Z 80	Convex	57087	In stock	5998984570877	10
125	Z 100	Convex	57092	Custom order	5998984570921	10
125	Z 120	Convex	57500	Custom order	5998984575001	10
125	Z 40	Flat	57612	Custom order	5998984576121	10
125	Z 60	Flat	57613	Custom order	5998984576138	10
125	Z 80	Flat	57614	Custom order	5998984576145	10
180	Z 40	Convex	57510	In stock	5998984575100	10
180	Z 60	Convex	57511	In stock	5998984575117	10
180	Z 80	Convex	57512	Custom order	5998984575124	10
180	Z 40	Flat	57513	Custom order	5998984575131	10
180	Z 60	Flat	57514	Custom order	5998984575148	10
180	Z 80	Flat	57515	Custom order	5998984575155	10



Granit Economy Flap Discs with Aluminum Oxide Grain



D	Grain Type / Size	Shape	Art. Nr.	Availability		
115	A 40	Convex	57076	In stock	5998984570761	10
115	A 60	Convex	57077	In stock	5998984570778	10
115	A 80	Convex	57080	In stock	5998984570808	10
115	A 100	Convex	57089	Custom order	5998984570891	10
115	A 120	Convex	57502	Custom order	5998984575025	10
125	A 40	Convex	57078	In stock	5998984570785	10
125	A 60	Convex	57079	In stock	5998984570792	10
125	A 80	Convex	57081	In stock	5998984570815	10
125	A 100	Convex	57090	Custom order	5998984570907	10
125	A 120	Convex	57501	Custom order	5998984575018	10

→ Recommendations

The convex form is used for working on both inaccessible locations and for surface grinding. Work with the convex flap discs in 15-30° angle, the flat discs working angle is lower as 0-15°. Cool grinding will be achieved with smaller contact surface, demanding lower pressure. For grinding wood, use larger grit sizes with lower RPM.

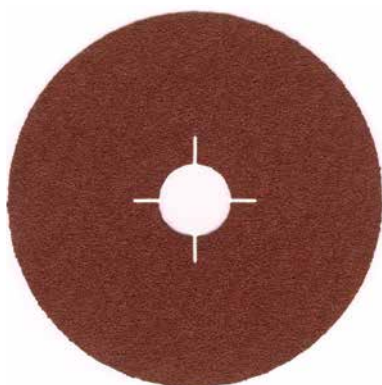
→ For a version with plastic backing please ask for our special offer! We can also provide other grain sizes, 100 mm or 150 mm diameter versions. Note: there is a minimum order size.



Coated Abrasives

→ Coated abrasive tools for general metal fabrication!

Fibre Disc



Specification: aluminum oxide grain in resin bond (brown)
Hole pattern: cross shaped hole
Speed: 80 m/s

Applications:


- Universal application

Suitable for:

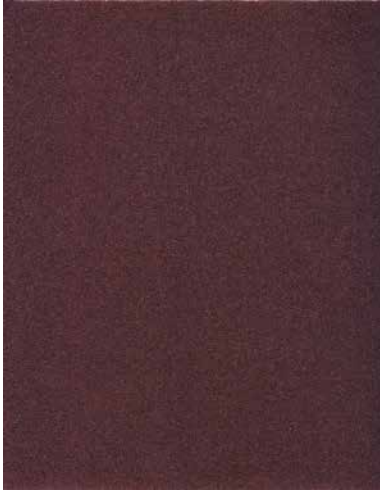
- For general purpose in workshops
- Light weld removal
- Removing the rust
- Surface cleaning
- Surface leveling
- Removing old lacquer coat

Benefits:

- Smooth surface finish
- Fast removal rate
- Easy and fast work
- Long lasting

D	Grain Size	Art. Nr.	
115	36	50310	25
115	40	50143	25
115	60	50144	25
115	80	50690	25
115	100	50141	25
115	120	50142	25
125	36	50720	25
125	40	50147	25
125	60	50148	25
125	80	50149	25
125	100	50680	25
125	120	50683	25

Cloth Sheets



Specification: aluminum oxide grain in resin bond (brown), on cotton cloth
Coating: close

Applications:



- Universal application
- Ferrous and non-ferrous materials

Suitable for:

- For general purpose in workshops
- Tarnish removal
- Grinding of ferrous and non-ferrous materials

Benefits:

- Multiple uses
- Smooth surface finish

Size	Grain size	Art. Nr.		Size	Grain size	Art. Nr.	
A3	40	50289	50	A4	40	50271	50
A3	50	50288	50	A4	60	50276	50
A3	60	50291	50	A4	80	50280	50
A3	80	50292	50	A4	100	50265	50
A3	100	50284	50	A4	120	50266	50
A3	120	50285	50	A4	150	50267	50
A3	150	50286	50	A4	180	50268	50
A3	180	50287	50				

Velcro Disc



Specification: aluminum oxide grain in resin bond (brown), on strong paper carrier
Coating: close
Speed: 80 m/s

Applications:



- Universal application

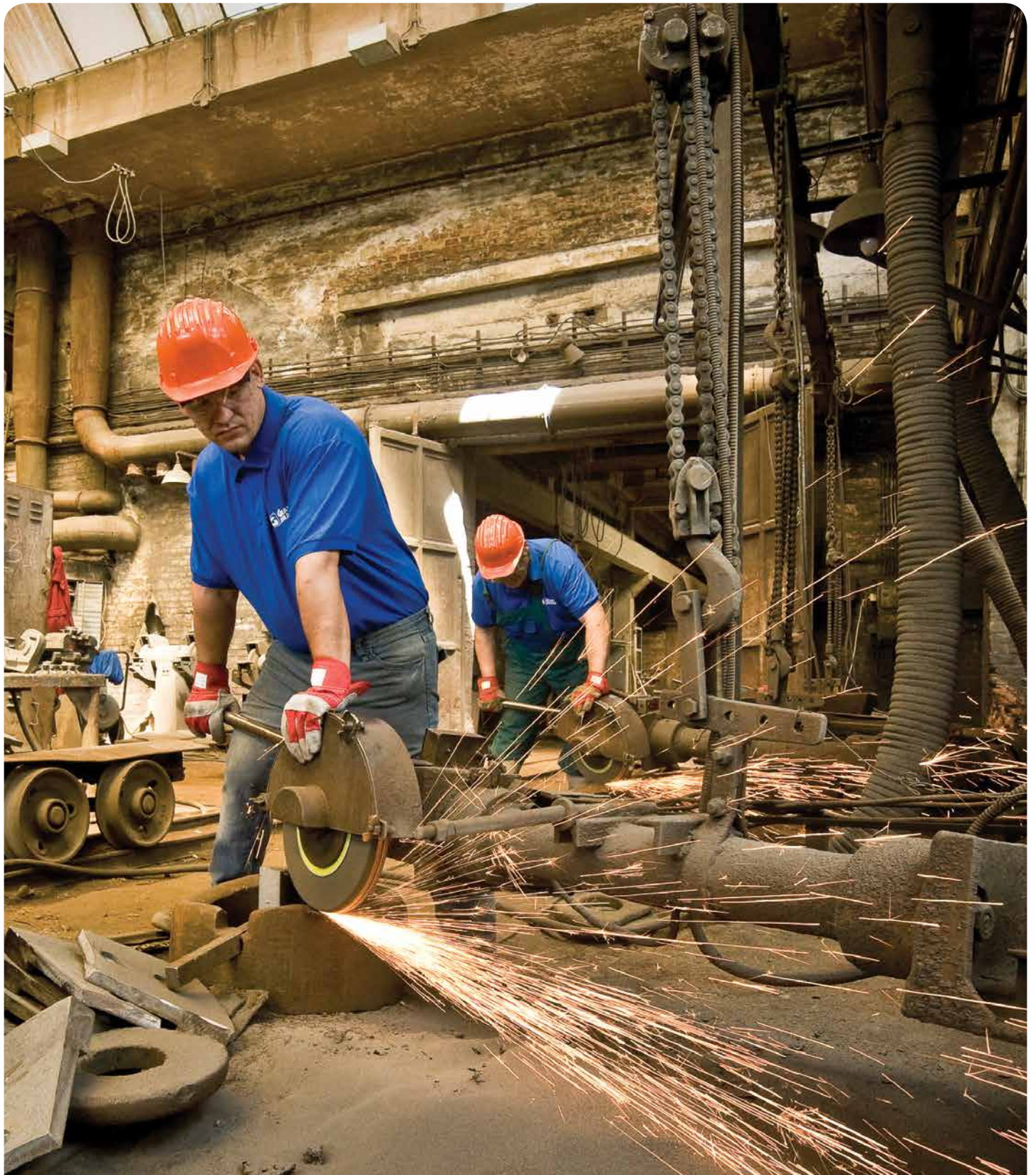
Suitable for:

