

# Consumables for cutting



CUTTING



# Precision cutting

Precision cutting enables cutting directly next to significant analysis areas and also for materials with particularly complex material properties. Precision cut-off wheels are significantly thinner than larger diameter cut-off wheels. With QPREP, you can choose from aluminum oxide, silicon carbide, diamond or CBN abrasives. The abrasives can be either electroplated, resin bonded, rubber bonded or bronze bonded. QPREP precision cut-off wheels are the ideal solution for cutting requirements with high surface quality and exact cutting accuracy.

#### **PRODUCT ADVANTAGES**

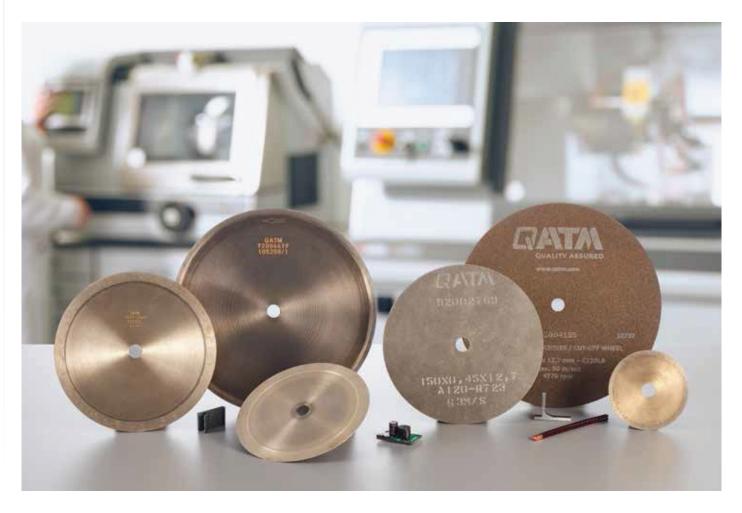
- I Minimal material loss due to thin cut-off wheel thickness
- Allows cutting closer to the desired surface
- I Allows cutting of small, sensitive, and very brittle specimens

#### **RECOMMENDED APPLICATIONS**

- I Target and defect preparation
- Electronic component segmentation
- I Preparing for thin sectioning specimens

# ARBOR SIZE AND WHEEL DIAMETER (MAX.) FOR QATM PRECISION CUT-OFF MACHINES

Cut-off machine	Arbor size	Wheel diameter (max.)
Qcut 150 M	12,7 mm	203 mm/8 "
Qcut 150 A	12,7 mm	203 mm/8 "
Qcut 200 A	12,7 mm	203 mm/8 "





# **Correp** Silicon carbide precision cut-off wheels

QPREP silicon carbide precision cut-off wheels offer the highest precision and surface finish when cutting complex components. Thanks to their tight manufacturing tolerances, they ensure a reliable and reproducible cutting process with a high degree of repeatability every time.



# **PRODUCT ADVANTAGES**

- I Excellent surface finish
- High repeatability
- I Exact cutting precision

- Nonferrous metals
- I Target preparations
- I Cutting of filigree parts

Item No.	Unit	Description	า			
		SILICON	CARBIDE F	PRECISION C	UT-OFF WHEELS	
		Ø	Thickness	Arbor Size	Bond	
		• for non-	errous metals	5		
92004998	5 Pcs.	150 mm (incl. reduc	1 mm tion ring 12.7 m	20 mm nm*)	Resin	
92004155	5 Pcs.	200 mm	1.5 mm	12.7 mm	Resin	
		* 1 reduction ring for each order				
		Reduction	ring			
01304330	1 Pc.	20 mm to	12.7 mm			

Notes	

CUTTING



# **Aprep** Aluminum oxide precision cut-off wheels

For precision cutting of ferrous materials, QPREP Aluminum oxide precision cut-off wheels are the optimal choice. This cut-off wheel is available in two different grain types (fine and coarse).



#### **PRODUCT ADVANTAGES**

- I The dense structure of the disc allows a longer lifetime
- Less wear and less heat between specimen and cut-off wheel

- Suitable for a wide range of materials, especially various steel samples
- I Cutting of high alloy steel
- I Cutting of nitrided steel
- I Allows cutting through mounted samples

