

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



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

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

			- Seriai irispee				
	Item No.	Unit	Description				
			PLANAR GRINDING STONES FOR QGRIND XL				
			Grain Size FEPA standard	Outer Ø	Inner Ø	Abor Size Ø	
			White corund • for tool stee steel and ca	(hardened ar		ed), stainless stee	el,
	95016741	1 Pc.	100	356 mm	126 mm	38 mm	
NEW	95017565	1 Pc.	150	356 mm	126 mm	38 mm	
			SIC grinding s • for sintered cast iron, co	materials (low	/- and unalloy	ed), aluminum, cł	nilled
NEW	95016746	1 Pc.	80	356 mm	126 mm	38 mm	
	95016747	1 Pc.	150	356 mm	126 mm	38 mm	
n i			Multi point dr	essing diamoı	nd for dressin	g face grinding st	tones
ă.	95016897	1 Pc.	Multi point dre	ssing diamon	d		



Qprep 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
- Defect analysis
- Thin section technology
- Petrographic examinations

	Item No.	Unit	Descr	iption				
			DIAN	DIAMOND CUP GRINDER				
			Ø	Thicknes	s Height	Arbor Size	Grain Size	
				glass fiber re n galvanic be		lastics and p	rinted circuit board	sk
	92006607	1 Pc.	150 m	m 8 mm	35 mm	12.7 mm	D126	
				glass, ceram n resin bond		nard metal		
NEW	95017564	1 Pc.	150 m	m 8 mm	21.5 mm	12.7 mm	D252	
	95015123	1 Pc.	150 m	m 8 mm	21.5 mm	12.7 mm	D151	
NEW	95017562	1 Pc.	150 m	m 8 mm	21.5 mm	12.7 mm	D126	
	95015122	1 Pc.	150 m	m 8 mm	21.5 mm	12.7 mm	D64	
NEW	95017563	1 Pc.	150 m	m 8 mm	21.5 mm	12.7 mm	D12	

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 gri	nding	and po	lishing s	ystems				
FEPA	P60	P80-100	P100-120	P180-320	P400-600	P800-1000	P500	0 material hardness
GALAXY		GREY	RED	GREEN	BLUE	YELLOW		> 350 HV
Grain size (µm)	250		12!	60	30		15 6	3 material hardness
POLARIS M				60	30	-	15 6	3 250 – 600 HV
POLARIS H			125	5 60	30	-	15 6	3 > 500 HV
QUASAR	250		125	5 91 4	4 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	aality*
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
- I Short processing times
- I High planarity

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

	Item No.	Unit	Description	
			GALAXY DIAMOND GRINDING DIS BOND: RESIN	CS
			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
			incl. dressing stone No. 95006603	
			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
	95013919	1 Pc.	GALAXY diamond grinding disc green	350 mm
The second secon			incl. dressing stone No. 95006603	









for medium to hard materials

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

Ī	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

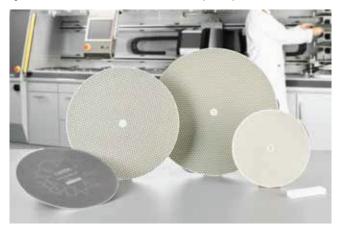
The values provided are only intended as guidelines. Grit sizes are considered as a range, rather than a specific value. The Federation of European Producers of Abrasives, known as FEPA, and the American National Standards Institute, known as ANSI, as well as the Japanese Industrial Standards Committee (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

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

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

Item No.	Unit	Description	
		POLARIS M DIAMOND GRINDING	DISCS
		Description	Grain Size
		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
95015020	1 Pc.	POLARIS M diamond grinding disc	3 µm
		300 mm Ø	
95015041	1 Pc.	POLARIS M diamond grinding disc	60 µm
95015042	1 Pc.	POLARIS M diamond grinding disc	30 µm
95015043	1 Pc.	POLARIS M diamond grinding disc	15 µm
95015044	1 Pc.	POLARIS M diamond grinding disc	6 µm
95015045	1 Pc.	POLARIS M diamond grinding disc	3 µm



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I N	\circ	LES



Coprep 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

1000	
200	
SF.	
307	
27	

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 $125 \mu m$ 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

 $3 \mu m$

Notes



Aprep 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

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

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

Item No.	Unit	Description		
		QUASAR DIAMOND GF	QUASAR DIAMOND GRINDING DISCS	
		Description	Grain Size	
		for hard materials incl. dressing stone No. (9Fixation system: Magnetic		
		250 mm Ø		
95015006	1 Pc.	QUASAR diamond grinding of	disc 252 µm	
95015007	1 Pc.	QUASAR diamond grinding of	disc 125 µm	
95015008	1 Pc.	QUASAR diamond grinding of	disc 91 µm	
95015009	1 Pc.	QUASAR diamond grinding of	disc 46 µm	
		300 mm Ø		
95015031	1 Pc.	QUASAR diamond grinding of	disc 252 µm	
95015032	1 Pc.	QUASAR diamond grinding of	disc 125 µm	
95015033	1 Pc.	QUASAR diamond grinding of	disc 91 µm	
95015034	1 Pc.	QUASAR diamond grinding of	disc 46 µm	

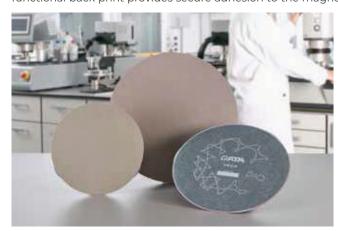


Notes		



Correp 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.