- Grinding of ferrous and non-ferrous materials
- Light weld removal
- Rust removal
- Surface leveling
- Removing old lacquer coat

Benefits:

- High removal rate
- Smooth surface finish

D	Grain size	Art. Nr.		D	Grain size	Art. Nr.	
115	40	50192	50	125	40	50212	50
115	60	50194	50	125	60	50229	50
115	80	50195	50	125	80	50233	50
115	100	50193	50	125	100	50221	50
				125	120	50222	50



**Vitrified and resinoid
bonded grinding wheels**

Specification System – Bonded Abrasive Products

- **Type:** e.g. 1, 6, 11, 12, 3101, 35
The drawing belongs to each type listed and is located next to the product in the particular section.
- **Size:** The main parameters of type 1: diameter x thickness x bore (mm)

Type	Dimensions	Abrasive type	Grit size, combination of different grits	Hardness grade	Structure	Bond nature	Type of bond	Maximum operating speed
↓	↓	↓	↓	↓	↓	↓	↓	↓
1	175 x 20 x 32	67A	462	K	8	V	31	40 m/s

TYPE	FULL NAME	A B R A S I V E G R A I N	
		CHARACTERISTICS	TYPICAL APPLICATION
1 A	Regular Aluminium Oxide	hard, tough grain (brown, grey)	For grinding plain and low alloyed steel, grey and chilled cast iron.
2 A	Microcrystalline Aluminium Oxide	white, pale	For grinding high-speed steel, medium and high alloyed tool steel, chromium hardened surfaces, heat and corrosion resistant steel. General tool grinding.
3 A	Alumina Zirconia	grey	For rough grinding of cast iron.
6 A	White Aluminium Oxide	hard, rigid, brittle (white)	For grinding unalloyed and alloyed, hardened and unhardened structural and tool steel, heat and corrosion resistant steel, rubber, glass.
7 A	Pink aluminium oxide	hard, tougher and less brittle than 6A	For grinding middle and high alloyed, hardened and unhardened structural and tool steel, heat and corrosion resistant steel.
9 A	Monocrystalline Aluminium Oxide	hard, though (light grey, slightly pink)	For grinding high speed steel, high alloyed steel, hardened steel, chromium hardened surfaces, heat and corrosion resistant steel.
16 A	Mixed Aluminium Oxide	1A + 6A (greyish)	For grinding plain and low alloyed steel, hardened and unhardened structural and tool steel.
67 A	Mixed Aluminium Oxide	6A + 7A	Application are the same as for 7A.
1 C	Black Silicon Carbide	hard, rigid, brittle	For grinding hard metal, cast iron, non-ferrous metals, aluminum, natural and artificial stones, ceramics, glasses.
2 C	Green Silicon Carbide	hard, rigid, brittle	Grinding of hard metal, technical ceramics, glass.



General labeling system for Grinding Wheels

Grit Size

The finer the grains, the larger the grit size number. The grit size can be supplemented with an additional number to indicate grit combinations.

16, 20, 22, 24	30, 36, 40, 46, 54, 60	70, 80, 90, 100, 120, 150
Coarse	Medium	Fine
Coarse grit size is recommended:	Medium grit size is recommended:	Fine grit size is recommended:
<ul style="list-style-type: none"> • soft materials like aluminum, rubber etc. • for rough grinding, fettling • for large contact surfaces 	<ul style="list-style-type: none"> • for external cylindrical grinding and centerless grinding • for surface grinding 	<ul style="list-style-type: none"> • fine processing operations • for reaching finer surface roughness • in case of small contact surface

Hardness grade

The hardness grade of abrasive tools characterizes how strongly both the grain and the bond resist the forces causing the breakage of the grain from the tools during the grinding process. Harder metals are normally ground with softer hardness grade tools.

E, F, G	H, I, J, K	L, M, N, O	P, Q, R, S
Very soft	Soft	Medium	Hard
Very soft grade is recommended:		Harder grade is recommended:	
<ul style="list-style-type: none"> • for harder materials 		<ul style="list-style-type: none"> • for softer materials • in case of small contact surface 	

Structure

The structure of abrasive tools depends on the volumetric ratio of abrasive grain, bond and pores. The pores create room for the chips and can help the removal of the chips from the work surface, can enhance the cooling and the flushing of the tool and the work piece.

3, 4	5, 6, 7, 8	9, 10	11, 12, 13
Closed	Medium	Open	Very open
Closed structure is recommended:	Medium structure is recommended:	Open structure is recommended:	
<ul style="list-style-type: none"> • for profile grinding • for cast cleaning 	<ul style="list-style-type: none"> • for general processing • for tool sharpening 	<ul style="list-style-type: none"> • for soft, low resistance material which are difficult to process • for heat sensitive material • for soft materials like rubber, plastic etc. • for surface grinding 	

Bonding

V	B	BF
Vitrified bonded	Resinoid bonded	Glass fibre reinforced resinoid bonded

The vitrified bonded wheels are resistant to chemical effects and can be stored for an unlimited period of time. The resinoid bonded wheels are more flexible and better for dynamic, forceful usage. Glass fibre reinforcement can further increase the resistance of the wheel to dynamic forces.

Type of Bond

Eg: 31, 32, 36, 38, 61, etc.

The last digit is an internal designation of the manufacturing company. Figure "8" for example reflects the red color of the bonding.

Color code definitions

The diagonal color strip on the wheel.

Color	Maximum operating speed
blue	50 m/s
yellow	63 m/s
red	80 m/s
green	100 m/s

General Recommendation for Grinding Tool Selection

- The data in the recommendation table is only for general information.
We provide only the most general solution and should not be considered as specific technological advice.
- Please do not hesitate to consult our experts who are ready to help you find the most suitable solution for your grinding tasks.