-							
	Item No.	Unit	Description	า			
			ALUMIN	UM OXIDE I	PRECISION (	CUT-OFF WH	HEELS
			Ø	Thickness	Arbor Size	Grain size	Bond
			Fine-grain •for univer		n of materials	of higher hardr	ness
	92002643	5 Pcs.	100 mm	0.25 mm	12.7 mm	fine grid	rubber
	92002645	5 Pcs.	100 mm	0.4 mm	12.7 mm	fine grid	rubber
	92002644	5 Pcs.	125 mm	0.45 mm	12.7 mm	fine grid	rubber
	92002769	5 Pcs.	150 mm	0.45 mm	12.7 mm	fine grid	rubber
NEW	95014126	5 Pcs.	200 mm	0.45 mm	12.7 mm	fine grid	rubber
				ained ersal application d samples	on of materials	of lower hardr	ness and
	92002646	5 Pcs.	125 mm	0.8 mm	12.7 mm	coarse grid	rubber
	92002770	5 Pcs.	150 mm	0.6 mm	12.7 mm	coarse grid	rubber
	92002647	5 Pcs.	200 mm	0.8 mm	12.7 mm	coarse grid	rubber
	92004159	5 Pcs.	150 mm	1 mm	12.7 mm	coarse grid	resin
Notes							



# **Aprep** Diamond precision cut-off wheels

For cutting hard materials, QPREP Diamond precision cut-off wheels are the optimal choice, as they cut materials such as ceramics without smearing. The bond is made of bronze. The diamonds can be "dressed" to take full advantage of the cutting performance of the diamond particles again after a longer period of use.



#### **PRODUCT ADVANTAGES**

- I Diamond as abrasive enables cutting of hardest materials
- Separates hard material without smearing
- I The dressing functionality of our QATM cut-off machines ensures that the diamonds always maintain maximum cutting performance

# **RECOMMENDED APPLICATIONS**

- I Cutting hard and brittle materials such as ceramics and glass
- I Cutting of mineral samples like rocks
- I Cutting of specimens with brittle plasma coating

	Item No.	Unit	Descriptio	n				
			DIAMON	ND PRECISIO	ON CUT-OF	F WHEE	LS	
			Ø	Thickness	Arbor Size	Grain size	Concen- tration	Bond
			• for unive	ersal applicati	on			
	92002397	1 Pc.	75 mm	0.3 mm	12.7 mm	D181	HC	bronze
	92002401	1 Pc.	100 mm	0.3 mm	12.7 mm	D181	HC	bronze
	92002405	1 Pc.	125 mm	0.5 mm	12.7 mm	D213	HC	bronze
	92002409	1 Pc.	150 mm	0.5 mm	12.7 mm	D213	HC	bronze
W	95016591	1 Pc.	175 mm	0.65 mm	12.7 mm	D213	HC	bronze
W	95004814	1 Pc.	200 mm	0.5 mm	12.7 mm	D213	HC	bronze
			• for glass	s, minerals and	d brittle struc	tural cera	mics	
	92002398	1 Pc.	75 mm	0.3 mm	12.7 mm	D181	LC	bronze
	92002402	1 Pc.	100 mm	0.3 mm	12.7 mm	D181	LC	bronze
	92002406	1 Pc.	125 mm	0.5 mm	12.7 mm	D213	LC	bronze
	92002410	1 Pc.	150 mm	0.5 mm	12.7 mm	D213	LC	bronze
W	92006368	1 Pc.	200 mm	0.6 mm	12.7 mm	D213	LC	bronze
			for hard	metals and h	ard ceramic r	naterials		
W	95010518	1 Pc.	150 mm	0.5 mm	12.7 mm	D213	LC	bronze
W	95008773	1 Pc.	150 mm	0.5 mm	12.7 mm	D213	LC	resin
_	95015121	1 Pc.	200 mm	1.0 mm	12.7 mm	D151	LC	bronze
			geomet	mbled printed ries	circuit board	is and fill	gree con	iponen
	92002400	1 Pc.	75 mm	0.3 mm	12.7 mm	D91/107	HC	bronze
	92002404	1 Pc.	100 mm	0.3 mm	12.7 mm	D91/107	HC	bronze
	92002408	1 Pc.	125 mm	0.5 mm	12.7 mm	D91/107	HC	bronze
	92002412	1 Pc.	150 mm	0.5 mm	12.7 mm	D91/107	HC	bronze
_			<ul> <li>for mou</li> </ul>	nted samples,	composites,	CFRP, GF	RP and p	lastics
	0=00=				10.0			

200 mm

1.2 mm

12.7 mm

D126

LC

galvanic

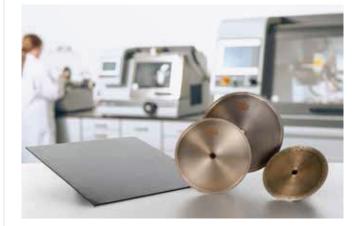
95007077

1 Pc.



# **Caprep** CBN precision cut-off wheels

QPREP CBN precision cut-off wheels like the diamond precision cut-off wheels, are edged with a cubic boron nitride (CBN) abrasive in a bronze bond. The properties of CBN make it particularly suitable for composite and tough materials.