95016237

95016238

95016239

1 Pc.

1 Pc.

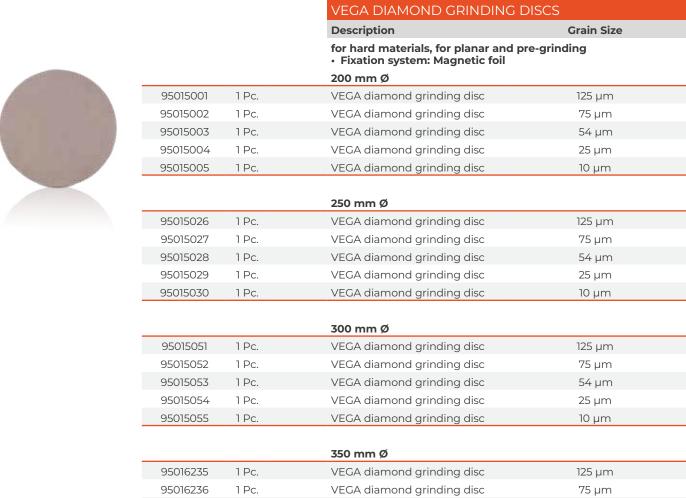
1 Pc.

PRODUCT ADVANTAGES

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

RECOMMENDED APPLICATIONS

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





VEGA diamond grinding disc

VEGA diamond grinding disc

VEGA diamond grinding disc

54 µm

25 µm

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

- High stock removal rate and flatness
- 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
- 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
- Long lifetime
- I 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
_			3



Grinding papers and foils

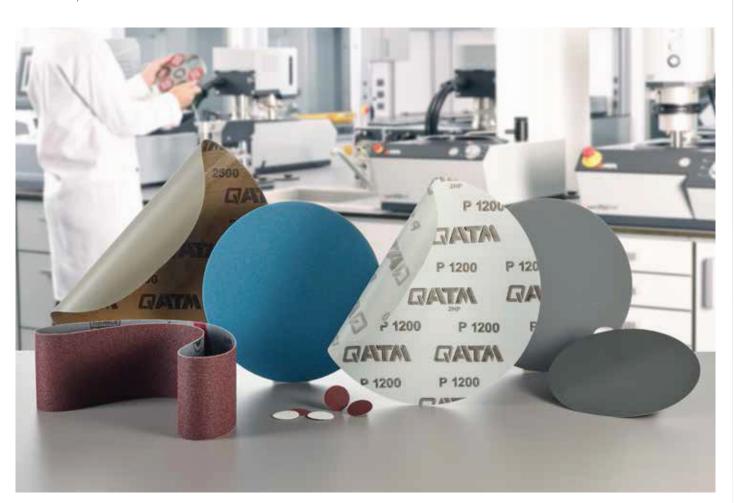
As an alternative to QPREP grinding discs, specimen preparation is also possible using QPREP grinding papers and foils. These differ in the type of carrier material and the possibility of the fixation systems to be used (double-sided adhesive carrier, GALAXY X-Tap, GALAXY Quick-Tap).

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 CAR		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

Notes



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 1200 P 1200
F 5200 P 1000 P 520
THE PARTY PERSON Y
DATA GATA
1200 b 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

Notes

Correp 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 PAR WITH FOIL BACKING	PER
		G	rain 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





SILICON CARBIDE GRINDING PAPER WITH FOIL BACKING

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

		350 mm Ø	
95014005	100 Pcs.	SiC grinding paper with foil backing	P80
95014006	100 Pcs.	SiC grinding paper with foil backing	P120
95014007	7 100 Pcs.	SiC grinding paper with foil backing	P180
95014008	3 100 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

Notes

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

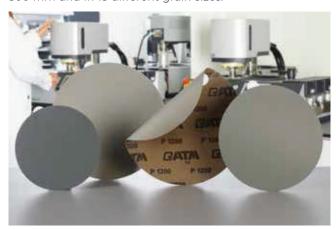


Placing e.g. self-adhesive grinding paper on GALAXY X-Tap



Coprep 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

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

RECOMMENDED APPLICATIONS

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

	Bescription

SILICON CARBIDE GRINDING PAPERS, SELF-ADHESIVE

Grain FEPA standard

· Fixation system: GALAXY X-Tap

200 mm Ø

		200 mm Ø		
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*	

^{*}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



Item No.	Unit	Description	
		SILICON CARBIDE GRIN	DING PAPERS, SELF-ADHESIVE
		Gra	in FEPA standard
		• Fixation system: GALAXY	Х-Тар
		300 mm Ø	
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

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

SiC grinding paper

Coprep Zirconia alumina grinding papers, self-adhesive

92002766 100 Pcs.