MATERIAL TYPE TO BE GROUND		SURFACE GRINDING			EXTERNAL CYLINDRICAL GRINDING		OFF-HAND GRINDING	INTERNAL GRINDING	
		Horizontal spindle machine	Vertical spindle machine		Between centers		Centerless	On bench grinders	
		Straight and recessed grinding wheel	Cup wheel and cylinder wheel	Segment	Standard	Crankshaft and camshaft	Through feed and infeed grinding	Fettling, deburring, form grinding	Grinding wheel diameter: 80-150 mm
Plain and low alloyed construction and tool steel	normal	16A 36-54 J-K 8 V 6A 46-60 J 8 V	16A 36-54 J-K 8 V 6A 46-60 J 8 V	6A 36-54 H 8 V 6A 30-54 J-H 8 V	16A 40-60 M-N 8 V		16A 54-60 M-N 8 V 6A 54-60 M-N 8 V	1A-6A 24-36 P-Q 3-5 V 1A 54 N 8 V 6A 60 M 8 V	6A-16A 46 M 8 V 7A 46 K 8 V
	hardened	6A 36-60 H-J 8 V 96A 46 G 12 V	6A 36-60 H-J 8 V	6A 30-54 H-J 8-10 V	6A 46-60 K-M 8 V 6A 80-100 J-K 8 V		6A 60-80 K-M 8 V 96A 60 K-L 8 V	6A 36 P 5 V 6A 46-60 M 8 V	6A-7A 60 K-L 8 V
Medium and high alloyed tool steel, HSS	normal	67A 36-60 J-K 8 V 9A 46-80 K 8-10 V	67A 36-60 J-K 8 V	67A 36-54 H 8 V	6A 46-54 L-M 8 V		16A 54-60 M-N 8 V 6A 54-60 M 8 V	6A 36 P 5 V 6A 46-60 M-N 8 V	6A 46-60 K 8 V
	hardened	6A 36-60 H-J 8 V 9A 46-80 H 8-10 V 96A 46 G 12 V	6A 36-60 H-J 8 V 96A 46 H-K 10 V	6A 36-54 H 8 V	6A 46-60 J-K 8 V 917A 60-100 J-K 8 V 9A 46-80 J-K 8-10 V		6A 60-80 K-L 8 V 917A 60-100 J-L 8 V	6A 36-60 L-N 8 V	6A 54-60 J 8 V 6A-7A-9A 46 H 8-10 V
Plain and low alloyed forged steel	normal					6A-16A 46 N 5 V			
	hardened					16A 60 K 8 V 6A 60 M 8 V			
Nitrided steel		1C 60 J 8 V	1C 60 J 8 V		1C 60 J 8 V 2C 120 J V				6A 54 J 8 V 1C 60 J-K 8 V
Heat resistant and stainless steel	normal	67A 36-54 J-K 8 V	67A 36-54 J-K 8 V	67A 36-46 H 8 V	67A 46-60 K-L 8 V 2C 60-80 J-K 8 V		67A 60 L-M 8 V 1C 60 L-M 5 V	6A 36-54 M-N 8 V 1C 36-46 M 5-8 V 1C 60 K 8 V	
	hardened	67A 54 H 8 V 97A 46 H-J 8-10 V	67A 54 H 8 V	67A 46-54 H 8 V	67A 46-80 J-K 8 V 7A 46-60 J-K 8 V 2C 46-100 J-L 8 V		67A 60 K-L 8 V 96A 60 J-K 8 V 1C 60 L 5 V 97A 60-80 K 8-10 V 2C 60 K-M 8 V		
Chromium hardened surfaces		67A 46-54 H-J 8 V 6A 120 H 8 V	67A 46-54 H-J 8 V 6A 120 H 8 V	67A 54 H 8 V 6A 120 H 8 V	67A 54-100 J-K 8 V 2C 46-100 J-L 8 V				6A 80 I-K 8 V
Tough, wear resistant layered surfaces	HRC: 51-60	67A 46-60 J-K 8 V	67A 46-60 H-I 8 V	67A 46-60 H-I 8 V	6A 46-60 K-M 8 V 2C 46-54 J- L 8 V			6A 36 P 5 V 6A 46-60 M 8 V	6A 80 J-K 8 V
	HRC > 60	2C 46-60 H 8 V 96A 60 J 8 V	1C 60 G-H 8 V 96A 60-80 G-H 8 V	1C 60 G-H 8 V 96A 60 G 8 V	96A 60-80 J-K 8 V 2C 46-60 I-J 8 V			1C 36-46 M 8 V 1C 60 K 8 V	2C 60-80 J-K 8 V
Hard metal		2C 46-80 J-K 8 V	2C 46-60 H-J 8 V	2C 46-60 G-H 8 V	1C 46 K 8 V 2C 60-80 J 8 V		2C 60 J 8 V	1C 36-46 M 8 V 1C 60 K 8 V	2C 60-80 J-K 8 V
Cast			16A 36 J 8 V 6A 54-60 I-J 8 V	16A 36 H 8 V 6A 30-60 G-H 8 V	16A 36 P 5 V 16A 54 M 8 V	16A 46 N 5 V 6A 60 M 5 V	16A 46-54 M-N 8 V 6A 60 M 8 V	16A 24 R 3 V 16A 36 P 5 V 16A 54 N 8 V	6A 46 L 8 V
Gray and hard cast iron		6A 36 K 8 V 1C 36-54 J-K 8 V	6A 36 H 8 V 1C 36-54 I-J 8 V	6A 30-60 G-H 8 V 1C 36-54 I 8 V	16A 36 P 5 V 16A 54 M 8 V 1C 46-54 K-M 8 V		16A 46-54 M-N 8 V 6A 60 M 8 V 1C 46-54 L-M 8 V	16A 24-36 P-R 3-5 V 16A 46-60 N 8 V 1C 24-36 P-R 5 V 1C 46-60 M 8 V	
Light and colored metals		1C 46-60 J-K 8 V	1C 46-54 I- 8 V	1C 36-54 H-I 8 V	1C 46-60 J-K 8 V		1C 46-60 K-L 8 V	1C 36-54 K-M 8 V	1C 36 J 8 V
Hard bronze		1C 36-46 J-K 8 V	1C 46 J 8 V	1C 36-46 J 8 V	6A 60 J 8 V 96A 60 J 8 V		6A 60 L 8 V		
Plastic, rubber, hard rubber		6A 46 H 10 V 1C 46-54 I-J 8 V	6A 46 H 10 V 1C 46-54 I-J 8 V	6A 36-46 H 10 V 1C 46 I 8 V	6A 46-60 J-K 8 V 1C 46-60 J-K 8 V 6A 46 I 12 V		1C 46-60 K 8 V	1C 36-54 K-M 8 V	1C 36 I 8 V
Technical ceramics (green state)		1C 46-54 J 8 V 2C 120 I 8 V	1C 46-54 J 8 V 2C 120 I 8 V	1C 36-54 J 8 V 2C 120 I 8 V	1C 46-60 K-L 8 V 2C 120 J 8 V		1C 60 K 8 V 2C 100 J 8 V	1C 24 P 5 V 1C 36-46 M 8 V 1C 60 K 8 V	

General Recommendation for Grinding Tool Selection

→ The data in the table provides help only for the initial sorting.