92002442

# **PRODUCT ADVANTAGES**

- I The best cutting performance when cutting soft and hard materials
- I Separates hard material without smearing

CBN PRECISION CUT-OFF WHEELS

Thickness

· for composites and rigid materials

0.9 mm

The dressing functionality of our QATM cut-off machines ensures that the CBN particles always maintain the highest cutting performance

# **RECOMMENDED APPLICATIONS**

Composites and materials with a combination of soft and hard materials

**Arbor Size** 

I Ductile materials

**BOND: BRONZE** 

I Cutting hard ferrous materials

	52002 : .2		,	0.5	,
	92002443	1 Pc.	100 mm	0.5 mm	12.7 mm
	92002444	1 Pc.	125 mm	0.5 mm	12.7 mm
	92002445	1 Pc.	150 mm	0.65 mm	12.7 mm
	92002446	1 Pc.	175 mm	0.9 mm	12.7 mm
	92006419	1 Pc.	200 mm	0.5 mm	12.7 mm
Notes					



# **Coprep** Saw blade cut-off wheel

The QPREP Saw blade cut-off wheel is particularly suitable for cutting materials with a high tendency to smearing.



# PRODUCT ADVANTAGES

- I The best performance when cutting non-metallic material
- I Lower heat generation due to single engagement of the saw teeth during cutting
- I Since there is no binding of abrasives, the disc is odor and dust free

- I Separation of non-metallic materials
- I Separation of plastic materials
- I Separation of polymers e.g., carbon fiber reinforced polymers

Item No.	Unit	Description
		SAW BLADE CUT-OFF WHEEL
		Ø Thickness Arbor Size
		for plastics, non-ferrous metals
95009083	1 Pc.	150 mm 1.4 mm 30 mm (reduction ring 12.7 mm necessary)
01811035	1 Pc.	Reduction ring 12.7 mm to 30 mm

Notes			

# Cutting

The process of cutting, specifically wet abrasive cutting, is essential for materialographic sectioning of samples. In this process, cut-off wheels of different material thicknesses, abrasive particles and bonds are used on a corresponding wet abrasive cutting machine. These bond types can be synthetic resin, rubber, or metal. For the abrasives, aluminum oxide, silicon carbide, diamond or CBN is used. These abrasive particles are enclosed in a bond matrix.

#### **PRODUCT ADVANTAGES**

- I Low thermal influence on the specimen during the cutting process
- Wet abrasive cutting achieves very fine surface finishes after cutting
- I Optimum cutting shortens the further preparation process

#### **RECOMMENDED APPLICATIONS**

- I Separation of relevant inspection areas
- I Plane-parallel segmentation of semi-finished products and components
- Investigation of geological and mineralogical samples

#### AS A RULE, THE FOLLOWING PRINCIPLE APPLIES:

- For hard materials, a cut-off wheel with soft bond is recommended.
  - → This ensures fast breaking out of worn abrasive particles.
- For medium-hard materials, a cut-off wheel with a medium-hard bond is recommended.
  - → This ensures worn abrasive particles break out evenly.
- I For soft materials, a cut-off wheel with hard bond is recommended.
  - → This ensures slow breaking out of worn abrasive particles.

# ARBOR SIZE AND WHEEL DIAMETER (MAX.) FOR QATM CUT-OFF MACHINES

Cut-off machine	Arbor size	Wheel diameter (max.)
Brillant 230	32 mm	305 mm/12 "
Brillant 255	32 mm	406 mm/16"
Qcut 250 M	32 mm	254 mm/10"
Qcut 250 A	32 mm	254 mm/10"
Qcut 350 A	32 mm	356 mm/14"
Qcut 400 A	32 mm	406 mm/16"
Qcut 500 A	32 mm	508 mm/20 "
Qcut 600 A	32 mm	610 mm/24"
Qcut 600 BOT	32 mm	610 mm/24"

