

Consumables for grinding





Grinding

Mechanical grinding is a machining process using bonded abrasive grains to level and smooth the specimen surface. This process is divided into three categories in materialography as follows:



Typically, silicon carbide (SiC), aluminum dioxide (Al2O3), silicon dioxide (SiO2), zirconium dioxide (ZrO2), diamond or cubic boron nitride (CBN) are used as abrasives. Particular attention must be paid here to low-deformation material removal and at the same time to keeping the number of preparation steps as low as possible. A wide range of QPREP grinding media is available for this purpose.

Aprep Planar grinding stones

If highest stock removal with highest planarity in the shortest time is required, the use of a planar grinding stone in materialographic specimen preparation is essential. In combination with our powerful automatic Qgrid XL planar grinding



95016897

1 Pc.

machine or our grinding and polishing automat Qpol 300 BOT, even high sample throughputs can be efficiently planar ground.

PRODUCT ADVANTAGES

- I Short machining time
- Excellent planarity for all materials
- Optimized removal rates with Qgrind XL stock removal monitoring
- I Ideal preparatory work for polishing on our Qpol polishing machine series

RECOMMENDED APPLICATIONS

Multi point dressing diamond

- I Primary material control with high sample throughput
- Serial inspections

		Item No.	Unit	Description			
				PLANAR GR	INDING STO	ONES FOR	QGRIND XL
				Grain Size FEPA standard	Outer Ø	Inner Ø	Abor Size Ø
				White corundu for tool steel steel and cas	(hardened ar		ned), stainless steel,
		95016741	1 Pc.	100	356 mm	126 mm	38 mm
	NEW	95017565	1 Pc.	150	356 mm	126 mm	38 mm
				SIC grinding st • for sintered n cast iron, cop	naterials (low	- and unalloy	red), aluminum, chilled
	NEW	95016746	1 Pc.	80	356 mm	126 mm	38 mm
	_	95016747	1 Pc.	150	356 mm	126 mm	38 mm
1				Multi point dre	ssing diamor	nd for dressin	g face grinding stones



Item No.	Unit	Description					
			RINDING STO R 375 AND C		ЗОТ		
		Grain Size FEPA standar	Outer Ø d	Inner Ø	Abor Size Ø		
		 for tool stee steel and ca 		nd not harder	ned), stainless steel,		
95000180	1 Pc.	100	350 mm	90 mm	40 mm		
95000210	1 Pc.	150	350 mm	90 mm	40 mm		
95002034	1 Pc.	180	350 mm	90 mm	40 mm		
		SIC grinding stone • for sintered materials (low- and unalloyed), aluminum, chilled cast iron, copper • glued on metal carrier plate					
95002223	1 Pc.	80	350 mm	90 mm	40 mm		
			20 mm on reque		g face grinding stones		
92008759	1 Pc.	Multi point dre	essing diamond	t			

Aprep Diamond cup grinder

If a specimen with parallel faces is desired after precision cutting the use of a diamond cup wheel for further processing is recommended. Used in our precision cutting machines Qcut 150 M, Qcut 150 A and Qcut 200 A with vacuum specimen holder,



the QPREP diamond cup grinder enable the user to achieve optimum planar parallelism with high surface quality and reproducibility.

PRODUCT ADVANTAGES

- I Planar parallel sample preparation
- Stock removal with high accuracy
- Very high repeat accuracy

- I Target preparation
- I Defect analysis
- I Thin section technology
- Petrographic examinations

	Item No.	Unit	Description	on			
			DIAMO	ND CUP	GRINDE	:R	
			ø ·	Thickness	Height	Arbor Size	Grain Size
				s fiber rei Ilvanic bor		astics and p	rinted circuit boards
	92006607	1 Pc.	150 mm	8 mm	35 mm	12.7 mm	D126
			for glaswith res		s, rocks, h	ard metal	
1EW	95017564	1 Pc.	150 mm	8 mm	21.5 mm	12.7 mm	D252
	95015123	1 Pc.	150 mm	8 mm	21.5 mm	12.7 mm	D151
1EW	95017562	1 Pc.	150 mm	8 mm	21.5 mm	12.7 mm	D126
	95015122	1 Pc.	150 mm	8 mm	21.5 mm	12.7 mm	D64



Grinding Discs

QPREP provides a comprehensive portfolio of grinding discs with different bond systems, grain types and gain sizes. This way always allows to find the best solutions for individual requirements. All abrasive elements are on a metal carrier. So they can be directly applied on the QPREP magnetic foil without further tools. The grinding elements have just minimal resilience and ensure a planar surface with high edge retention. By this, it will gain stock removal free of smearing and chipping. QPREP grinding discs realize short preparation times and have in parallel long life times. Thus, will importantly contributes to a sustainable and resource-saving process in materialography.

PRODUCT ADVANTAGES

- I High lifetime
- I High planarity
- I Sample preparation with high edge retention
- I Sustainable and eco-friendly

Range of grinding and polishing systems								
FEPA	P60	P80-100	P100-120	P180-320	P400-600	P800-1000	P5000	material hardness
GALAXY		GREY	RED	GREEN	BLUE	YELLOW		> 350 HV
Grain size (µm)	250		12!	5 60	30	1	5 6	3 material hardness
POLARIS M				60	30	1	5 6	3 250 – 600 HV
POLARIS H			125	5 60	30	1	5 6	3 > 500 HV
QUASAR	250		125	5 91 4	1 6			> 500 HV
VEGA			125	5 75 5	4 25		10	universal

Removal r	ate*
GALAXY	
POLARIS M	
POLARIS H	
QUASAR	
VEGA	

^{*}with newly dressed / cleaned disc and same grit sizes

Surface qu	uality*
GALAXY	
POLARIS M	
POLARIS H	
QUASAR	
VEGA	





FIXATION SYSTEM FOR GRINDING DISCS

Aprep Magnetic foil

For low resilience during grinding (or polishing) as well as best adhesion and easy handling of the QPREP GALAXY grinding discs (or polishing cloths), the QPREP magnetic foil is perfectly suited.



PRODUCT ADVANTAGES

- I Low resilience
- I One time application on the working disc of the machine
- I Long service life
- I Different magnet. field strengths

- I For the use of all GALAXY grinding discs and polishing cloths
- I Frequent change of grinding discs and polishing cloths

Item No.	Unit	Description
		MAGNETIC FOIL, SELF-ADHESIVE
		Ø thickness
		Magnetic foil, strong adhesion • to apply on working wheel
95016345	1 Pc.	200 mm 1 mm
95016346	1 Pc.	250 mm 1 mm
95012161	1 Pc.	300 mm 1 mm
95014137	1 Pc.	350 mm 1 mm
		Magnetic foil, strongest adhesion • to apply on working wheel • Increased magnetic adhesion by higher material thickness
95016300	1 Pc.	250 mm 2 mm
95016301	1 Pc.	300 mm 2 mm



Applying the magnetic foil



Placing e.g. a diamond grinding disc on the magnetic foil



Aprep GALAXY diamond grinding disc

QPREP GALAXY diamond grinding discs are equipped with specially arranged elements, which contains resin-bonded diamond grains, on a stainless-steel metal carrier. They are used for planar and fine grinding of medium-hard and hard materials. The color-coded grinding discs cover the FEPA grain sizes P80 to P1000. The color coding for the individual grain size ranges can be found in the application table.



PRODUCT ADVANTAGES

- I High stock removal
- Short processing times
- I High planarity

- I Steel with medium and high hardness
- I Cast iron (CJS / CJL)
- I Composites
- I Hard metal
- Glass

	Item No.	Unit	Description	
			GALAXY DIAMOND GRINDING DIS BOND: RESIN	iCS
			Description	Ø
			for medium to hard materials planar grinding: grey(P80 – P100)Fixation system: Magnetic foil	
	95005505	1 Pc.	GALAXY diamond grinding disc grey	200 mm
	95004279	1 Pc.	GALAXY diamond grinding disc grey	250 mm
	95004280	1 Pc.	GALAXY diamond grinding disc grey	300 mm
	95013917	1 Pc.	GALAXY diamond grinding disc grey	350 mm
			for medium to hard materials planar grinding: red(P100 – P120)Fixation system: Magnetic foil	
	95005521	1 Pc.	GALAXY diamond grinding disc red	200 mm
	95004310	1 Pc.	GALAXY diamond grinding disc red	250 mm
	95004314	1 Pc.	GALAXY diamond grinding disc red	300 mm
	95013918	1 Pc.	GALAXY diamond grinding disc red	350 mm
			incl. dressing stone No. 95006603	
			for medium to hard materials fine grinding: green(P180 – P320)Fixation system: Magnetic foil	
	95005522	1 Pc.	GALAXY diamond grinding disc green	200 mm
	95004311	1 Pc.	GALAXY diamond grinding disc green	250 mm
	95004315	1 Pc.	GALAXY diamond grinding disc green	300 mm
SECONOMIC HITMEN SECTION	95013919	1 Pc.	GALAXY diamond grinding disc green	350 mm









for medium to hard materials

- fine grinding: yellow (P800 – P1000)
- · Fixation system: Magnetic foil

95005524	1 Pc.	GALAXY diamond grinding disc yellow	200 mm
95004313	1 Pc.	GALAXY diamond grinding disc yellow	250 mm
95004317	1 Pc.	GALAXY diamond grinding disc yellow	300 mm
95013921	1 Pc.	GALAXY diamond grinding disc yellow	350 mm

incl. dressing stone No. 95006603

Grid to grain size conversion chart

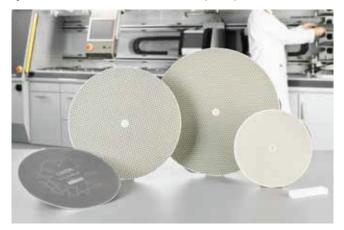
The values provided are only intended as guidelines. Grit sizes are considered as a range, rather than a specific value. The Federation of European Producers of Abrasives, known as FEPA, and the American National Standards Institute, known as ANSI, as well as the Japanese Industrial Standards Committee (JISC) are the respective organizations that define these standards and are the basis for the conversion. QPREP abrasive paper conforms to the European FEPA P standard.

Grain size [µm]	201	125	82	60	46	30	22	15	8	5
FEPA P (Europe)	P80	P120	P180	P240	P320	P500	P800	P1.200	P2.500	P4.000
ANSI/CAMI (USA)	#80	#100	#150	#220	#280	#360	#400	#600	#1.000	#1.200
JIS (Japan)	~J60	J100	J150	J320	J360	J600	J700	J1.000	J2.000	J3.000



Coprep POLARIS M diamond grinding disc

QPREP Polaris M is a grinding disc on a zinc-plated metal carrier for pre- and fine grinding of medium-hard materials. The back of the product is coated with a high-quality non-slip print. The grinding disc is equipped with diamonds bonded in medium-hard synthetic resin. The functional back print provides secure adhesion to the magnetic foil.



PRODUCT ADVANTAGES

- High stock removal
- Particularly high planarity with high surface quality
- Long lifetime

RECOMMENDED APPLICATIONS

- Metal materials of medium hardness < 500 HV
- Polymer materials
- Composites
- Ceramics

Description POLARIS M DIAMOND GRINDING DISCS				
DescriptionGrain Sizefor medium-hard materials • incl. cleaning stone No. (95015077) • Fixation system: Magnetic foil 250 mm Ø950150161 Pc.POLARIS M diamond grinding disc60 μm950150171 Pc.POLARIS M diamond grinding disc30 μm950150181 Pc.POLARIS M diamond grinding disc15 μm950150191 Pc.POLARIS M diamond grinding disc6 μm	Item No.	Unit	Description	
for medium-hard materials incl. cleaning stone No. (95015077) Fixation system: Magnetic foil 250 mm Ø 95015016 1 Pc. POLARIS M diamond grinding disc 60 μm 95015017 1 Pc. POLARIS M diamond grinding disc 30 μm 95015018 1 Pc. POLARIS M diamond grinding disc 15 μm 95015019 1 Pc. POLARIS M diamond grinding disc 6 μm			POLARIS M DIAMOND GRINDIN	G DISCS
 incl. cleaning stone No. (95015077) Fixation system: Magnetic foil 250 mm Ø 95015016 1 Pc. POLARIS M diamond grinding disc 60 μm 95015017 1 Pc. POLARIS M diamond grinding disc 30 μm 95015018 1 Pc. POLARIS M diamond grinding disc 15 μm 95015019 1 Pc. POLARIS M diamond grinding disc 6 μm 			Description	Grain Size
95015016 1 Pc. POLARIS M diamond grinding disc 60 μm 95015017 1 Pc. POLARIS M diamond grinding disc 30 μm 95015018 1 Pc. POLARIS M diamond grinding disc 15 μm 95015019 1 Pc. POLARIS M diamond grinding disc 6 μm			· incl. cleaning stone No. (95015077)	
950150171 Pc.POLARIS M diamond grinding disc30 μm950150181 Pc.POLARIS M diamond grinding disc15 μm950150191 Pc.POLARIS M diamond grinding disc6 μm			250 mm Ø	
950150181 Pc.POLARIS M diamond grinding disc15 μm950150191 Pc.POLARIS M diamond grinding disc6 μm	95015016	1 Pc.	POLARIS M diamond grinding disc	60 µm
95015019 1 Pc. POLARIS M diamond grinding disc 6 µm	95015017	1 Pc.	POLARIS M diamond grinding disc	30 µm
	95015018	1 Pc.	POLARIS M diamond grinding disc	15 µm
95015020 1 Pc. POLARIS M diamond grinding disc 3 µm	95015019	1 Pc.	POLARIS M diamond grinding disc	6 µm
	95015020	1 Pc.	POLARIS M diamond grinding disc	3 µm
300 mm Ø			300 mm Ø	
95015041 1 Pc. POLARIS M diamond grinding disc 60 µm	95015041	1 Pc.	POLARIS M diamond grinding disc	60 µm
95015042 1 Pc. POLARIS M diamond grinding disc 30 µm	95015042	1 Pc.	POLARIS M diamond grinding disc	30 µm
95015043 1 Pc. POLARIS M diamond grinding disc 15 µm	95015043	1 Pc.	POLARIS M diamond grinding disc	15 µm
95015044 1 Pc. POLARIS M diamond grinding disc 6 µm	95015044	1 Pc.	POLARIS M diamond grinding disc	6 µm
95015045 1 Pc. POLARIS M diamond grinding disc 3 µm	95015045	1 Pc.	POLARIS M diamond grinding disc	3 µm





Aprep POLARIS H diamond grinding disc

QPREP Polaris H is a grinding disc on a zinc-plated metal carrier for pre- and fine grinding of hard materials. The back of the product is coated with a high-quality non-slip print. The grinding disc is equipped with diamonds bonded in hard synthetic resin. The functional back print provides secure adhesion to the magnetic foil.



PRODUCT ADVANTAGES

- I High stock removal
- I Particularly high planarity with high surface quality
- I Long lifetime

RECOMMENDED APPLICATIONS

- Metal materials of higher hardness > 500HV
- Fiber reinforced plastics
- I Composites
- I Ceramics
- Rocks

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200		
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95015040

1 Pc.

POLARIS H DIAMOND GRINDING DISCS Description **Grain Size** for hard materials · incl. cleaning stone No. (95015077) Fixation system: Magnetic foil 250 mm Ø 95015010 1 Pc. POLARIS H diamond grinding disc 125 µm 95015011 1 Pc. POLARIS H diamond grinding disc 60 µm 95015012 1 Pc. POLARIS H diamond grinding disc 30 µm 95015013 1 Pc. POLARIS H diamond grinding disc 15 µm 95015014 1 Pc. POLARIS H diamond grinding disc 6 µm 95015015 1 Pc. POLARIS H diamond grinding disc $3 \mu m$ 300 mm Ø 95015035 1 Pc. POLARIS H diamond grinding disc 125 µm 95015036 1 Pc. POLARIS H diamond grinding disc 60 µm 95015037 1 Pc. POLARIS H diamond grinding disc 30 µm 95015038 1 Pc. POLARIS H diamond grinding disc 15 µm 95015039 1 Pc. POLARIS H diamond grinding disc 6 µm

POLARIS H diamond grinding disc

 $3 \mu m$

Coprep QUASAR diamond grinding disc

QPREP Quasar is a grinding disc on a zinc-plated metal carrier for planar- and pre grinding of hard materials. The back of the product is coated with a high-quality non-slip print. The grinding disc is equipped with diamonds bonded in hard epoxy resin. The functional back print provides secure adhesion to the magnetic foil.



PRODUCT ADVANTAGES

- I High stock removal
- I Particularly high planarity with high surface quality
- I Very long lifetime

RECOMMENDED APPLICATIONS

- I Hard ferrous materials
- Nickel base-super alloys
- I Hard metals
- I Ceramics

Item No.	Unit	Description	
		QUASAR DIAMOND GRINDING	G DISCS
		Description	Grain Size
		for hard materials incl. dressing stone No. (95015076)Fixation system: Magnetic foil	
		250 mm Ø	
95015006	1 Pc.	QUASAR diamond grinding disc	252 µm
95015007	1 Pc.	QUASAR diamond grinding disc	125 µm
95015008	1 Pc.	QUASAR diamond grinding disc	91 µm
95015009	1 Pc.	QUASAR diamond grinding disc	46 µm
		300 mm Ø	
95015031	1 Pc.	QUASAR diamond grinding disc	252 µm
95015032	1 Pc.	QUASAR diamond grinding disc	125 µm
95015033	1 Pc.	QUASAR diamond grinding disc	91 µm
95015034	1 Pc.	QUASAR diamond grinding disc	46 µm





Coprep VEGA diamond grinding disc

QPREP Vega is a grinding disc on a zinc-plated metal carrier for planar and pre-grinding of hard materials. On the back side the product is coated with a high-quality non-slip print. The grinding disc is equipped with diamonds bonded in nickel. The functional back print provides secure adhesion to the magnetic foil.



PRODUCT ADVANTAGES

- I High stock removal
- I Particularly high planarity
- Very long lifetime

- I Hard ferrous materials
- Composites
- . I Ceramics
- Rocks
- I Possible to grind unmounted samples
- I Especially recommended for manual preparations



iterrino.	OTIL	Description	
		VEGA DIAMOND GRINDING DISCS	
		Description	Grain Size
		for hard materials, for planar and pr • Fixation system: Magnetic foil	e-grinding
		200 mm Ø	
95015001	1 Pc.	VEGA diamond grinding disc	125 µm
95015002	1 Pc.	VEGA diamond grinding disc	75 µm
95015003	1 Pc.	VEGA diamond grinding disc	54 μm
95015004	1 Pc.	VEGA diamond grinding disc	25 µm
95015005	1 Pc.	VEGA diamond grinding disc	10 µm
		250 mm Ø	
95015026	1 Pc.	VEGA diamond grinding disc	125 µm
95015027	1 Pc.	VEGA diamond grinding disc	75 µm
95015028	1 Pc.	VEGA diamond grinding disc	54 μm
95015029	1 Pc.	VEGA diamond grinding disc	25 µm
95015030	1 Pc.	VEGA diamond grinding disc	10 μm
		300 mm Ø	
95015051	1 Pc.	VEGA diamond grinding disc	125 µm
95015052	1 Pc.	VEGA diamond grinding disc	75 µm
95015053	1 Pc.	VEGA diamond grinding disc	54 µm
95015054	1 Pc.	VEGA diamond grinding disc	25 µm
95015055	1 Pc.	VEGA diamond grinding disc	10 μm
		350 mm Ø	
95016235	1 Pc.	VEGA diamond grinding disc	125 µm
95016236	1 Pc.	VEGA diamond grinding disc	75 µm
95016237	1 Pc.	VEGA diamond grinding disc	54 μm
95016238	1 Pc.	VEGA diamond grinding disc	25 µm
95016239	1 Pc.	VEGA diamond grinding disc	10 μm



CONTERO fine grinding discs

QPREP Contero S and H are a general purpose fine grinding discs with a specially arranged inflexible grinding surface. The grinding elements consist of a reinforced composite matrix and are mounted on a stainless metal carrier. During the fine grinding process, diamond suspension is regularly fed to the disc, in this way the diamonds partially are implant in the functional surface. This leads to high stock removal rates and creates very low-deformation sample surfaces, which can be polished easily and efficiently afterwards.



CONTERO S: PRODUCT ADVANTAGES

- I High stock removal rate and flatness
- I Long lifetime
- I High edge retention
- I Compatible with diamond suspensions from 6 to 15 μm grain size

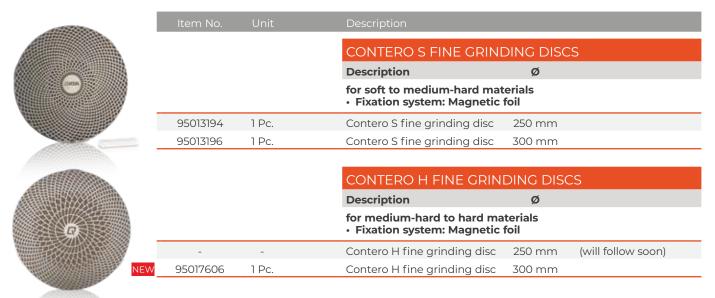
RECOMMENDED APPLICATIONS

- I Ideal for soft to mediumhard materials with a hardness of < 300 HV
- I Composites with soft matrix
- I Edge examinations
- I Characterization of layer systems
- I High sample throughput

CONTERO H: PRODUCT ADVANTAGES

- I Maintenance-free and ready to use out of the box
- High surface quality and homogeneous scratch pattern
- I High stock removal rate, flatness and edge retention
- I Long lifetime
- Compatible with diamond suspensions from 6 to 15 μm grain size

- I Ideal for medium-hard to hard materials with a hardness of 300 HV or more
- I Edge examinations
- I Characterization of hard coatings
- I Sintered Carbides
- I Cermets (ceramic composite with metal matrix)
- I High sample throughput





Item No. Unit	Description
	CLEANING BRUSHES
	Description
	for cleaning of grinding and fine grinding discs
95016623 1 Pc.	Nylon brush



Grinding papers and foils

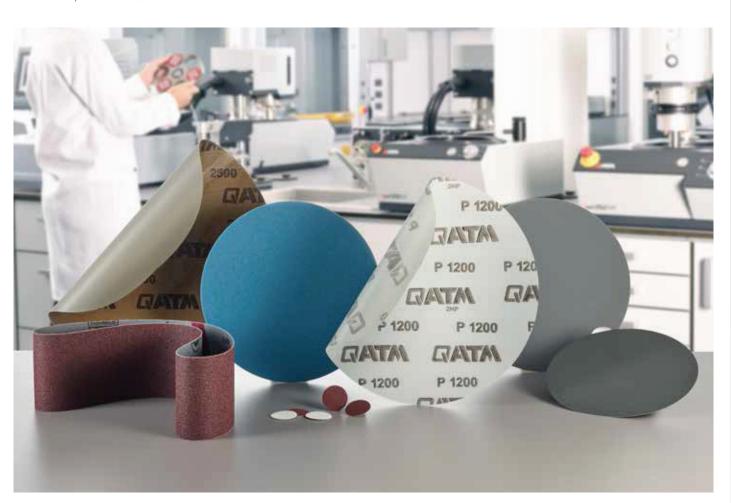
As an alternative to QPREP grinding discs, specimen preparation is also possible using QPREP grinding papers and foils. These differ in the type of carrier material and the possibility of the fixation systems to be used (double-sided adhesive carrier, GALAXY X-Tap, GALAXY Quick-Tap).

Grinding papers:

- I Foiled back, carrier material paper
- I Self-adhesive back, carrier material paper
- I Paper back, carrier material paper

Grinding foils:

I Back foil, carrier material foil



Notes		

GRINDING



FIXATION SYSTEM FOR GRINDING FOILS AND PAPERS WITH FOIL BACKING

Aprep Adhesive carrier disc

The QPREP adhesive carrier is characterized by a nano-surface, which ensured good adhesion and easy removal of the grinding medium.



PRODUCT ADVANTAGES

- I No glue backing, therefore no glue residues
- I Good adhesion to work disc as well as good adhesion to grinding paper and grinding foil
- Easy removal and repositioning of grinding paper and grinding foil
- Double sided permanent adhesive and reusable

RECOMMENDED APPLICATIONS

- I For direct application to the working disc
- I For use with grinding paper and grinding foil

Item No.	Unit	Description
		ADHESIVE CARRIER DISCS, DOUBLE-SIDED
		Ø
95003607	1 Pc.	250 mm
95003608	1 Pc.	300 mm
95014566	1 Pc.	350 mm

before initial use please remove protective foil on both sides



Applying the adhesive carrier disc



Placing e.g. a grinding paper with foil backing on the adhesive carrier disc



Coprep Silicon carbide grinding foils

QPREP silicon carbide grinding foils can be used individually and are ideally suited for a wide range of varied materials. They offer a high degree of flexibility, especially for frequently changing material variants. Furthermore, the foils are ideally suited for the "Vakujet" vacuum fixation in the QATM automatic grinding and polishing machine Qpol 300 Bot. QPREP silicon carbide grinding foils are available in diameters of 250 and 300 mm and in 8 different grain sizes.



PRODUCT ADVANTAGES

- I Suitable for vacuum fixation
- I Particularly high planarity
- No curling
- I Tear and water resistant, so weakening during the grinding process can be excluded
- Low resilience
- Multiple uses possible in connection with QPREP adhesive carrier disc

RECOMMENDED APPLICATIONS

- I All-purpose usage
- I Suitable for planar, pre- and fine grinding steps due to different grain sizes

P 5200 P 5304
DATE DATE
P 4200 P 1200 P 120
GROW GROW GR
208 9 1200 P 1200
BATA GATA
4 1200 H 1209
e 1200 P 1200

Item No.	Unit	Description

SILICON CARBIDE GRINDING FOILS

Grain FEPA standard

• Fixation system: Adhesive carrier disc

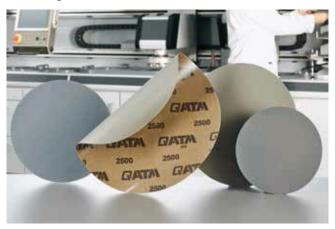
		250 mm Ø	
92008557	100 Pcs.	SiC grinding foil	P120
92008558	100 Pcs.	SiC grinding foil	P180
95000899	100 Pcs.	SiC grinding foil	P240
92006305	100 Pcs.	SiC grinding foil	P320
92006304	100 Pcs.	SiC grinding foil	P600
95000900	100 Pcs.	SiC grinding foil	P800
92008559	100 Pcs.	SiC grinding foil	P1200
92008639	100 Pcs.	SiC grinding foil	P2500

		300 mm Ø	
92008561	100 Pcs.	SiC grinding foil	P120
92008658	100 Pcs.	SiC grinding foil	P180
95000902	100 Pcs.	SiC grinding foil	P240
92006303	100 Pcs.	SiC grinding foil	P320
92006302	100 Pcs.	SiC grinding foil	P600
95000903	100 Pcs.	SiC grinding foil	P800
92008562	100 Pcs.	SiC grinding foil	P1200
92008621	100 Pcs.	SiC grinding foil	P2500



Coprep Silicon carbide grinding paper with foil backing

Silicon carbide grinding paper with foil backing can be used individually and are ideally suited for a wide range of varied materials. They offer a high degree of flexibility, especially for frequently changing material variants. Furthermore, the foiled paper enables the use of the "Vakujet" vacuum fixation in the QATM automatic grinding and polishing machine Qpol 300 Bot. QPREP silicon carbide grinding paper with foil backing is available in diameters of 200 / 250 / 300 / and 350 mm and in 12 different grain sizes.



PRODUCT ADVANTAGES

- I Suitable for vacuum fixation
- Directionally oriented applied abrasive grains with homogeneous distribution for a high cutting effect and efficient material removal
- I Ideally suited for the QPREP adhesive carrier disc
- I 12 grain sizes for a wide range of applications

- I All-purpose usage
- Suitable for planar, pre- and fine grinding steps due to different grain sizes

Item No.	Unit	Description	
		SILICON CARBIDE GRINDING I WITH FOIL BACKING	PAPER
			Grain FEPA standard
		• Fixation system: Adhesive carrier	disc
		200 mm Ø	
95011898	100 Pcs.	SiC grinding paper with foil backing	P80
95011899	100 Pcs.	SiC grinding paper with foil backing	P120
95011900	100 Pcs.	SiC grinding paper with foil backing	P180
95011901	100 Pcs.	SiC grinding paper with foil backing	P240
95011902	100 Pcs.	SiC grinding paper with foil backing	P320
95011903	100 Pcs.	SiC grinding paper with foil backing	P400
95011904	100 Pcs.	SiC grinding paper with foil backing	P500
95011905	100 Pcs.	SiC grinding paper with foil backing	P600
95011906	100 Pcs.	SiC grinding paper with foil backing	P800
95011907	100 Pcs.	SiC grinding paper with foil backing	P1000
95011908	100 Pcs.	SiC grinding paper with foil backing	P1200
95011909	100 Pcs.	SiC grinding paper with foil backing	P2500
		250 mm Ø	
95011928	100 Pcs.	SiC grinding paper with foil backing	P80
95011929	100 Pcs.	SiC grinding paper with foil backing	P120
95011930	100 Pcs.	SiC grinding paper with foil backing	P180
95011931	100 Pcs.	SiC grinding paper with foil backing	P240
95011932	100 Pcs.	SiC grinding paper with foil backing	P320
95011933	100 Pcs.	SiC grinding paper with foil backing	P400
95011934	100 Pcs.	SiC grinding paper with foil backing	P500
95011935	100 Pcs.	SiC grinding paper with foil backing	P600
95011936	100 Pcs.	SiC grinding paper with foil backing	P800
95011937	100 Pcs.	SiC grinding paper with foil backing	P1000
95011938	100 Pcs.	SiC grinding paper with foil backing	P1200
95011939	100 Pcs.	SiC grinding paper with foil backing	P2500







Grain FEPA standard

• Fixation system: Adhesive carrier disc

300 mm Ø

		300 mm Ø	
95011943	100 Pcs.	SiC grinding paper with foil backing	P80
95011944	100 Pcs.	SiC grinding paper with foil backing	P120
95011945	100 Pcs.	SiC grinding paper with foil backing	P180
95011946	100 Pcs.	SiC grinding paper with foil backing	P240
95011947	100 Pcs.	SiC grinding paper with foil backing	P320
95011948	100 Pcs.	SiC grinding paper with foil backing	P400
95011949	100 Pcs.	SiC grinding paper with foil backing	P500
95011950	100 Pcs.	SiC grinding paper with foil backing	P600
95011951	100 Pcs.	SiC grinding paper with foil backing	P800
95011952	100 Pcs.	SiC grinding paper with foil backing	P1000
95011953	100 Pcs.	SiC grinding paper with foil backing	P1200
95011954	100 Pcs.	SiC grinding paper with foil backing	P2500

_			350 mm Ø	
	95014005	100 Pcs.	SiC grinding paper with foil backing	P80
	95014006	100 Pcs.	SiC grinding paper with foil backing	P120
	95014007	100 Pcs.	SiC grinding paper with foil backing	P180
	95014008	100 Pcs.	SiC grinding paper with foil backing	P240
	95014009	100 Pcs.	SiC grinding paper with foil backing	P320
	95014010	100 Pcs.	SiC grinding paper with foil backing	P400
	95014011	100 Pcs.	SiC grinding paper with foil backing	P500
	95014012	100 Pcs.	SiC grinding paper with foil backing	P600
	95014013	100 Pcs.	SiC grinding paper with foil backing	P800
	95014014	100 Pcs.	SiC grinding paper with foil backing	P1000
	95014015	100 Pcs.	SiC grinding paper with foil backing	P1200
	95014016	100 Pcs.	SiC grinding paper with foil backing	P2500



FIXATION SYSTEM FOR SELF-ADHESIVE GRINDING PAPER

Coprep GALAXY X-Tap

The QPREP GALAXY X-Tap is ideally suited for fast and residue-free attachment of self-adhesive grinding papers and polishing cloths. This special attachment system offers minimal impact elasticity and can be applied as QPREP GALAXY X-Tap with metal backing plate to the QPREP magnetic foil.



PRODUCT ADVANTAGES

- I Quick change of self-adhesive grinding paper or self-adhesive polishing cloths without adhesive residues
- Low resilience, due to the thin and solid structure of the QPREP GALAXY X-Tap
- I Easier cleaning compared to adhesive carrier disc

RECOMMENDED APPLICATIONS

- I Preparations with high edge sharpness
- I Carrier plate for self-adhesive grinding paper and self-adhesive polishing cloths

Item No.	Unit	Description	
		GALAXY X-TAP	
		Ø	



GALAXY X-Tap (for using with magnetic foil)

95017019	1 Pc.	200 mm	
95017020	1 Pc.	250 mm	
95017021	1 Pc.	300 mm	
95017022	1 Pc.	350 mm	



Applying GALAXY X-Tap on magnetic foil

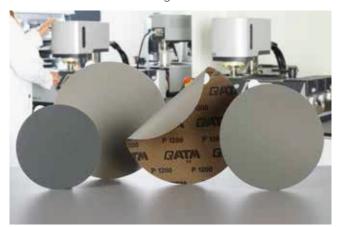


Placing e.g. self-adhesive grinding paper on GALAXY X-Tap



Correp Silicon carbide grinding papers, self-adhesive

Self-adhesive QPREP silicon carbide grinding papers can be used individually and are ideally suited for a wide range of varied materials. They offer a high degree of flexibility, especially for frequently changing material variants. The use of the QPREP GALAXY X-Tap fixation system allows efficient and non-residual changing of the grinding paper between the different grinding stages. Self-adhesive QPREP silicon carbide grinding paper is available in diameters of 200 / 250 / and 300 mm and in 13 different grain sizes.



PRODUCT ADVANTAGES

- Directionally oriented applied abrasive grains with homogeneous distribution for a high cutting effect and efficient material removal
- Very high adhesion on the fixation system
- Low resilience in conjunction with QPREP GALAXY X-Tap

RECOMMENDED APPLICATIONS

- I All-purpose usage
- I Suitable for planar, pre- and fine grinding steps due to different grain sizes

SILICON CARBIDE GRINDING PAPERS, SELF-ADHESIVE

Grain FEPA standard

· Fixation system: GALAXY X-Tap

200 mm Ø

		200 111111 9	
92002544	100 Pcs.	SiC grinding paper	P80
92002545	100 Pcs.	SiC grinding paper	P120
92002546	100 Pcs.	SiC grinding paper	P180
92002547	100 Pcs.	SiC grinding paper	P240
92002548	100 Pcs.	SiC grinding paper	P320
92002549	100 Pcs.	SiC grinding paper	P400
92004516	100 Pcs.	SiC grinding paper	P600
92002550	100 Pcs.	SiC grinding paper	P800
92002551	100 Pcs.	SiC grinding paper	P1000
92002638	100 Pcs.	SiC grinding paper	P1200
92002761	100 Pcs.	SiC grinding paper	2400*
92004561	100 Pcs.	SiC grinding paper	P2500
92002762	100 Pcs.	SiC grinding paper	4000*
		* 1	6 6 1

^{*}slurry coated, for a finer surface finish

250 mm Ø

92001643	100 Pcs.	SiC grinding paper	P80	
92001644	100 Pcs.	SiC grinding paper	P120	
92001645	100 Pcs.	SiC grinding paper	P180	
92004953	100 Pcs.	SiC grinding paper	P240	
92001647	100 Pcs.	SiC grinding paper	P320	
92001648	100 Pcs.	SiC grinding paper	P400	
92001649	100 Pcs.	SiC grinding paper	P600	
92001650	100 Pcs.	SiC grinding paper	P800	
92001651	100 Pcs.	SiC grinding paper	P1000	
92001652	100 Pcs.	SiC grinding paper	P1200	
92002763	100 Pcs.	SiC grinding paper	2400*	
92004563	100 Pcs.	SiC grinding paper	P2500	
92002764	100 Pcs.	SiC grinding paper	4000*	

^{*}slurry coated, for a finer surface finish





Grain FEPA standard

· Fixation system: GALAXY X-Tap

300 mm 6	0 mm 9	ð
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			300 mm Ø	
Ī	92001654	100 Pcs.	SiC grinding paper	P80
	92001655	100 Pcs.	SiC grinding paper	P120
	92001657	100 Pcs.	SiC grinding paper	P180
	92001658	100 Pcs.	SiC grinding paper	P240
	92001659	100 Pcs.	SiC grinding paper	P320
	92001660	100 Pcs.	SiC grinding paper	P400
	92001661	100 Pcs.	SiC grinding paper	P600
	92001662	100 Pcs.	SiC grinding paper	P800
	92001663	100 Pcs.	SiC grinding paper	P1000
	92001664	100 Pcs.	SiC grinding paper	P1200
	92002765	100 Pcs.	SiC grinding paper	2400*
	92004564	100 Pcs.	SiC grinding paper	P2500
	92002766	100 Pcs.	SiC grinding paper	4000*

^{*}slurry coated, for a finer surface finish

Aprep Zirconia alumina grinding papers, self-adhesive

QPREP Zirconia alumina grinding papers are high-performance grinding papers with a long lifetime for planar and pre-grinding. The zirconia alumina grain used constantly releases new cutting surfaces during the grinding process and enables efficient stock removal even at high contact forces. The grinding paper is free of silicon carbide and is therefore also suitable for sample preparation for



optical emission spectrometry (spectral analysis OES). QPREP zirconia alumina grinding paper is available in diameters of 200 / 250 / and 300 mm and in 3 different pre-grinding grit sizes.

PRODUCT ADVANTAGES

- Long lifetime
- Very high stock removal
- Low resilience in conjunction with QPREP GALAXY X-Tap

- Planar and pre-grinding of larger specimen cross-sections
- I Sample preparation for spectral analysis

		ZIRCONIA ALUMINA GRINDIN	G PAPERS, SELF-ADHESIVE
		Grain	n FEPA standard
		• Fixation system: GALAXY X-Tap	
		200 mm Ø	
92002374	25 Pcs.	Zirconia alumina grinding paper	P60
92002376	25 Pcs.	Zirconia alumina grinding paper	P180
		250 mm Ø	
92002382	25 Pcs.	Zirconia alumina grinding paper	P60
92002383	25 Pcs.	Zirconia alumina grinding paper	P120
92002384	25 Pcs.	Zirconia alumina grinding paper	P180
		300 mm Ø	
92002386	25 Pcs.	Zirconia alumina grinding paper	P60
92002387	25 Pcs.	Zirconia alumina grinding paper	P120
92002388	25 Pcs.	Zirconia alumina grinding paper	P180





FIXATION SYSTEM FOR SILICON GRINDING PAPERS WITHOUT ADHESIVE/FOIL BACKING

Oprep GALAXY Quick-Tap

The reusable fast and time saving fixation system for plain backed grinding paper. As an alternative to the clamping ring and adhesive film, the innovative QPREP GALAXY Quick-Tap is ideally suited for fixing grinding paper without adhesive/foil backing. Designed to be reusable, the thin layer of our new innovative fixation system resists high shear forces and ensures that the plain backed paper adheres securely to the GALAXY Quick-Tap. Like all new Galaxy products, the Quick-Tap features the Qprep Antislip backside for secure retention of the Qprep magnetic film.



PRODUCT ADVANTAGES

- I Optimized adhesion
- I Low impact elasticity
- I Reduction of pencil effect and edge rounding
- I Possibility to position the specimen holder beyond the edge of the grinding paper during semi-automatic and automatic specimen preparation
- Sustainable and resource-saving compared to using grinding paper with adhesive/foil backing
- I Allows hundreds of paper changes

RECOMMENDED APPLICATIONS

- I For use with grinding paper without adhesive/foil backing
- I Quick and easy as well as repeated fixation of grinding paper
- For direct attachment to QPREP magnetic foil

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	Item No.	Unit	Description
			GALAXY QUICK-TAP
			GALAXY Quick-Tap (for using with magnetic foil)
IEW	95017587	1 Pc.	200 mm
1EW	95017484	1 Pc.	250 mm
1EW	95017485	1 Pc.	300 mm



Applying GALAXY Quick-Tap on magnetic foil



Placing e.g. grinding paper without adhesive/foil backing on GALAXY Quick-Tap



on the GALAXY Quick-Tap: Dust and abrasion on the surface of the GALAXY Quick-Tap can reduce the adhesive strength and life of your GALAXY Quick-Tap. We recommend cleaning the adhesive layer with warm water and a few drops of detergent after approximately 100 paper changes. After cleaning, the Quick Tap will regain its original adhesive strength. To permanently protect the surface of the Quick Tap from dust, simply apply fresh, unused abrasive paper after use. This ensures safe, dust-free storage and the GALAXY Quick-Tap is immediately ready for use.





Corper Silicon carbide grinding papers without adhesive/foil backing

QPREP silicon carbide grinding papers without adhesive/foil backing can be used individually and are ideally suited for a wide range of varied materials. They offer a high degree of flexibility, especially for frequently changing material variants. The grinding paper without adhesive/foil backing can be fixed directly with the QPREP Quick Tap (to the work disc or magnetic foil) or with the QPREP clamping ring to the work disc. Both ensure low resilience during the grinding process. QPREP silicon carbide grinding paper without adhesive/foil backing is available in diameters of 200 / 230 / 250 and 300 mm and in 15 different grain sizes.



PRODUCT ADVANTAGES

- Directionally oriented applied abrasive grains with homogeneous distribution for a high cutting effect and efficient material removal
- Low resilience

RECOMMENDED APPLICATIONS

- I All-purpose usage
- Suitable for planar, pre- and fine grinding steps due to different grain sizes

P1200

2400*

P2500

4000*

Item No.	Unit	Description	
		SILICON CARBIDE GRINDING WITHOUT ADHESIVE/FOIL BA	
		Grai	n FEPA standard
		 Fixation system: GALAXY Quick-T 	ap or clamping ring
		200 mm Ø	
92001811	100 Pcs.	SiC grinding paper, plain backed	P80
92001812	100 Pcs.	SiC grinding paper, plain backed	P120
92001813	100 Pcs.	SiC grinding paper, plain backed	P180
92001814	100 Pcs.	SiC grinding paper, plain backed	P240
92001815	100 Pcs.	SiC grinding paper, plain backed	P320
92001816	100 Pcs.	SiC grinding paper, plain backed	P400
92001817	100 Pcs.	SiC grinding paper, plain backed	P500
92001818	100 Pcs.	SiC grinding paper, plain backed	P600
92001819	100 Pcs.	SiC grinding paper, plain backed	P800
92001820	100 Pcs.	SiC grinding paper, plain backed	P1000



SiC grinding paper, plain backed
*slurry coated, for a finer surface finish

SiC grinding paper, plain backed

SiC grinding paper, plain backed

SiC grinding paper, plain backed

100 Pcs.

100 Pcs.

100 Pcs.

100 Pcs.

92001821

92002634

92004557

92002640





*slurry coated, for a finer surface finish





Correp Grinding papers for Qpol 30

QPREP grinding papers for mobile grinding and polishing equipment are mainly used in mobile materialography rugged field conditions and are available as alumina grinding papers with a Velcro fastener on the back or as silicon carbide grinding papers with an adhesive backing. Both fasteners enable efficient changing of the sandpaper even under rugged field conditions.



PRODUCT ADVANTAGES

- I Targeted grinding of smallest areas without influencing surrounding sample areas
- I Easy change of grinding paper

- I Mobile component-materialography
- I Deburring samples of complex geometries

li N	4.4.5	5	
Item No.	Unit	Description	
		GRINDING	
		FOR MOB	ILE GRINDER AND POLISHER QPOL 30
		Ø Grain	FEPA standard
		Corundum g	rinding papers with hook-and-loop fastener backing
92004285	100 Pcs.	30 mm	P60
92004286	100 Pcs.	30 mm	P180
92004288	100 Pcs.	30 mm	P240
92004287	100 Pcs.	30 mm	P320
		Silicon grind	ling papers with adhesive backing
92004498	100 Pcs.	30 mm	P400
92004499	100 Pcs.	30 mm	P600
92004631	100 Pcs.	30 mm	P1000
		Self-adhesive p	polishing cloths: view chapter polishing

Notes			



Correp Grinding belts for Qgrind 100

QPREP grinding belts can be used very well for manual pre-grinding and deburring. They are waterproof and very robust for wet grinding with the Qgrind 100.



PRODUCT ADVANTAGES

- Waterproof
- High robustness
- I High stock removal

- I Pre-grinding and deburring
- I Preparations for macro etching for weld testing

Item No.	Unit	Description				
		GRINDING BELTS FOR QGRIND 100				
		Dimensions	Grain FEPA standard			
		Aluminum oxide grinding belts, water resistant				
92002528	5 Pcs.	100 x 920 mm	P80			
92002529	5 Pcs.	100 x 920 mm	P120			
92002530	5 Pcs.	100 x 920 mm	P180			
92002531	5 Pcs.	100 x 920 mm	P240			
92004505	5 Pcs.	100 x 920 mm	P320			
		Silcon carbide g	grinding belts, water-resistant			
92002664	5 Pcs.	100 x 915 mm	P80			
92002665	5 Pcs.	100 x 915 mm	P120			
92002666	5 Pcs.	100 x 915 mm	P180			
92002667	5 Pcs.	100 x 915 mm	P240			
92004613	5 Pcs.	100 x 915 mm	P320			
92002394	5 Pcs.	100 x 915 mm	P400			

Notes			



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