TOOL GRINDING

Material to be ground	Manual grinding		Mechanical tool grinding		
	Straight grinding wheel	Straight and taper cup wheel	Straight grinding wheel	Straight and taper cup wheel	Dish wheel
Normal tool steel	1A 36 P 5 V 6A 46-60 M-N 8 V 6A 80 K 8 V	6A 46 K 8 V			
Hardened tool steel and high-speed steel (SS, HSS)	6A 46 M 8 V 6A 60-80 K 8 V 6A 80-100 J-K 8 V	6A 80 J 8 V 2C 46-80 J 8 V	6A 46-60 K 8 V 6A 60-120 J 8 V 9A 80 K 10 V	6A 46-80 H 8 V 6A 60 -100 J 8 V	6A 46 H 8 V 6A 60 J-K 8 V 6A 100-120 I-J 8 V
Hard metal and hard metal inserts	1C 46 K 5 V 1C 60 K 5 V 2C 60-80 J 8 V		2C 60-80 K-J 8 V 2C 100 I 8 V	2C 60 J-K 8 2C 80-120-J 8 V	2C 60-80 J 8 V 2C 80 I 8 V

SAW SHARPENING

Material to be ground	Type of machine	Thickness of the wheels	
		2-5 mm	6-13 mm
Low alloyed and normal tool steel	Wood work, belt and circular saws	6A 100 N 5 V 6A 90 P 5 V 6A 80 N 5 V	6A 90 P 5 V 6A 80 N 8 V 6A 60 M 8 V 6A/7A 60 N 8 V
High alloyed tool steel	Gang saws	6A 80 N 5 V	6A 60 M 8 V 6A/7A 60 N 8 V
High-speed steel (HSS, SS)	Circular saws for metal working	6A 100 N 5 V 7A 80 M-P 5 V 97A 802 Ó 8 V	6A 80 N 5 V 7A 80 O 5 V 6A/7A 60 N 8 V
Stellite	Circular saw	9A 60 P 8 B	9A 60 P 8 B





Vitrified bonded grinding wheels

Vitrified wheels are brittle, fragile tools. They require special care during transport and handling. Upon receipt and before mounting, please always check the product. Never use a broken or damaged wheel. The product range available from stock is selected to comply with the most typical applications in the workshops to achieve a good grinding surface.

Resinoid bonded grinding wheels

The resinoid bonded grinding wheels are more flexible than the vitrified bonded wheels due to the characteristics of the bond. They are more resistant to dynamic stress. These tools are mostly used for rough grinding (for example fettling, cast cleaning), but also provide superior performance in specialized applications. We provide and develop a broad range of resinoid bonded wheels based on the grinding need of our clients and their specific product request.

How to choose the right tool for your grinding task?

It is advisable to first try a softer grinding wheel, as you do not risk overheating the work piece, but the wear on the grinding wheel may be greater than the optimal rate. For grinding soft materials the use of rougher grain size and harder bonded grinding wheel is advisable, whereas for hard materials the finer grain size and softer bonded grinding wheel is recommended. Better grinding performance might be achievable for softer grinding wheels by increasing the peripheral speed of the wheel

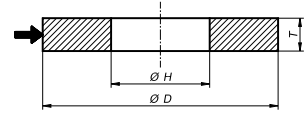
up to the maximum speed allowed by the manufacturer. For any specific grinding task, the specification of the grinding tools should be revised and might be modified compared to the above recommendation after exact assessment of the actual grinding technology, the work piece, type of grinding machine etc.

→ Please do not hesitate to consult our experts, who are ready to help you find the most suitable solution for your grinding task!

Straight Vitrified Bonded Grinding Wheels

→ Wheels with larger operating speed may be custom ordered!

Maximum operating speed for manually guided grinding is 35m/s, for mechanically guided grinding is 40m/s. !
Type: 1



Suitable for:

- Peripheral grinding
- Surface grinding
- General workshop application: snagging, burr cleaning, shaping

→ All of our grinding wheels available from inventory can be ordered in recessed or profiled version at an additional charge. Delivery time, including the re-shaping a straight wheel, is 2 weeks from the receipt of your order.



6A is white corundum, in red bonding (V38).

This type of grain is mainly used for processing general tool steels. White aluminum oxide grain is hard, rigid and brittle grain with excellent re-sharpening ability.



6A... V31 indicates white corundum in white bonding.

In soft bonding it is commonly used for fabricating operations of the harder materials or hard to process materials. In harder bonding it is widely used for processing of softer materials. Easy to dress.



1C, black silicon carbide wheels are hard, rigid and easy broken. Recommended for processing hard metal.



2C, green silicon carbide wheels are harder and more rigid than the 1C wheels. Due to the cleaner grain these quality wheels are characterized by higher removal rate.

Straight Grinding Wheel

Type	D x T x H	Reducer bushing	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
1	100 x 20 x 20	—	10029	6A	60	M	8	V 38	5998984100296
1	125 x 16 x 12,7	—	10097	6A	60	M	8	V 38	5998984100975
1	125 x 20 x 32	32/25/20	10108	6A	60	M	8	V 38	5998984101088
1	150 x 20 x 20	—	10290	6A	60	M	8	V 38	5998984102900
1	150 x 20 x 20	—	16911	6A	46	M	8	V 31	5998984169118
1	150 x 20 x 32	32/25/20	10297	6A	60	M	8	V 38	5998984102979
1	175 x 20 x 20	—	10511	6A	46	M	8	V 38	5998984105116
1	175 x 20 x 20	—	10515	6A	60	M	8	V 38	5998984105154
1	175 x 20 x 32	32/25/20	10530	6A	60	K	8	V 38	5998984105307
1	175 x 20 x 32	32/25/20	10531	6A	46	M	8	V 38	5998984105314
1	175 x 20 x 32	32/25/20	10532	6A	60	M	8	V 38	5998984105321
1	175 x 20 x 32	32/25/20	10545	6A	60	M	8	V 31	5998984105451
1	175 x 25 x 32	32/25/20	10560	6A	60	M	8	V 38	5998984105604
1	200 x 20 x 20	—	10682	6A	60	M	8	V 31	5998984106823
1	200 x 20 x 20	—	10685	6A	60	M	8	V 38	5998984106854
1	200 x 20 x 32	—	10709	6A	60	M	8	V 38	5998984107097
1	200 x 20 x 50,8	—	10727	6A	60	M	8	V 38	5998984107271
1	200 x 20 x 20	—	15195	6A	46	M	8	V 31	5998984151953
1	200 x 25 x 32	—	10744	6A	60	M	8	V 38	5998984107448
1	200 x 32 x 32	—	10758	6A	60	M	8	V 38	5998984107585
1	250 x 20 x 32	32/25/20	10884	6A	60	M	8	V 38	5998984108841
1	250 x 20 x 76,2	—	10920	6A	60	M	8	V 38	5998984109206
1	250 x 20 x 76,2	—	13749	6A	46	J	8	V 31	5998984137490
1	250 x 25 x 32	32/25/20	10933	6A	60	M	8	V 38	5998984109336
1	250 x 25 x 76,2	—	10965	6A	60	M	8	V 38	5998984109657
1	250 x 25 x 76,2	—	10966	6A	46	K	8	V 38	5998984109664
1	250 x 32 x 32	—	10987	6A	60	M	8	V 38	5998984109879
1	250 x 32 x 76,2	—	11009	6A	46	K	8	V 38	5998984110097
1	250 x 32 x 76,2	—	11010	6A	60	M	8	V 38	5998984110103
1	250 x 32 x 76,2	—	11011	6A	60	K	8	V 38	5998984110110
1	250 x 32 x 76,2	—	12352	6A	46	M	8	V 31	5998984123523
1	250 x 32 x 76,2	—	13830	6A	60	M	8	V 31	5998984138305
1	250 x 40 x 76,2	—	11021	6A	60	M	8	V 31	5998984110219
1	250 x 40 x 76,2	—	16907	6A	46	M	8	V 31	5998984169071
1	300 x 32 x 32	—	11129	6A	60	M	8	V 31	5998984111292
1	300 x 32 x 32	—	11133	6A	46	M	8	V 38	5998984111339
1	300 x 32 x 32	—	11134	6A	60	M	8	V 38	5998984111346
1	300 x 32 x 127	—	11165	6A	60	M	8	V 38	5998984111650
1	300 x 32 x 32	—	13242	6A	46	M	8	V 31	5998984132426
1	300 x 40 x 40	—	11182	6A	60	M	8	V 38	5998984111827
1	300 x 40 x 76,2	—	11199	6A	60	M	8	V 38	5998984111995
1	300 x 40 x 127	—	11213	6A	60	M	8	V 38	5998984112138
1	350 x 32 x 32	—	11349	6A	60	M	8	V 38	5998984113494
1	350 x 32 x 127	—	11366	6A	60	M	8	V 38	5998984113661
1	350 x 40 x 40	—	11395	6A	46	M	8	V 38	5998984113951
1	350 x 40 x 40	—	11396	6A	60	M	8	V 38	5998984113968
1	350 x 40 x 50,8	—	11403	6A	60	M	8	V 38	5998984114033
1	350 x 40 x 127	—	11449	6A	36	M	8	V 31	5998984114491
1	350 x 40 x 127	—	11456	6A	46	M	8	V 31	5998984114569
1	350 x 40 x 127	—	11469	6A	60	M	8	V 31	5998984114699