# Notes



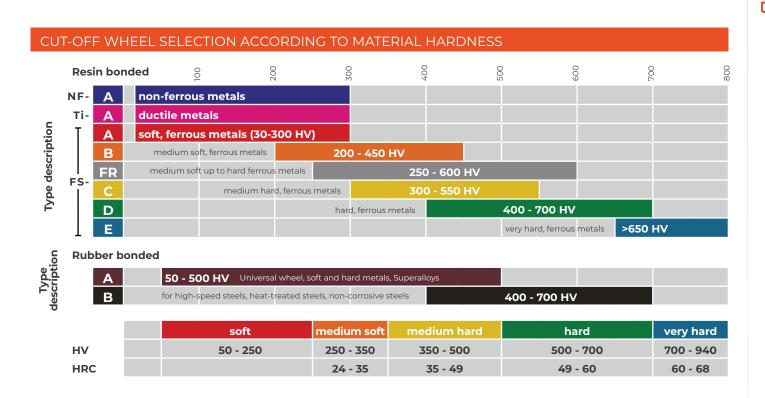
# Premium cut-off wheels

Significant properties for cut-off wheels are wear (i.e., abrasion resistance), long lifetime and cutting performance. Characteristics of the wheel composition are the abrasive used (aluminum oxide, silicon carbide, diamond, cubic boron nitride (CBN)) and the bond type (metal, resin or rubber). The goal of any cut is to separate the material with minimal deformation and temperature effect. For a clean cut, the abrasive particles and bond type of the cut-off wheel should be matched to the material being cut.

QPREP Premium cut-off wheels offer the optimal solution for a wide range of applications.

- Achieve a fine cutting surface
- Wide range of cut-off wheels for cutting all materials
- I The best cutting function fitting to the material
- I Low deformation and temperature during the cutting process
- I Very good cutting performance with long lifetime

The color coding of the premium cut-off wheels enables quick, visual assignment and identification of the several types:



# Notes

CUTTING



# **Aprep** Premium Silicon Carbide cut-off wheels

Due to the lower hardness of silicon carbide particles compared to aluminum oxide particles, these premium cut-off wheels are the optimal choice for cutting soft as well as non-ferrous materials.



#### **PRODUCT ADVANTAGES**

- Optimized cutting performance for non-ferrous metals and ductile metals
- Long lifetime and low wear of the cut-off wheel

#### RECOMMENDED APPLICATIONS

- I QPREP Premium Silicon Carbide cut-off wheel **NF-A** are suitable for cutting soft and medium hard non-ferrous metals as well as hard non-metallic materials (glass, stone).
- I QPREP Premium Silicon Carbide cut-off wheel **Ti-A** for cutting non-ferrous metals, Ti alloys and refractory metals

Item No.	Unit	Description

# PREMIUM SILICON CARBIDE CUT-OFF WHEELS BOND: RESIN

Ø Thickness Arbor Size

#### Type NF-A, Purple

• for non-ferrous metals (30-300 HV)

95012531	10 Pcs.	250 mm	1.5 mm	32 mm
95012538	10 Pcs.	300 mm	2.0 mm	32 mm
95012545	10 Pcs.	350 mm	2.5 mm	32 mm
95012552	10 Pcs.	400 mm	3.0 mm	32 mm
95012566	5 Pcs.	500 mm	4.0 mm	32 mm
95012573	5 Pcs.	600 mm	4.5 mm	32 mm

# Type Ti-A, Pink

for titanium and alloys, refractory metals (30-300 HV)

NEW	92002417	10 Pcs.	230 mm	1.5 mm	32 mm
	95012530	10 Pcs.	250 mm	1.5 mm	32 mm
	95012537	10 Pcs.	300 mm	2.0 mm	32 mm
NEW	92002427	10 Pcs.	350 mm	2.5 mm	32 mm
NEW	92002428	10 Pcs.	400 mm	3.0 mm	32 mm

Notes			



# **Aprep** Premium Aluminum Oxide cut-off wheels

QPREP Premium Aluminum Oxide cut-off wheels cover a wide range of materials from 30 HV to >650 HV.



#### **PRODUCT ADVANTAGES**

- I Wide range of application for various materials with different hardness's
- I Long lifetime as well as low wear of the cut-off wheel
- I Premium abrasive particles enable the finest cutting surfaces, which shortens the following grinding steps
- I The synthetic resin bond allows dull abrasive particles to break out evenly during the cutting process

# **RECOMMENDED APPLICATIONS**

- I Cutting of all materials
- I Cutting of polymers with the hard-bonded cut-off wheel FS-A
- I FS-FR low-wear cut-off wheel in the 250 to 600 HV range, especially suitable for manual cutting
- I Cutting of very hard steels with the soft-bonded cut-off wheel