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.

4000*

PRODUCT ADVANTAGES

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

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

Item No.	Unit	Description	
		ZIRCONIA ALUMINA GRINDINO	PAPERS, SELF-ADHESIVE
		Fixation system: GALAXY X-Tap	TEL A Stalladia
		200 mm Ø	
92002374	25 Pcs.	Zirconia alumina grinding paper	P60
92002374	25 Pcs. 25 Pcs.	Zirconia alumina grinding paper Zirconia alumina grinding paper	P180
92002376	25 PCS.	Zircoriia aidiffiiria griffdirig paper	PIOU
		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

Correp 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
- Low impact elasticity
- I Reduction of pencil effect and edge rounding
- 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

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



ΝE

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.





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

ltem No.	Unit	Description		
		SILICON CARBIDE GRINDING PAPERS WITHOUT ADHESIVE/FOIL BACKING		
		Gra	in FEPA standard	
		 Fixation system: GALAXY Quick-7 	Tap 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

P1200

2400*

P2500

4000*

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
- Easy change of grinding paper

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

ltem No.	Unit	Description	
			LE GRINDER AND POLISHER QPOL 30
		,	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	ing 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	olishing cloths: view chapter polishing

Notes			



Coprep 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

- I 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 oxid	le 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	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			



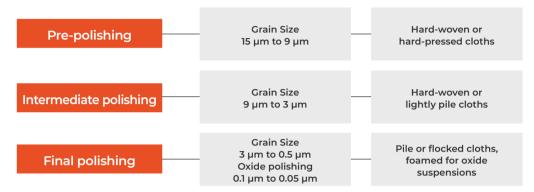
Consumables for polishing





Polishing

The polishing of the materialographic specimen serves, similar like grinding and after the grinding step, to remove the deformation introduced into the material. For this purpose, the unbound abrasive/grain is applied to special polishing cloths in gradually finer grain sizes. A distinction is made between three polishing processes with different polishing media:



A wide range of QPREP polishing media, lubricants and polishing cloths is available for this purpose.

Diamond Suspension

QPREP diamond suspensions are the polishing product of choice for materialographic preparations. The range of different chemical bases (water, alcohol, or oil) allows scratch-free polishing, depending on the application.

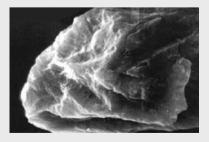
QPREP diamond suspensions are characterized by

- A narrow tolerance grain size distribution for a uniform scratch pattern.
- I The optimized diamond concentration for high removal rate and time-saving polishing.
- I Suitable for use with all materials.

The abrasive used is (industrial) diamond, which is divided into monocrystalline and polycrystalline, since different levels of material removal rate are achieved.

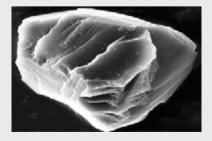
Polycrystalline (industrial) diamonds:

It consists of a multi-crystal, which breaks into smaller components when used, thus repeatedly creating new cutting edges (self-sharpening effect). This results in a high material removal rate and time-optimized polishing results.



Monocrystalline (industrial) diamonds:

It consists of a single crystal that breaks into small slices like a block when used. There is no self-sharpening effect as with polycrystalline diamonds. Due to this, a more material-friendly but also more time-consuming removal rate is achieved during polishing.



QPREP diamond suspensions are used in combination with a lubricant based on water, alcohol, or oil. The right mixing ratio between suspension and lubricant must be observed to achieve correct polishing results. Alternatively, QATM offers the QPREP DIA-Complete All-In-One diamond suspension. It contains the lubricant in an optimized ratio, which eliminates the need for manual dosing and mixing of suspension and lubricant.



Complete DIA-COMPLETE Poly

QPREP DIA-Complete Poly (polycrystalline) is an all-in-one diamond suspension that is used for a wide range of materials.



PRODUCT ADVANTAGES

- I High material removal rate
- I Easy handling
- I Optimally adjusted ratio of suspension and lubricant
- I Process reliable and repeatable polishing results
- Water based (eco-friendly)
- I Closely tolerated grain size

- I All Material besides water-sensitiv materials
- I Soft to hard materials
- I Manual as well as semi and fully automatic preparation

Item No.	Unit	Description
		DIA-COMPLETE POLY,
		ALL-IN-ONE DIAMOND SUSPENSION
		Grain Size
		Combined product of diamond suspension and lubricant
95011833	500 ml	0.25 µm
95011839	11	0.25 µm
95011845	2.5	0.25 µm
95016023	51	0.25 µm
95011834	500 ml	1 μm
95011840	11	1 μm
95011846	2.5	1 μm
95015394	51	1 μm
95011835	500 ml	3 µm
95011841	11	3 µm
95011847	2.5	3 µm
95015395	51	3 µm
95011836	500 ml	6 µm
95011842	11	6 µm
95011848	2.5	6 µm
95015396	51	6 µm
95011837	500 ml	9 µm
95011843	11	9 µm
95011849	2.5	9 µm
95015397	51	9 µm
95011844	11	15 µm



Gprep DIA-COMPLETE Mono

QPREP DIA-Complete Mono (monocrystalline) is an all-in-one diamond suspension that is used for a wide range of materials.