Straight Grinding Wheel

Type	D x T x H	Reducer bushing	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
1	350 x 40 x 127	—	11480	6A	46	K	8	V 38	5998984114804
1	350 x 40 x 127	—	11483	6A	60	K	8	V 38	5998984114835
1	350 x 40 x 127	—	11484	6A	60	M	8	V 38	5998984114842
1	350 x 40 x 127	—	11485	6A	46	M	8	V 38	5998984114859
1	350 x 40 x 127	—	11495	7A	60	M	8	V 31	5998984114958
1	350 x 50 x 50,8	—	11508	6A	60	M	8	V 38	5998984115085
1	350 x 50 x 127	—	11557	6A	60	M	8	V 38	5998984115573
1	350 x 50 x 127	—	11558	6A	46	M	8	V 38	5998984115580
1	350 x 63 x 127	—	11590	6A	60	M	8	V 38	5998984115900
1	400 x 40 x 40	—	11682	6A	60	M	8	V 38	5998984116822
1	400 x 40 x 127	—	11701	6A	60	M	8	V 31	5998984117010
1	400 x 40 x 127	—	11718	6A	60	M	8	V 38	5998984117188
1	400 x 40 x 127	—	16908	6A	46	M	8	V 31	5998984169088
1	400 x 50 x 50,8	—	11742	6A	60	M	8	V 38	5998984117423
1	400 x 50 x 127	—	11766	6A	60	M	8	V 31	5998984117669
1	400 x 50 x 127	—	11774	6A	60	M	8	V 38	5998984117744
1	400 x 50 x 127	—	16909	6A	46	M	8	V 31	5998984169095
1	400 x 63 x 127	—	11815	6A	60	M	8	V 38	5998984118154
1	450 x 63 x 203,2	—	11887	6A	60	M	8	V 38	5998984118871
1	500 x 50 x 50,8	—	11949	6A	60	M	8	V 38	5998984119496
1	500 x 50 x 127	—	11957	6A	46	M	8	V 38	5998984119571
1	500 x 50 x 127	—	11958	6A	60	M	8	V 38	5998984119588
1	500 x 50 x 203,2	—	11964	6A	60	M	8	V 38	5998984119649
1	500 x 50 x 203,2	—	14932	6A	60	M	8	V 31	5998984149325
1	500 x 50 x 203,2	—	16912	6A	46	M	8	V 31	5998984169125
1	500 x 63 x 127	—	11979	6A	60	M	8	V 38	5998984119793
1	500 x 63 x 203,2	—	11990	6A	60	M	8	V 38	5998984119908
1	500 x 63 x 203,2	—	14564	6A	46	M	8	V 31	5998984145648
1	500 x 63 x 203,2	—	16910	6A	60	M	8	V 31	5998984169101
1	500 x 80 x 203,2	—	12011	6A	60	M	8	V 31	5998984120119
1	500 x 80 x 203,2	—	12022	6A	60	M	8	V 38	5998984120225
1	500 x 100 x 304,8	—	12049	6A	46	K	8	V 31	5998984120492
1	500 x 150 x 304,8	—	12071	6A	60	M	8	V 31	5998984120713