  FS-F

		FS-E
Item No.	Unit	Description
		PREMIUM ALUMINUM OXIDE CUT-OFF WHEELS BOND: RESIN
		Ø Thickness Arbor Size
		Type FS-A, Red • for soft steel (30-300 HV), non-ferrous metals, polymer
95012529	10 Pcs.	250 mm 1.5 mm 32 mm
95012536	10 Pcs.	300 mm 2.0 mm 32 mm
95012543	10 Pcs.	350 mm 2.5 mm 32 mm
95012550	10 Pcs.	400 mm 3.0 mm 32 mm
95012564	5 Pcs.	500 mm 4.0 mm 32 mm
95012571	5 Pcs.	600 mm 4.5 mm 32 mm
		Type FS-B, Orange • for medium soft steel (200-450 HV)
95012528	10 Pcs.	250 mm 1.5 mm 32 mm
95012535	10 Pcs.	300 mm 2.0 mm 32 mm
95012542	10 Pcs.	350 mm 2.5 mm 32 mm
95012549	10 Pcs.	400 mm 3.0 mm 32 mm
95012563	5 Pcs.	500 mm 4.0 mm 32 mm
95012570	5 Pcs.	600 mm 4.5 mm 32 mm
		Type FC FD febrie reinferend (250 C00 LIV)

Type FS-FR, fabric reinforced (250-600 HV)

- · for medium soft to hard steels
- > 30% wear reduction

NEW	95017540	10 Pcs.	250 mm	1.5 mm	32 mm
NEW	95017541	10 Pcs.	300 mm	2.0 mm	32 mm
NEW	95017542	10 Pcs.	350 mm	2.5 mm	32 mm
NEW	95017543	10 Pcs.	400 mm	3.0 mm	32 mm



Item No.	Unit	Descriptio	on	
		Type FS-0	C, Yellow	steel (300-550 HV), case hardened, nitrided
95012527	10 Pcs.	250 mm	1.5 mm	32 mm
95012534	10 Pcs.	300 mm	2.2 mm	32 mm
95012541	10 Pcs.	350 mm	2.2 mm	32 mm
95012548	10 Pcs.	400 mm	3.0 mm	32 mm
95012562	5 Pcs.	500 mm	4.0 mm	32 mm
95012569	5 Pcs.	600 mm	4.5 mm	32 mm
		Type FS-E • for hard		0-700 HV), annealed, carburised steels
95012526	10 Pcs.	250 mm	1.5 mm	32 mm
95012533	10 Pcs.	300 mm	2.0 mm	32 mm
95012540	10 Pcs.	350 mm	2.5 mm	32 mm
95012547	10 Pcs.	400 mm	3.0 mm	32 mm
95012561	5 Pcs.	500 mm	4.0 mm	32 mm
95012568	5 Pcs.	600 mm	4.5 mm	32 mm
		Type FS-E • for very		s (>650 HV)
95012525	10 Pcs.	250 mm	1.5 mm	32 mm
95012532	10 Pcs.	300 mm	2.0 mm	32 mm
95012539	10 Pcs.	350 mm	2.5 mm	32 mm
95012546	10 Pcs.	400 mm	3.0 mm	32 mm
95012560	5 Pcs.	500 mm	4.0 mm	32 mm
95012567	5 Pcs.	600 mm	4.5 mm	32 mm



		PREMIUM ALUMINUM OXIDE CUT-OFF WHEEL BOND: RUBBER		
		Ø	Thickness	Arbor Size
		Type A, Bro • universal		t and hard metals, superalloys (50-500 HV)
92002413	10 Pcs.	229 mm	0.8 mm	32 mm
92002599	10 Pcs.	254 mm	1.0 mm	32 mm
92002441	10 Pcs.	305 mm	1.0 mm	32 mm
92002436	10 Pcs.	356 mm	1.6 mm	32 mm
92002439	10 Pcs.	400 mm	1.6 mm	32 mm
92008537	10 Pcs.	500 mm	2.4 mm	32 mm
92004007	10 Pcs.	600 mm	4.3 mm	40 mm

# Typ B, Black

• for high-speed steels, heat-treated steels, non-corrosive steels (400-700 HV)

92002414	10 Pcs.	229 mm	1.6 mm	32 mm
92002600	10 Pcs.	254 mm	1.6 mm	32 mm
92002434	10 Pcs.	305 mm	1.6 mm	32 mm
92002437	10 Pcs.	356 mm	2.4 mm	32 mm
92002440	10 Pcs.	400 mm	2.4 mm	32 mm
92008874	10 Pcs.	500 mm	3.0 mm	32 mm



# **Aprep** Premium Diamond cut-off wheels

QPREP Premium Diamond cut-off wheels are used for hard materials (ceramics, glass fiber reinforced plastics, minerals and rocks, glass or similar). There are two different bond variants to choose from: metallic, in which the diamonds are usually bound in a bronze bond, or the bond with synthetic resin.