PRODUCT ADVANTAGES

- I Gentle material removal rate
- Easy handling
- Optimally adjusted ratio of suspension and lubricant
- I Process reliable and repeatable polishing results
- Water based (eco-friendly)
- I Closely tolerated grain size

- I All Material besides water-sensitiv materials
- I Soft to hard materials
- I Manual as well as semi and fully automatic preparation

Item No.	Unit	Description
		DIA-COMPLETE MONO, ALL-IN-ONE DIAMOND SUSPENSION Grain Size
		Combined product of diamond suspension and lubricant
95011815	500 ml	1 µm
95011820	11	1 µm
95011825	2.5	1 µm
95015404	5 l	1 µm
95011816	500 ml	3 µm
95011821	11	3 µm
95011826	2.5	3 µm
95015405	51	3 µm
95011817	500 ml	6 µm
95011822	11	6 µm
95011827	2.5	6 µm
95015406	51	6 µm
95011818	500 ml	9 µm
95011823	11	9 µm
95011828	2.5	9 µm
95015407	51	9 µm



Aprep Diamond suspension polycrystalline

QPREP diamond suspensions are characterized by the narrow tolerance grain size as well as the optimized concentration of polycrystalline diamonds.



PRODUCT ADVANTAGES

- I High material removal rate
- Water based (eco-friendly)
- I Closely tolerated grain size

- I All Material besides water-sensitiv materials
- I Soft to hard materials
- I For manual fine dosing with lubricant

Item No.	Unit	Description
		DIAMOND SUSPENSION POLYCRYSTALLINE
		Grain Size
92002353	250 ml	1 μm
95016017	500 ml	1 µm
92004798	11	1 µm
95002761	2.5	1 µm
95014519	51	1 µm
92002354	250 ml	3 µm
95016018	500 ml	3 µm
92004799	11	3 µm
95002762	2.5	3 µm
95014520	51	3 µm
92002355	250 ml	6 µm
95016019	500 ml	6 µm
92004800	11	6 µm
95002763	2.5	6 µm
95014521	51	6 µm
92002356	250 ml	9 µm
95016020	500 ml	9 µm
92004801	11	9 µm
95002764	2.5	9 µm
95014522	5 l	9 µm
95005738	11	15 μm



Aprep Diamond suspension monocrystalline

QPREP diamond suspensions are characterized by the narrow tolerance grain size as well as the optimized concentration of monocrystalline diamonds.



92002346

PRODUCT ADVANTAGES

- I Gentle material removal rate
- Water based (eco-friendly)
- I Closely tolerated grain size

RECOMMENDED APPLICATIONS

- All Material besides water-sensitiv materials
- Soft to hard materials
- I For manual fine dosing with lubricant

Item No.	Unit	Description
icciti i vo.		Description

DIAMOND SUSPENSION MONOCRYSTALLINE

Grain Size

diamond suspension monocrystalline		
Grain Size µm	Color	
1 µm	Blue	
3 µm	Green	
6 µm	Yellow	
9 µm	Red	

Color code

32002310	230 1111	i piri	
95016012	500 ml	1 µm	
92004791	11	1 μm	
95002755	2.5	1 μm	
95014514	5 l	1 µm	
92002347	250 ml	3 µm	
95016013	500 ml	3 µm	
92004792	11	3 µm	
95002756	2.5	3 µm	
95014515	5 l	3 µm	
92002348	250 ml	6 µm	
95016014	500 ml	6 µm	
92004793	11	6 µm	
95002757	2.5	6 µm	
95014516	51	6 µm	
92002349	250 ml	9 µm	
95016015	500 ml	9 µm	
92004794	11	9 µm	
95002758	2.5	9 µm	
95014517	51	9 µm	



Aprep Diamond suspension (alcohol-based / oil-based)

For polishing water-sensitive materials, QPREP diamond suspensions based on alcohol or oil are used. These have the same excellent polishing properties as the other diamond suspensions.



PRODUCT ADVANTAGES

- Anticorrosive
- High lubricity with ductile materials
- I Closely tolerated grain size

RECOMMENDED APPLICATIONS

- I All materials especially materials prone to corrosion
- I Soft to hard materials
- I For manual fine dosing with lubricant

Item No.	Unit	Description
		DIAMOND SUSPENSION (ALCOHOL-BASED) POLYCRYSTALLINE
		Grain Size
95003494	11	1 µm
95003495	11	3 µm
95003496	11	6 µm
95003497	11	9 um

DIAMOND SUSPENSION (ALCOHOL-BASED) MONOCRYSTALLINE

Grain Size

95003490	11	1 µm
95003491	11	3 µm
95003492	11	6 µm
95003493	11	9 µm

DIAMOND SUSPENSION (OIL-BASED) POLYCRYSTALLINE

Grain Size

95002792	11	1 µm
95002793	11	3 µm
95002794	11	6 µm
95002795	11	9 µm



Aprep Spray nozzle

The QPREP Spray nozzle is suited for optimum fine dispersion of suspension and lubricant on the polishing cloth during manual polishing.