Straight Grinding Wheel

Type	D x T x H	Reducer bushing	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
1	125 x 16 x 12,7	—	10096	1C	60	K	8	V 36	5998984100968
1	125 x 20 x 32	32/25/20	10107	1C	60	M	5	V 36	5998984101071
1	150 x 20 x 20	—	10280	1C	60	K	5	V 36	5998984102801
1	150 x 20 x 20	—	10281	1C	60	M	5	V 36	5998984102818
1	150 x 20 x 32	32/25/20	10295	1C	60	K	5	V 36	5998984102955
1	150 x 20 x 32	32/25/20	10296	1C	60	M	5	V 36	5998984102962
1	150 x 20 x 32	32/25/20	10307	2C	60	K	5	V 36	5998984103075
1	175 x 20 x 20	—	10492	1C	60	K	5	V 36	5998984104928
1	175 x 20 x 20	—	10493	1C	60	M	5	V 36	5998984104935
1	175 x 20 x 32	32/25/20	10528	1C	60	M	5	V 36	5998984105284
1	175 x 20 x 32	32/25/20	10529	2C	60	K	5	V 36	5998984105291
1	175 x 25 x 32	32/25/20	10553	1C	60	M	5	V 36	5998984105536
1	200 x 20 x 20	—	10677	1C	60	M	5	V36	5998984106779
1	200 x 20 x 32	—	10695	1C	60	M	5	V 36	5998984106953
1	200 x 20 x 32	—	10696	1C	60	K	5	V 36	5998984106960
1	200 x 20 x 32	32/25/20	13553	2C	60	K	5	V 36	5998984135533
1	200 x 25 x 32	—	10737	1C	60	M	5	V 36	5998984107370
1	200 x 32 x 32	—	10751	1C	60	M	5	V 36	5998984107516
1	250 x 20 x 32	32/25/20	10883	1C	60	M	5	V 36	5998984108834
1	250 x 20 x 76,2	—	10908	1C	60	K	5	V 36	5998984109084
1	250 x 25 x 32	32/25/20	10929	1C	60	K	5	V 36	5998984109299
1	250 x 25 x 76,2	—	10945	1C	60	K	5	V 36	5998984109459
1	250 x 32 x 32	—	10983	1C	60	M	5	V 36	5998984109831
1	250 x 32 x 32	—	17183	2C	60	K	5	V 36	5998984171838
1	250 x 32 x 76,2	—	10995	1C	60	K	5	V 36	5998984109954
1	300 x 32 x 32	—	11123	1C	60	M	5	V 36	5998984111230
1	300 x 32 x 32	—	17184	2C	60	K	5	V 36	5998984171845
1	300 x 32 x 127	—	11144	1C	60	M	5	V 36	5998984111445
1	300 x 32 x 127	—	11143	1C	60	K	5	V 36	5998984111438
1	300 x 40 x 40	—	11178	1C	60	K	5	V 36	5998984111780
1	300 x 40 x 76,2	—	11192	1C	60	M	5	V 36	5998984111926
1	300 x 40 x 127	—	11207	1C	60	K	5	V 36	5998984112077
1	350 x 32 x 32	—	11344	1C	60	M	5	V 36	5998984113449
1	350 x 32 x 127	—	11360	1C	60	M	5	V 36	5998984113609
1	350 x 40 x 40	—	11380	1C	60	K	5	V 36	5998984113807
1	350 x 40 x 40	—	11381	1C	60	M	5	V 36	5998984113814
1	350 x 40 x 127	—	11411	1C	36	J	5	V 36	5998984114118
1	350 x 40 x 127	—	11424	1C	46	M	5	V 36	5998984114248
1	350 x 40 x 127	—	11426	1C	60	K	5	V 36	5998984114262
1	350 x 40 x 127	—	11429	1C	60	M	5	V 36	5998984114293
1	350 x 40 x 127	—	11442	2C	60	K	5	V 36	5998984114422
1	350 x 50 x 50,8	—	11505	1C	60	M	5	V 36	5998984115054
1	350 x 50 x 127	—	11527	1C	60	M	5	V 36	5998984115276
1	400 x 40 x 40	—	11680	1C	60	M	5	V 36	5998984116808
1	400 x 40 x 127	—	11694	1C	60	K	5	V 36	5998984116945
1	400 x 50 x 50,8	—	11735	1C	60	K	5	V 36	5998984117355
1	400 x 50 x 127	—	11754	1C	60	M	8	V 36	5998984117546
1	400 x 63 x 127	—	11801	1C	60	M	5	V 36	5998984118017
1	500 x 50 x 50,8	—	11943	1C	60	M	5	V 36	5998984119434

Quality Grain Straight Grinding Wheel with High Performance

Type	D x T x H	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
1	250 x 25 x 76,2	13398	9A	46	K	10	V 31	5998984133980
1	300 x 40 x 76,2	16981	9A	46	G	12	V 32	5998984169811
1	300 x 50 x 127	16620	9A	462	G	12	V 32	5998984166209
1	350 x 40 x 127	16958	9A	46	G	12	V 32	5998984169583
1	400 x 50 x 127	16823	9A	60	J	8	V 31	5998984168234
1	400 x 50 x 203,2	16775	9A	46	G	12	V 32	5998984167756

MONOCRYSTALLINE GRAIN

Processing solution over 60 HRC

Monocrystalline grain (9A) is formulated in the most typical grit sizes by one single crystalline. It is an extremely hard, tough grain, less brittle than the white aluminum oxide. Heat-sensitive, highly hardened tools can be processed with these monocrystalline wheels. Mixed with white aluminum oxide (6A), pink aluminum oxide (7A) or normal corundum (1A) the parameters of the grinding operation can be optimized and the removal rate can be increased. Reduce your grinding operation cost with our monocrystalline wheels!

- It gives a good performance even over 60 HRC in case of external cylindrical grinding, surface grinding, and centerless grinding without overheating the material (burn-in).
- For surface grinding we recommend the grit size 46 (60) in soft bonding and open structure (9A46G12 V 32).
- For external cylindrical grinding we suggest composition 9A60J8 V 31.
- For external cylindrical grinding and centerless grinding the mixed grain combinations ensure a more advantageous cost level solution (917A, 97A etc.).

→ The above products are available for order and represent samples of our wide product range recommended for processing material over 60HRC.

→ Please ask for a quote!

Straight Grinding Wheels

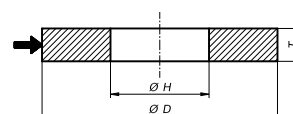
→ With 40m/s maximum operation speed for mechanically guided grinding!

Suitable for:

- Tool sharpening
- Saw sharpening
- Knife sharpening

Thin Straight Grinding Wheel for Peripheral Grinding and Saw Sharpening

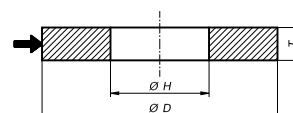
Type: 1



Type	D x T x H	Reducer bushing	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	Barcode
flat	150 x 4 x 20	—	10182	7A	60	N	5	V 31	5998984101828
flat	200 x 4 x 32	—	10610	9A	80	N	8	V 31	5998984106106
flat	150 x 6 x 20	—	10212	6A	60	N	8	V 31	5998984102122
flat	150 x 6 x 32	—	14234	6A	80	M	8	V 31	5998984142340
flat	175 x 10 x 32	32/25/20	10438	6A	60	M	8	V 38	5998984104386
sandwich, flat	250 x 12 x 32	—	10862	6A/7A	60	N	8	V 31	5998984108629

Wet Grinding Wheel for Knife Sharpening

Type: 1



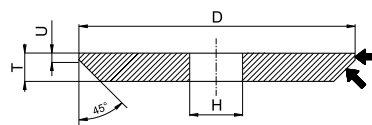
D x T x H	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	Barcode
200 x 40 x 20	16675	6A	220	K	5	V 31	5998984166759

→ Recommendations

For general applications we recommend using wheel with our 6A90P5V38 specifications. For harder metals and for faster work we recommend using rougher and softer versions. If you need enhanced performance we suggest using our product containing 7A or 9A grain. For more precise jobs as well as improved edge holding we advise that you try one of our sandwich wheels!

Thin Straight Grinding Wheel with Profile for Saw Sharpening

Type: 1C



Type	D x T x H Edge	Reducer bushing	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
sharpened	125 x 10 x 20 U2	—	10081	6A	90	P	5	V 38	5998984100814
sharpened	150 x 10 x 20 U3	—	10240	6A	90	P	5	V 38	5998984102405
sharpened	150 x 10 x 32 U3	32/25/20	10246	6A	90	P	5	V 38	5998984102467
sharpened	150 x 10 x 32 U3	32/25/20	10247	6A	60	M	5	V 38	5998984102474
sharpened	175 x 10 x 20 U3	—	10424	1C	60	K	5	V 36	5998984104249
sharpened	175 x 10 x 20 U3	—	10428	6A	90	P	5	V 38	5998984104287
sharpened	175 x 10 x 32 U3	32/25/20	10442	6A	60	M	8	V 38	5998984104423
sharpened	175 x 10 x 32 U3	32/25/20	10443	6A	90	P	5	V 38	5998984104430
sharpened	200 x 10 x 20 U3	—	10636	6A	90	P	5	V 38	5998984106366
sharpened	200 x 10 x 32 U3	—	10645	6A	90	P	5	V 38	5998984106458
sharpened	200 x 10 x 32 U3	32/25/20	10648	6A	60	M	8	V 38	5998984106489
sandwich, sharpened	200 x 12 x 32 U3	—	14495	6A/7A	60	N	8	V 31	5998984144955
sharpened	250 x 10 x 20 U3	—	10838	6A	90	P	5	V 38	5998984108384
sharpened	250 x 10 x 32 U3	—	10850	6A	90	P	5	V 38	5998984108506
sharpened	250 x 10 x 32 U3	32/25/20	10852	6A	60	N	8	V 38	5998984108520
sharpened	250 x 10 x 32 U3	32/25/20	10853	6A	60	M	8	V 38	5998984108537
sharpened	300 x 10 x 32 U3	32/25/20	11067	6A	90	P	5	V 38	5998984110677
sharpened	300 x 10 x 32 U3	32/25/20	11068	6A	80	N	5	V 38	5998984110684