#### **PRODUCT ADVANTAGES**

- I Two different bond types (bronze and resin) for a wide range of applications.
- The dressing functionality of our QATM cut-off machines ensures that the diamonds always maintain maximum cutting performance
- I Long lifetime as well as low wear of the cut-off wheel

# **RECOMMENDED APPLICATIONS**

- I Cutting of ceramic materials as well as composites with bronzebonded diamond premium cut-off wheels
- Cutting of hard and brittle materials with resin-bonded diamond cutting discs
- I Cutting of brittle coating surfaces

		· catting c	or brittle coath	19 34114003			
Item No.	Unit	Description	ı				
			PREMIUM DIAMOND CUT-OFF WHEELS BOND: BRONZE				
		Ø	Thickness	Arbor Size	Grain C size	Concen- tration	
		• for ceran	nic materials				
92002452	1 Pc.	250 mm	1.2 mm	32 mm	D181	LC	
92002453	1 Pc.	300 mm	1.6 mm	32 mm	D181	LC	
95003433	1 Pc.	350 mm	1.6 mm	32 mm	D181	LC	
92008751	1 Pc.	400 mm	2.4 mm	32 mm	D181/213	LC	
		• for comp	osite materia	als (hard/soft o	combinatio	ons)	
95002102	1 Pc.	250 mm	1.3 mm	32 mm	D126/151	HC	
92004719	1 Pc.	300 mm	1.3 mm	32 mm	D126/151	HC	
92008619	1 Pc.	350 mm	1.4 mm	32 mm	D126/151	HC	
95006793	1 Pc.	400 mm	1.3 mm	32 mm	D126/151	НС	
		other diame	ters on request				

PREMIUM DIAMOND CUT-OFF WHEELS
BOND: RESIN

Ø	Thickness	Arbor Size	Grain	Concen-
			size	tration

#### · for hard metals, generally for materials of high hardness

92002451	1 Pc.	250 mm	1.2 mm	32 mm	D126/151	HC
92002454	1 Pc.	300 mm	1.6 mm	32 mm	D126	HC
95003049	1 Pc.	350 mm	1.6 mm	32 mm	D126	HC
95010131	1 Pc.	400 mm	1.6 mm	32 mm	D126	HC

other diameters on request



# **Aprep** Premium CBN cut-off wheels

QPREP Premium CBN cut-off wheels made of cubic boron nitride (CBN) provide a fine cutting surface for nickel and cobalt-based alloys. The high hardness as well as the high ductility of the CBN particles improve the cutting ability of the cut-off wheel with significantly less wear. The CBN abrasives in these discs maintain cutting performance over a longer period, which improves the cutting ability of the cut-off wheels.



# **PRODUCT ADVANTAGES**

- I The good thermal conductivity of CBN abrasives can dissipate heat generated during cutting much more effectively
- Long lifetime as well as low wear of the cut-off wheel
- The dressing functionality of our QATM cut-off machines ensures that the CBN particles always maintain the highest cutting performance

Arbor Size

## **RECOMMENDED APPLICATIONS**

I For the cutting of composite materials

PREMIUM CBN CUT-OFF WHEELS

**Thickness** 

I For cutting very hard steels

BOND: BRONZE

			• for comp	osites and rigi	d materials
	92002456	1 Pc.	250 mm	1.6 mm	32 mm
	92002457	1 Pc.	300 mm	1.6 mm	32 mm
	95005025	1 Pc.	350 mm	1.6 mm	32 mm
	92004473	1 Pc.	400 mm	1.6 mm	32 mm
Notes					



# **Aprep** Aluminum Oxide cut-off wheels

QPREP Aluminum Oxide cut-off wheels are to be used for varied materials depending on the type.



# **PRODUCT ADVANTAGES**

- I Long lifetime as well as low wear of the cut-off wheel
- I The synthetic resin bond enables even breaking out of blunt abrasive particles during the cutting process

# RECOMMENDED APPLICATIONS

- Type C is universally applicable for materials with high and very high hardnesses
- I Type-D for cutting medium-hard materials and case-hardened
- I Type-I for cutting mild steel and cast materials