Item No.	Unit	Description
		SPRAY NOZZLE
		Description
		 for diamond suspensions of all grain sizes for 250 ml, 500 ml and 1 L bottles
95016723	1 Pc.	Spray nozzle, hose length approx. 160 mm

Aprep Qdoser ONE dosing system for suspensions

The Qdoser ONE dosing system is an easy-to-use solution for manual or semi-automatic polishing processes. QATM's standard suspension and lubricant bottles can be quickly screwed on the dosing attachment. The dosing volume is closely and continuously controlled with an adjusting screw. The system can be applied with the Qdoser ONE holder to the polishing heads Qpol GO and ECO. If used with manual grinding/polishing machines, the Qdoser ONE stand with suction cups can be placed on the machines.

PRODUCT ADVANTAGES

- I Dosing attachment for standard and suspension bottles
- I Adjustable dosing volume
- I Can be freely positioned with stand
- I Can be screwed to polishing heads Qpol GO and ECO



ltem No.	Unit	Description
		QDOSER ONE DOSING SYSTEM FOR SUSPENSIONS
		Description
Z5631015	1 Pc.	Qdoser ONE basic module
Z5631014	1 Pc.	Qdoser ONE holder
Z5631016	1 Pc.	Qdoser ONE stand

Notes			



Aprep Diamond spray and paste

As an alternative to the diamond suspension as a polishing product, QATM also offers QPREP diamond spray and diamond paste. These are particularly well suited for commissioning new polishing cloths. When using these, make sure that the QPREP lubricants are also used.



PRODUCT ADVANTAGES

- Diamonds attach better to the polishing cloth due to nonliquid carrier medium
- I Closely tolerated grain size
- I High stock removal rate

RECOMMENDED APPLICATIONS

I Commissioning of new polishing cloths for higher percentage of bonded diamonds on the polishing cloth

-				
	Item No.	Unit	Description	
			DIAMOND SPRAY POLYCRYSTALLINE	
			Grain Size	
			CFC-free	
	95016025	200 ml	1 µm	
	95016026	200 ml	3 µm	
	95016027	200 ml	6 µm	
	95016028	200 ml	9 µm	

DIAMOND PASTE POLYCRYSTALLINE			
		Grain Size	
		10 g syringe	
92002339	10 g	0.25 µm	
92002340	10 g	1 µm	
92002341	10 g	3 μm	
92002342	10 g	6 μm	
92002343	10 g	9 μm	
92002344	10 a	15 um	

		DIAMOND PASTE MONOCRYSTALLINE	
		Grain Size	
		10 g syringe	
92002333	10 g	1 μm	
92002316	10 g	3 µm	
92002335	10 g	6 µm	
92002336	10 g	9 µm	
92002337	10 g	15 µm	



Aprep Diamond lubricants

QPREP lubricants (diamond lubricants) based on water, alcohol and oil are used with the polishing products mentioned above. The lubricant ensures even distribution of the polishing product on the polishing cloth. In addition, it also serves to cool the cloth and sample while polishing.



QPREP diamond lubricant yellow (water-based) is especially environmentally friendly and provides an even lubricating film on the polishing cloth.

QPREP diamond lubricant blue (alcohol-based) has a higher viscosity and surface tension. Due to this, the lubricant remains longer on the polishing cloth. This allows a more economical dosage.

QPREP diamond lubricant red (oil based) is an oil - water emulsion and due to its higher viscosity ensures a consistently stable lubricating film on the polishing cloth. Optimal for heat as well as water sensitive materials.

Item No.	Unit	Description	_	
item No.	Unit	Description		
		DIAMOND LUBRIC	CANT	
		Color Charac	teristics	
		 for manual dosing w 	ith diamond	d suspension
92005509	11	Yellow - water-	-based -	ecologically friendly
92004925	2.5	Yellow - water-	-based -	ecologically friendly
92005510	5 I	Yellow - water-	-based -	ecologically friendly
95016174	10 I	Yellow - water-	-based -	ecologically friendly
95000901	11	Blue - alcoho	l-based -	for water-free preparation
95000911	2.5	Blue - alcoho	l-based -	for water-free preparation
95001194	51	Blue - alcoho	l-based -	for water-free preparation
95001759	11	Red - oil-b	ased -	for water-free preparation
95001772	2.5	Red - oil-b	ased -	for water-free preparation
95001784	51	Red - oil-b	ased -	for water-free preparation
		DIAMOND LUBRIC	CATION CC	NCENTRATE
		Color	Chara	cteristics
		 for manual dosing w 	ith diamond	d suspension
95016362	11	Blue - for 10 L lubricant, mix w		pased lubricant - f ethanol
			· · · · · · · · · · · · · · · · · · ·	
		ETHANOL		
		individually applicab	le for intens	sive cleaning
95004662	11	Ethanol, 99% denatured	d d	
95004663	51	Ethanol, 99% denatured	d	
95004664	10 I	Ethanol, 99% denature	d	



Aprep Fine polishing suspensions

QPREP fine polishing suspensions are the polishing products of choice for the most demanding polishing requirements. This involves chemical mechanical polishing using silicon dioxide or aluminum oxide.