Stone Dresser

D x L	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
250 x 22	10927	1C	36	P	5	V 36	5998984109275
300 x 28	11113	1C	24	P	5	V 36	5998984111131



Stone Dresser



Scythe Stones

Scythe Stones

L x B x C	Art. Nr.	Grain type	Grit size	Hardness	Structure	Bonding	
240 x 35 x 15	10819	1C	120	P	5	V 36	5998984108193
240 x 35 x 15	10820	6A	150	N	5	V 38	5998984108209

Vitrified Grinding Wheels with Special Shape

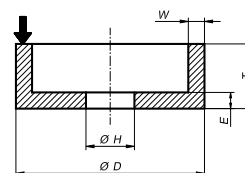
→ With 32m/s maximum operation speed for manually and for mechanically guided grinding!

Suitable for:

- Tool sharpening

Straight Cup Wheel

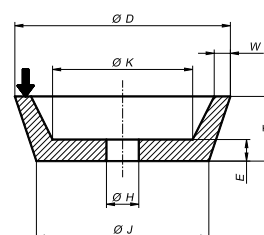
Type: 6



D x T x H	Other dimensions	Art. Nr	Grain type	Grit size	Hardness	Structure	Bonding	■ ■ ■ ■ ■
125 x 63 x 32	W8 E13	10141	6A	54	J	8	V 31	5998984101415
150 x 80 x 32	W13 E15	10370	6A	60	J	8	V 31	5998984103709
175 x 80 x 76,2	W16 E20	10589	6A	60	K	8	V 31	5998984105895
175 x 100 x 76,2	W15 E15	10597	6A	46	K	8	V 31	5998984105970
200 x 100 x 76,2	W25 E25	10797	6A	46	K	8	V 31	5998984107974

Taper Cup Wheel

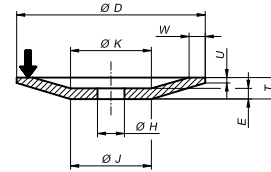
Type: 11



D x T x H	Other dimensions	Art. Nr	Grain type	Grit size	Hardness	Structure	Bonding	■ ■ ■ ■ ■
100 x 40 x 20	W8 E10 J71 K56	10040	6A	60	K	8	V 31	5998984100401
125 x 45 x 20	W10 E13 J92 K75	10122	6A	60	K	8	V 31	5998984101224
125 x 45 x 32	W10 E13 J92 K75	10128	6A	60	K	8	V 31	5998984101286
150 x 50 x 32	W10 E15 J113 K97	10334	6A	60	J	8	V 31	5998984103341

Dish Wheel

Type: 12

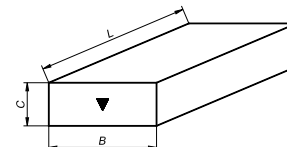


D x T x H	Edge	Other dimensions	Art. Nr	Grain type	Grit size	Hardness	Structure	Bonding	■ ■ ■ ■ ■
150 x 16 x 20	U3,2	J66 E9 W8	10268	6A	60	K	8	V 31	5998984102689
175 x 18 x 20	U3,2	J60 E11 W8	10466	1C	60	K	5	V 36	5998984104669
175 x 18 x 20	U3,2	J60 E11 W8	10470	6A	60	K	8	V 31	5998984104706
200 x 20 x 32	U3,2	J90 E12 W10	10715	6A	60	K	8	V 31	5998984107158
125 x 13 x 20	U3,2	J61 E7 W6	13466	6A	60	K	8	V 31	5998984134666

Rectangular Segments

L x B x C	Art. Nr	Grain type	Grit size	Hardness	Structure	Bonding	■ ■ ■ ■ ■
150 x 80 x 25	10358	6A	36	H	8	V 38	5998984103587
150 x 80 x 25	10360	6A	30	G	8	V 38	5998984103600
200 x 120 x 30	10802	1C	30	N	5	V 36	5998984108025

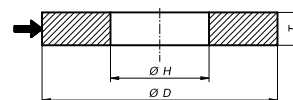
Type: 3101



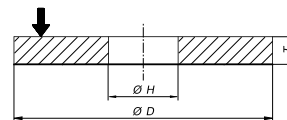
Resinoid Bonded Grinding Wheels

→ With 50m/s maximum operation speed!

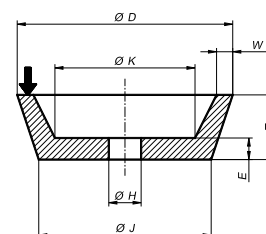
Type: 1



Type: 35



Type: 11



Suitable for:

- Wheels for cast cleaning: straight or recessed grinding wheels and wheels with inserted nuts
- Centerless grinding wheels, support wheels
- Segments, cylinder, straight and taper cup wheels for surface grinding
- Wheels for tool sharpening
- Straight and recessed wheels for roll grinding
- Wheels with inserted nuts for face grinding in special applications

→ Check the expiration date! (eg. V 07 2018 Expiry date is the end of July 2018)

→ Should be used within 3 years from the production date!

→ For higher operation speed please ask our quote!

Type	D x T x H	Art. Nr	Description	Max speed	Availability	Grain type	Grit size	Hardness	Structure	Bonding	Barcode
11	110/90 x 56 x 22,23	30209	cup wheel	50 m/s	In stock	1C	16	Q	5	B	5998984532097
11	110/90 x 56 x 22,23	30210	cup wheel	50 m/s	In stock	1C	36	Q	5	B	5998984532103
11	110/90 x 56 x 22,23	30222	cup wheel	50 m/s	In stock	1C	24	Q	5	B	5998984532226
11	110/90 x 56 x 22,23	30239	cup wheel	50 m/s	Custom order	1A	16	Q	5	B	5998984530239

Type	D x T x H	Art. Nr	Description	Max speed	Availability	Grain type	Grit size	Hardness	Structure	Bonding	Barcode
35	250 x 8 x 20	30071	dental grinding wheel	50 m/s	In stock	1C	30	R	4	B	5998984530710
35	250 x 8 x 20	30070	dental grinding wheel with glass fibre reinforcement	50 m/s	In stock	1C	30	R	4	B	5998984530703
1	150 x 25 x 32	30015	cast cleaning wheel for hand held machine	50 m/s	Custom order	1A	24	R	4	B	5998984530154
1	300 x 150 x 127	30117	centerless grinding wheel, support wheel	50 m/s	Custom order	1A	120	Q	6	B	5998984531175
1	500 x 50 x 203,2	30163	centerless grinding wheel for stationary or swing frame machine	50 m/s	Custom order	1A	16	R	5	B	5998984531632

Safety Rules 1.