Item No.	Unit	Description	n	
		ALUMINI BOND: R		E CUT-OFF WHEELS
		Ø	Thickness	Arbor Size
		Type C • universa	l wheel for	materials of high to very high hardness
92001554	10 Pcs.	250 mm	1.5 mm	32 mm
92001558	10 Pcs.	300 mm	2 mm	32 mm
92001669	10 Pcs.	350 mm	2 mm	32 mm
92001783	10 Pcs.	400 mm	3 mm	32 mm
		Type D • universa	l wheel for	medium hard materials, case-hardened
92001555	10 Pcs.	250 mm	1.5 mm	32 mm
92001559	10 Pcs.	300 mm	2 mm	32 mm
92001670	10 Pcs.	350 mm	2 mm	32 mm
92001784	10 Pcs.	400 mm	3 mm	32 mm
		Type I • for const	ruction ste	els and cast material
0200000	10 Pcs.	250 mm	1.6 mm	32 mm
92006066	IU PCS.	200		
92006066	10 Pcs.	300 mm	2 mm	32 mm
			2 mm 2.5 mm	32 mm 32 mm

# Notes



# **Coprep** Coolant and anti-corrosion agent

Optimum cooling is essential during cutting. Excessive heat generation during the cutting process damages the specimen as well as the cutting wheel. QPREP coolant and anti-corrosion agent help to dissipate the heat and remove chips at the cutting point. A corrosion inhibitor must be added to the coolant, otherwise there is a risk of oxidation on the cut-off surface of the specimen as well as on machine components.



#### PRODUCT ADVANTAGES

- QPREP coolant and anti-corrosion agent are suitable for all types of cut-off machines
- QPREP ATM CoolCut is known for its environmentally and userfriendly handling
- I QPREP coolant and anti-corrosion agent minimize the risk of thermal damage and corrosion during the cutting process

- I Cutting additive for all and especially corrosive sensitive materials
- I When cutting coated samples that have been coated in a salt bath, the QPREP Defoamer should be used
- I For cutting polymers and composites, the use of the QPREP coolant and anti-corrosion agent for plastics and composites is recommended
- QPREP ATM-CoolAdd CU is an additive to the cooling lubricant for specific requirements when cutting specific materials

ltem No.	Unit	Description	
		ATM-COOLCUT,	
		ENVIRONMENT- AND USER-FRIENDLY	
		Mixing ratio 1:25 (4%) – 1:17 (6%) / refractometer: 2.0%/°Bx	
RECOMME	NDATION	<ul> <li>for steel, cast iron, light and non-ferrous metal, glass and ceramics, composites</li> <li>free of oil, boron, nitride and formaldehyde</li> <li>optimized anti-corrosion protection and cutting properties</li> </ul>	
95004145	11	ATM-CoolCut, concentrate	
95004146	51	ATM-CoolCut, concentrate	
95004147	10 I	ATM-CoolCut, concentrate	
		Mixing ratio: 1:66 (1.5%) - 1:33 (3%) / refractometer: 2.4%/°Bx  • optimized for polymers and composites  • free of nitride and oil  • also suitable for steels, non-ferrous metals, ceramics and glasses	
95007864	11	Concentrate	
		ANTI CORROSION COOLANT, STANDARD	
		Mixing ratio 1:35 / refractometer: 1.4%/°Bx	
		for steel, cast iron, non-ferrous metal	
95014280	11	Concentrate	
95014281	5 l	Concentrate	
		Concentrate	



ı	Item No.	Unit	Description
			COOLING AGENT ADDITIVES
			COOLING AGENT ADDITIVES
			ATM-CoolAdd CU
	95008731	11	ATM-CoolAdd CU, additive for cutting of non-ferrous materials like Cu and its alloys. Mixing concentration in aqueous coolant approx. 0.05 - 0.2%
_			
			Defoaming agent
Ī	95014584	200 ml	Defoaming agent, additive for water-based coolants Mixing concentration in aqueous coolant approx. 0.005 - 0.05%
	95014584 95014583	200 ml	
		200	Mixing concentration in aqueous coolant approx. 0.005 - 0.05%  Defoaming agent, additive for water-based coolants
		200	Mixing concentration in aqueous coolant approx. 0.005 - 0.05%  Defoaming agent, additive for water-based coolants
		200	Mixing concentration in aqueous coolant approx. 0.005 - 0.05%  Defoaming agent, additive for water-based coolants  Mixing concentration in aqueous coolant approx. 0.005 - 0.05%

# **Aprep** Accessories & Tools

For inspection as well as effective working with QPREP cut-off wheels and QPREP cooling and anti-corrosion agents, QATM offers accessories & tools.



Item No.	Unit	Description
		ACCESSORIES FOR MAINTENANCE AND CARE OF COOLANTS
		Maintenance and testing set
95007866	1 Set	Maintenance and testing set for anti-corrosion coolant (case with handheld refractometer, plastic cup for extraction of sample, test strips, thermometer)
		Accessories for maintenance and testing set
92005616	100 Pcs.	Accessories for maintenance and testing set  pH test strips
92005616 92005613	100 Pcs. 100 Pcs.	
		pH test strips
92005613	100 Pcs.	pH test strips Nitrate test strips



		Corrosion protection- and care spray
95016408	400 ml	Corrosion protection- and care spray, fully synthetical, silicon-free corrosion protection oil, for metal surfaces (e.g. clamping vices)
		Anti-fog spray
95008900	100 ml	Anti-fog spray (prevents steaming up the viewing window by splash water)

**CUT-OFF MACHINES** 



ACCESSORIES FOR MAINTENANCE AND CARE OF

#### **Dressing stone**

92002460 1 Pc. Dressing stone for diamond cut-off wheels, CBN cut-off wheels and cup wheels



# **Aprep** Filter systems

During cutting, various residual materials are produced from the specimen (chips) and from the cut-off wheel (wear/tear). To prevent these residual materials from entering the cooling water / waste water system or the pump mechanism, the use of filter systems is required. A suitable filter system with the correct mesh size, filter material and dimension has a significant influence on the cleanliness of the coolant.



#### **PRODUCT ADVANTAGES**

- I Various QPREP filter systems for different cut-off machines, from precision machines to floor standing machines.
- I QPREP filter systems protect the cutting machine and thus increase its lifetime.
- I The different mesh sizes of the filters offer an applicationoriented selection of the appropriate filter system for the corresponding recirculating cooling unit.

#### **RECOMMENDED APPLICATIONS**

I The use of a filter system keeps the coolant significantly longer clean and prevents damage to the pump and machine.

Item No.	Unit	Description		
		ELLTED INCEDTO		
		FILTER INSERTS		
			Dimensions	Mesh size
		for Brillant 255 / Qcut 400 A (Brillant 265) / Brillant 270 / Qcut 500 A (Brillant 275) / Brillant 280		lant 270 /
95017301	5 Pcs.	Filter cloth and fleece	490 x 290 x 190 mm	60 µm
95017302	5 Pcs.	Filter cloth and fleece	490 x 290 x 190 mm	100 µm
95017303	5 Pcs.	Filter cloth and fleece	490 x 290 x 190 mm	800 µm
		for recirculation coolin (until year of construct		
95017304	5 Pcs.			60 µm
95017304 95017305	5 Pcs. 5 Pcs.	(until year of construct	tion 2012)	60 µm 100 µm
	0 . 66.	(until year of construct	290 x 150 x 190 mm	•
95017305	5 Pcs.	(until year of construct Filter cloth and fleece Filter cloth and fleece	290 x 150 x 190 mm 290 x 150 x 190 mm	100 µm
95017305	5 Pcs.	(until year of construct Filter cloth and fleece Filter cloth and fleece	290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm	100 µm
95017305	5 Pcs.	Filter cloth and fleece Filter cloth and fleece Filter cloth and fleece Filter cloth and fleece for recirculation coolin	290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm	100 µm
95017305 95017306	5 Pcs. 5 Pcs.	(until year of construct Filter cloth and fleece Filter cloth and fleece Filter cloth and fleece for recirculation coolin (from year of construct)	290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm 290 x 150 x 190 mm g system 45 Ltr. tion 2013)	100 μm 800 μm



# FILTER BASKET

# **Dimensions (WxHxD)**

Hanging basket made of stainless steel for the collection of the chip abrasion

· can be hooked into 45 liter recirculating cooling unit

▼ Z5800008 1 Pc. Filter Basket 140 x 80 x 200 mm



Iter	n No.	Unit	Description
			FILTER FLEECE FOR BELT FILTER SYSTEMS
			Length x Width
			for belt filter system BFA 285
9200	08780	1 Pc.	Filter fleece roll, coarse, 150 μm 100 m x 710 mm
			for belt filter system BFA 100/130
950	01696	1 Pc.	Filter fleece roll, coarse, 150 µm 100 m x 420 mm
			other sizes on request

		FILTER FLEECE MAT FOR RECIRCULATION COOLING SYSTEMS	
			Length x Width
		for Qcut 800 A (Brillant 2000)	
95016233	5 Pcs.	Filter fleece mat	940 x 720 mm
		for Qcut 600 A (Brillant 285)	
95016231	5 Pcs.	Filter fleece mat	724 x 720 mm
		for recirculation cooling system 15 Ltr. (Qcut 150 A/M)	
95017314	5 Pcs.	Filter fleece mat	235 x 148 mm

# Notes \_\_\_\_\_\_



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