PRODUCT ADVANTAGES

- I Highest surface qualities
- I Removal of all deformation with vibration polishing
- Polishing/removing scratches in the range of 0.1 μm to 0.05 μm

- I Detailed microstructure analysis
- I Very soft or very hard and ductile materials

Item No.	Unit	Description	_	_	
item No.	Offic				
		FINE POLISH	IING SUSF	PENSIONS	
		Description	ph-value	Grain Size	
		Fine polishing s does not crys for ferrous maninerals	tallize	. 2 3	osites, PCB, rocks and
92002534	11	Eposal	pH≈8.0	0.06 µm	
02002576			d non-ferro soft materi	us materials, als like Al,Cu	
92002536	11	Eposil F	pH≈9.5	0.1 µm	
95013858	11	Eposil Non Dry	pH≈9.5	0.05 µm	(does not crystallize)
95013958	10 l	Eposil Non Dry	pH≈9.5	0.05 µm	(does not crystallize)
92002541	1 kg	Eposil M	pH≈9.5	0.06 µm	
		Colloidal silica • for titanium, ı	nickel, tin ar	nd its alloys	
95001206	1 kg	Eposil M11	pH≈11.0	0.06 µm	
		Water-free fine • e.g. for magn		uspension	
95005033	1 kg	Etosil E	pH≈7.0	0.06 µm	
		ALUMINA SU	ISPENSIO	N, CALCIN	ATED
		Description		Grain Size	9
		Aqueous conce	entrate, to d	ilute, 3-5 par	t of dest. water
92002533	11	Alumina susper	sion	0.3 µm	
92002532	11	Alumina suspen	Alumina suspension		
92004950	11	Alumina suspen	Alumina suspension		



Polishing cloths

The choice of the right polishing cloth is essential for a low-deformation and relief-free polish. The cloth material (silk, artificial silk, man-made fibers, wool fabric, felt, flocked or foamed synthetic fabrics) and the corresponding resilience are a crucial criterion in the selection of the polishing cloth. The possible fixation systems (GALAXY metal disc with magnetic foil or X-Tap) also differ.

Our GALAXY polishing cloths are now available with QPREP anti-slip backing! This allows GALAXY polishing cloths to resist high shear forces, even with high contact pressures and fully loaded sample holders, ensuring a stable polishing process every time.

At the beginning, **pre-polishing**, polishing cloths with a low resilience (hard cloth material) are selected, as these support the retention of edge sharpness. In comparison to the further polishing steps, a higher material removal is achieved during pre-polishing due to longer polishing times.

Polishing cloths with different resilience are used for **intermediate polishing**. The objective of the polish and the material to be polished are always the determining factors for the selection of a suitable polishing cloth.

Final polishing is performed on polishing cloths with a high resilience with short polishing times to avoid relief formation. Final polishing can either be done with diamond suspensions (3 μ m - 0.5 μ m) or, for the highest demands for analysis, by using fine polishing suspensions (oxide polish 0.1 μ m - 0.05 μ m) or (alumina 1 μ m - 0.3 μ m).

The selection of QPREP polishing cloths offers a suitable cloth for every polishing step, which, with the matching QPREP diamond suspension, ensures excellent polishing results.





FIXATION SYSTEM FOR GALAXY POLISHING CLOTHS

Coprep Magnetic foil for GALAXY polishing cloths

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
- 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 GALAXY polishing cloth on the magnetic foil



Caprep GALAXY polishing cloths

QPREP GALAXY polishing cloths with Qprep Anti-Slip backing offer the right cloth material for all materials and analysis purposes, with a secure grip on the magnetic foil every time.



PRODUCT ADVANTAGES

- I Faster application because there is no need to glue on the polishing cloth
- I Low resilience due to metallic carrier plate
- I Easier handling due to grip tabs on the carrier plate

- I Process-reliable and reproducible polishing results
- I Use with GALAXY magnetic foil

	ltem No.	Unit	Descripti	on
			GALAX'	Y POLISHING CLOTH WITH METAL BACK
			Descript	ion Ø
			Very haFor cerHigh lifFor use	– ALPHA e for pre-polishing ard, perforated chemical fiber cloth amics, hard metal, steel, grey cast iron, aluminum fetime and stock removal with diamond grain size: 15/9 μm n system: Magnetic foil
	95001407	5 Pcs.	Alpha	200 mm
	95001408	5 Pcs.	Alpha	250 mm
	95001409	5 Pcs.	Alpha	300 mm
	95013994	5 Pcs.	Alpha	350 mm
			Fixation	e with diamond grain size: 15/9/6 µm n system: Magnetic foil
	95001410	5 Pcs.	Beta	200 mm
	95001411	5 Pcs.	Beta	250 mm
	95001412	5 Pcs.	Beta -	300 mm
	95013995	5 Pcs.	Beta	350 mm
3 3 8			MediurC-steelaluminFor use	e for pre- & intermediate polishing n hard silk cloth s, precious metal, plastics [CFK, GFK], coatings,
	95001413	5 Pcs.	Delta	200 mm
	95001414	5 Pcs.	Delta	250 mm
	95001415	5 Pcs.	Delta	300 mm
	95013996	5 Pcs.	Delta	350 mm



	tem No.	Unit	Description GALAXY POLISHING CLOTH WITH METAL BACK
			Description Ø
			GAMMA – Polishing cloth • Suitable for pre- & intermediate polishing • Medium hard silk cloth • C-steels, precious metal, coatings, plastics [CFK, GFK], • For use with diamond grain size: 9/6/3 µm • Fixation system: Magnetic foil
W 9.	5017588	5 Pcs.	Gamma 200 mm
V 9.	5017589	5 Pcs.	Gamma 250 mm
N 9!	5017590	5 Pcs.	Gamma 300 mm



GALAXY - PH	I
-------------	---

- · Suitable for pre-, intermediate-, and end polishing
- · Medium hard chemical fiber cloth
- · For iron, non ferrous metals, minerals, ceramics, composite materials
- For use with diamond grain size: 9/6/3/1 µm
- Fixation system: Magnetic foil

95012740	5 Pcs.	Phi	250 mm
95012741	5 Pcs.	Phi	300 mm



GALAXY - SIGMA

- · Suitable for intermediate and end polishing
- · Soft wool cloth
- For all materials
- For use with diamond grain size: 6/3/1 µm
- · Fixation system: Magnetic foil

95001416	5 Pcs.	Sigma	200 mm
95001417	5 Pcs.	Sigma	250 mm
95001418	5 Pcs.	Sigma	300 mm
95013997	5 Pcs.	Sigma	350 mm



- · Suitable for end polishing
- · Short flocked, medium hard synthetic cloth
- · For all materials of medium and high hardness
- For use with diamond grain size: 3/1 μm
- · Fixation system: Magnetic foil

95016833	5 Pcs.	Eta	250 mm
95016834	5 Pcs.	Eta	300 mm

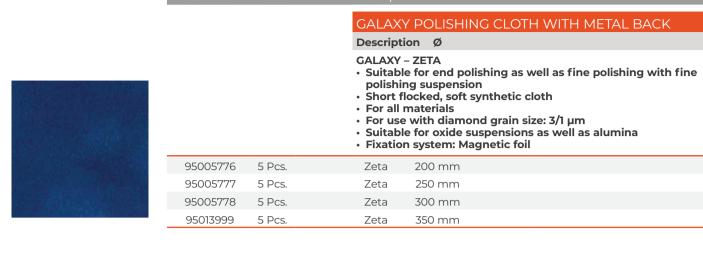


- · Suitable for end polishing as well as fine polishing with fine polishing suspension
- Short flocked, soft synthetic cloth
- For all materials, especially hard materials
- For use with diamond grain size: 3/1 µm
- Suitable for oxide suspensions

Fixation system: Magnetic foil					
95001419	5 Pcs.	lota	200 mm		
95001420	5 Pcs.	lota	250 mm		
95001421	5 Pcs.	lota	300 mm		
95013998	5 Pcs.	lota	350 mm		









GALAXY - OMEGA

- · Suitable for fine polishing with fine polishing suspension
- Soft synthetic cloth (chemical resistant)
- For all materials
- · Suitable for oxide suspensions
- Fixation system: Magnetic foil

95005779	5 Pcs.	Omega	200 mm	
95005780	5 Pcs.	Omega	250 mm	
95005781	5 Pcs.	Omega	300 mm	



GALAXY - LAMBDA

- Suitable for fine polishing with fine polishing suspension
- Brushed, structured synthetic cloth (chemical resistant)
- For all materials
- Suitable for oxide suspensions as well as alumina
- Fixation system: Magnetic foil

95005782	5 Pcs.	Lambda 200 mm
95005783	5 Pcs.	Lambda 250 mm
95005784	5 Pcs.	Lambda 300 mm

Notes			

FIXATION SYSTEM FOR SELF-ADHESIVE POLISHING CLOTHS

Oprep 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
- 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)

			or and the first doing that magnetic ten,	
Ī	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 polishing cloth on GALAXY X-Tap



Aprep Polishing cloths, self-adhesive

QPREP polishing cloths offer the right cloth material for all materials and analysis purposes.



PRODUCT ADVANTAGES

I Optimized adhesive backing ensures uniform fixing over the entire surface on the fixation system and realized no slipping or detachment of the polishing cloth

RECOMMENDED APPLICATIONS

I For use with GALAXY X-Tap system

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Item No.	Unit	Description				
		POLISHING CLOTHS, SELF-ADHESIVE Description Ø				
		ALPHA – Polishing cloth • Suitable for pre-polishing • Very hard, perforated chemical fiber cloth • For ceramics, hard metal, steel, grey cast iron, aluminum • High lifetime and stock removal • For use with diamond grain size: 15/9 µm • Fixation system: GALAXY X-Tap				
92002564	5 Pcs.	Alpha 250 mm				
92002573	5 Dcs	Alpha 300 mm				



		BETA – Polishing cloth • Suitable for pre-polishing • Hard synthetic cloth • Materials with high hardness, steel, grey cast iron, hard metal, ceramics • For use with diamond grain size: 15/9/6 µm • Fixation system: GALAXY X-Tap
95006572	5 Pcs.	Beta 250 mm
95006573	5 Pcs.	Beta 300 mm



DELTA - Polishing cloth

- Suitable for pre- & intermediate polishing
- Medium hard silk cloth
- C-steels, precious metal, plastics [CFK, GFK], coatings, aluminum
- For use with diamond grain size: 9/6/3 μm
- Fixation system: GALAXY X-Tap

92008802	5 Pcs.	Delta	250 mm
92008803	5 Pcs.	Delta	300 mm







SIGMA - Polishing cloth

- · Suitable for pre- & intermediate polishing
- Soft wool cloth
- For all materials
- For use with diamond grain size: 6/3/1 µm
- Fixation system: GALAXY X-Tap

92008810	5 Pcs.	Sigma	200 mm
92008811	5 Pcs.	Sigma	250 mm
92008812	5 Pcs.	Sigma	300 mm



IOTA - Polishing cloth

- Suitable for end polishing as well as fine polishing with fine polishing suspension
- · Short flocked, soft synthetic cloth
- for all materials, especially hard materials
- For use with diamond grain size: 3/1 µm
- · Suitable for oxide suspensions
- Fixation system: GALAXY X-Tap

			-	•
95002393	5 Pcs.	lota	200 mm	
95002394	5 Pcs.	lota	250 mm	
95002395	5 Pcs.	lota	300 mm	



ZETA - Polishing cloth

- Suitable for end polishing as well as fine polishing with fine polishing suspension
- · Short flocked, soft synthetic cloth
- · for all materials
- For use with diamond grain size: 3/1 μm
- Suitable for oxide suspensions as well as alumina
- Fixation system: GALAXY X-Tap

92005681	5 Pcs.	Zeta	200 mm
92005683	5 Pcs.	Zeta	250 mm
92005684	5 Pcs.	Zeta	300 mm



KAPPA - Polishing cloth

- · Suitable for fine polishing with fine polishing suspension
- Soft polishing felt
- · For all materials
- · Suitable for alumina
- Fixation system: GALAXY X-Tap

				·
92002572	5 Pcs.	Kappa	250 mm	
92002581	5 Pcs.	Kappa	300 mm	









NOTE: The Phi, Eta and Lambda polishing cloths are now only available in the GALAXY version!



PHI - Polishing cloth

- Suitable for pre-, intermediate-, and end polishing
- Medium hard chemical fiber cloth
- For iron, non ferrous metals, minerals, ceramics, composite materials
- For use with diamond grain size: 9/6/3/1 µm



ETA - Polishing cloth

- · Suitable for end polishing
- Short flocked, medium hard synthetic cloth
- For all materials of medium and high hardness
- For use with diamond grain size:
 3/1 µm



LAMBDA - Polishing cloth

- Suitable for fine polishing with fine polishing suspension
- Brushed, structured synthetic cloth (chemical resistant)
- For all materials
- Suitable for oxide suspensions as well as alumina

Notes		



Aprep Media carrier plate

During preparation using the Qpol 250 BOT, the grinding wheels/papers and polishing cloths are placed on a media carrier plate specially designed for the machine. Can be equipped with QPREP magnetic foil for use with QPREP GALAXY media.



PRODUCT ADVANTAGES

- I Quick exchange/selection of grinding papers / polishing cloths possible due to up to 16 stored media carrier plates
- Secure fixing of the media carrier plate by means of vacuum suction (Vakujet)

RECOMMENDED APPLICATIONS

I Fully automatic preparation using Qpol 250 BOT

ltem No.	Unit	Description
		MEDIA CARRIER PLATE
		Ø
		 for grinding and polishing robot Qpol 250 BOT (SAPHIR X-Change)
95005867	1 Pc.	250 mm

Aprep Filter inserts

During grinding and polishing, various fine residual materials are produced. These originate from the sample (chips), the grinding wheel (wear/abrasion) as well as par ts of the polishing media. To avoid entering of the wastewater system and the pumps these residuals have to be filtered. Suitable filter fleeces with the correct mesh sizes in the sedimentation tank prevents damage to the machines and ensure a safe process.



Item No.	Unit	Description			
		FILTER INSERTS	FILTER INSERTS		
			Dimensions	Mesh size	
		Filter inserts for settl (until year of constru			
95017310	5 Pcs.	Fleece	290 x 150 x 190 mm	40 µm	
95017311	5 Pcs.	Fleece	290 x 150 x 190 mm	60 µm	
		Filter inserts for settling tank (from year of construction 2013)			
95017312	5 Pcs.	Fleece	250 x 200 x 155 mm	60 µm	
95017313	5 Pcs.	Fleece	250 x 200 x 155 mm	100 µm	



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