The safety requirements of bonded abrasive products are determined by the EN 12413, of the flap disc by EN 13743. Granit is the member of oSa (Organization for the Safety of Abrasives). Look for the oSa logo on the products!

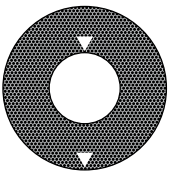
→ TO ENSURE THE SAFE USE OF ABRASIVES IT IS ESSENTIAL THAT BOTH THE MANUFACTURER AND THE USER OF THE GRINDING TOOLS STRICTLY FOLLOW THE SAFETY INSTRUCTIONS!

General Instructions

- The inappropriate use of abrasives could be very dangerous. Always follow the safety rules for abrasives and the instructions in the machine's user manual!
- Grinding wheels are fragile, please transport, store and handle them with care. They should always be stored in a frost free, dry place in its original packaging, on shelves or racks.
- Always use the oldest manufactured product first! (follow rules of FIFO)
- Always inspect carefully the products for possible damage, cracks before mounting! Vitrified wheels exceeding the 80mm in diameter can be subjected to a sound (ring) test.
- Never use broken, damaged wheels or wheels from unknown source. Ensure that you always read all user instructions and strictly adhere to the guidance provided!
- **MAKE SURE THAT THE OPERATING SPEED OF THE MACHINE DOES NOT EXCEED THE ALLOWED MAXIMUM OPERATING SPEED LISTED ON THE WHEEL!**
- If something is not clear about the safety requirements of the tool, do not hesitate to contact the manufacturer!

Mounting of Abrasives

Position mark



The wheel may have positioning marks on their side. Care must be taken to ensure that these marks occupy the position shown in the above picture (i.e. the arrows point downwards) when the wheel is mounted on the spindle.

- Carefully inspect the wheel guard and mounting devices, they must conform to the relevant rules, must be in good mechanical condition and free of foreign bodies!
- The clamping flanges and mounting devices must conform to the machine manual, EN 13218, ISO 666 and "Fepa Safety Code"!
- The blotters should conform to EN 12413!
- Mounting, balancing and dressing of abrasives must be performed only according to the rules listed in the machine manual.
- Only qualified and trained persons should handle these products and operate these machines!
- After mounting, start the machine and let it run idle for at least 30 seconds. Make sure all personnel are at a safe distance from the machine!

Safety Rules 2.

Usage

- Operating speed and RPM must never exceed the maximum operating speed or RPM printed on the wheel label or on the grinding wheel itself!
- When using cooling detergent, always stop the detergent first and the wheel after to prevent an unbalance problem upon restarting the machine.
- After mounting the wheel on a hand held machine, rotate the wheel first to make sure that the wheel is running freely. Turn on the machine only after close review and checking that everything is aligned per the instructions!
- Always make sure you do not put others or yourself in danger when proceeding with trial run!
- Hand held machines should be held with two hands!
- Never force the wheel when using it on a hand held machine! The weight of the machine is sufficient.
- When using a hand held machine keep in mind the sparks! Make sure that the sparks do not land on you or others in the vicinity.
- NEVER USE CUTTING DISCS FOR GRINDING!
- Always stop using grinding disc or depressed centre cutting discs before you reach the depressed section around the bore!
- Take care to only grind in location which has good ventilation or use an exhaust system to vent out any residue!
- Never cut or grind when there are flammable or combustible materials around or in the vicinity of any explosive materials.
- Resinoid bonded tools can be used within three years from the production date!
- ALWAYS USE THE APPROPRIATE SAFETY GEAR TO ENSURE YOU ARE PROPERLY PROTECTED!

Advice for the use of cutting and grinding discs:

- Make sure that the work piece is fixed properly!
- When choosing the direction of mounting, select the side of the work piece with the smallest cross section!
- When the work piece is larger or longer, fix it without any strain to assure the cut particular can fall freely without fastening or hitting the wheel itself.
- When starting to work with a new disc, use a bit higher force at the beginning.
- Always touch the work piece carefully with the disc!
- When the wheel started the cut you can increase the pressure.
- Do not apply too much pressure, let the disc do the cutting.
- When you feel the disc vibrating reduce the pressure.
- When the vibration is too much, stop the machine and look for the source of the failure. Start to cut only after fixing the problem.
- Do not use the cutting disc for side grinding!
- Always hold the centre of the wheel over the work spot to be able to keep the control through the cut!

RPM and Operation Speed

WHEEL DIAMETER (mm)	OPERATION SPEED (RPM / min)						
	32 m/s	35 m/s	40 m/s	50 m/s	63 m/s	80 m/s	100 m/s
80	7650	8400	9550	12000	15100	19100	23900
100	6150	6700	7650	9550	12100	15300	19100
115	5350	5850	6650	8350	10500	13300	16650
125	4900	5350	6150	7650	9650	12250	15300
150	4100	4500	5100	6400	8050	10200	12700
175	3500	3850	4400	5500	6900	8750	10900
180	3400	3750	4250	5350	6700	8500	10650
200	3100	3350	3850	4800	6050	7650	9550
230	2700	2950	3350	4200	5250	6650	8350
250	2450	2700	3100	3850	4850	6150	7650
300	2050	2250	2550	3200	4050	5100	6400
350/356	1750	1950	2200	2750	3450	4400	5500
400/406	1550	1700	1950	2400	3050	3850	4800
450/457	1400	1500	1700	2150	2700	3400	4250
500/508	1250	1350	1550	1950	2450	3100	3850
600/610	1050	1150	1300	1600	2050	2550	3200
750/762	820	895	1050	1300	1650	2050	2550
800/813	765	840	960	1200	1550	1950	2400
900/914	680	750	850	1100	1350	1700	2150

Further safety information:

www.granitabrasive.com
www.fepa-abrasives.org
www.osa-abrasives.org

→ Please find further important safety information for the cutting and grinding disc on page 4.



Granit as the member of oSa:

- Monitors the entire production process
- Constantly checks production according to EN standards
- Is committed to ethical guidelines as well as maximum safety at work and environmental protection



What is oSa, the Organization for the Safety of Abrasives?

Leading producers of high-grade abrasive products have come together in this international organization to document the high safety standards of their branded and quality products. oSa members are committed to sustaining quality assurance and ensuring the adherence to safety standards. As a result, the user knows that products with the oSa label reflect high-grade production and high safety standards.

Look for the oSa logo on the products!





**GRANIT
ABRASIVE**





GRINDING SOLUTIONS FROM THE HUNGARIAN MANUFACTURER

- Please follow the recommended safety instructions whenever you are transporting, handling or working with any of our products!
- The geometrical range of our products (outside diameter):
vitrified and resinoid bonded grinding wheels 75-900 mm,
glass fibre reinforced cutting and grinding discs 75-500 mm.
- For selecting the optimal grinding tool suited to your particular grinding task please use the General Recommendation Section of this catalogue or ask for assistance from our in-house experts or distributors!
- For special grinding tool needs please contact us as we are able to give you a customized product recommendation that we can manufacture for you based on your shape, size, grain, hardness or composite structure!

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www.granitabrasive.com
sales@granitabrasive.com
2015

Your distributor:

