# Coated Abrasives







# Hermes — the abrasives specialist

#### SUCCESSFUL IN OVER 100 COUNTRIES.

Since as long ago as 1927, Hermes has been specializing in the production of the latest abrasives, used to manufacture aesthetically convincing surfaces and precision working parts. Continuous research and further development have expanded the range of coated abrasives, which now covers over 150 basic types with over 1,200 variants.

This brochure contains detailed information about the range which Hermes successfully supplies in over 100 countries.

## HERMES DEVELOPS PIONEERING PRODUCT SOLUTIONS.

In 1993, Hermes expanded production to include precision bonded abrasives and since then, it has been a complete supplier of high-quality, high-performance abrasives. In addition to our detailed knowledge about raw materials for abrasives and our many years' experience in producing them, we also benefit from in-depth knowledge of the process requirements of users when developing new product solutions.

In the field of backing materials, we have developed new special stitch-bonded cloths characterized by higher tearstrength and reduced stretch compared to conventional cloths.

In Hermes binder technology, the ideal binder structure for each new product is designed from a broad range of raw materials and additives to prevent the workpiece overheating during grinding, for example.

In the sphere of abrasive grain, Hermes research paved the way for development and production of the **microcrystalline aluminium oxide SAPPHIRE BLUE®**. This abrasive grain has considerable performance advantages over conventional grain in both bonded and coated abrasives.

In the **HERMESIT®** abrasive system (coated carrier spheres), we developed a completely new kind of multi-dimensional abrasive. In many metal-processing applications, this system can be used to achieve longer tool life and finer surfaces. Or the **agglomerate** type **MERCURIT®** with significantly extended lifetime compared to standard abrasives.

#### THE RESULTS SPEAK FOR THEMSELVES.

The excellent production results, constant high performance and long service life of Hermes abrasives are all convincing features. Our customers can use Hermes abrasives to increase the efficiency of their production and thus save costs. We owe this quality to our leading market position in many sectors such as the steel industry, the automotive industry and its suppliers, the furniture and chipboard industry and the glass and ski industries.

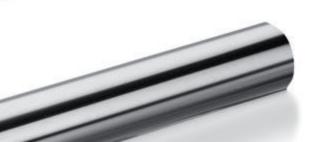
Another thing: Hermes focuses on sustainability and has made its Management System for the areas of quality, environment and energy in accordance with the relevant standards DIN EN ISO 9001/14001/50001.

### WHY NOT BENEFIT FROM OUR COMPETENCE?

If you don't treat surface treatment superficially, you are in the best hands. Our technical advisers will be pleased to come to you for a discussion of how we can work together to produce an individual optimization concept for your production process.

Simply call us on **+49 (0)40 8330-0** or send us an E-Mail: **hsd@hermes-schleifmittel.com** 

We look forward to meeting you!

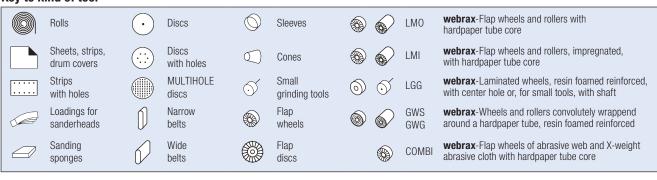




Туре	Code	Grain	Backing	Bonding	Gr	it ra	ang	e													D	eliver	y fo	rm		
									38	20	09	100	120	180	220	280	360	200	800	1200	2000					
					H	+	Н		$\forall$	+	H	$\forall$		$\forall$	+	+	$\parallel$				2					
Abrasive clotl	h																									
RB 306 J-flex	30660	Aluminium oxide	J-flex	R	Р																(				Ø	
RB 317 J-flex-w	31770	Aluminium oxide	J-flex-w	R	Р																(			$\overline{\cdot}$	0	
RB 320 X	32020	Aluminium oxide	Х	R	Р												П					<b>0</b>		$\overline{\odot}$	0	0 8
HSB	32220	Aluminium oxide	Χ	R	Р																				0	
FW 340 X	34000	Aluminium oxide	X	R	Р	Τ	П										П	П								6
RB 346 MJ	34602	Aluminium oxide	J	R	Р	Τ	П		П	Τ					+						(				0	
RB 346 J-flex	34660	Aluminium oxide	J-flex	R	Р		П														(				0	
RB 346 CX	34662	Aluminium oxide	Х	R	Р																			(	$\supset$	
RB 346 X-flex	34670	Aluminium oxide	X-flex	R	Р	T	П		П	T									П						0	
RB 346 74 X-flex Procut	34674	Aluminium oxide	X-flex	RPC																					0	
RB 377 YX	37710	Aluminium oxide	YXw	R	+		П														(	0			0	0
RB 406 J-flex	40660	Aluminium oxide	J-flex	RPC	Р				$\parallel$	T									$\sqcap$						0	
RB 417 YX	41710	Aluminium oxide	YXw	RPC	+			Ì	$\prod$	$\top$				$\prod$	$\top$				$\sqcap$							0
RB 346 23 MX	34623	Aluminium oxide + Ceramic grain	Х	R	Р					÷									$\sqcap$		(			<u>)</u> q		0
CR 454 Z	45440	Ceramic grain	Z <sub>w</sub>	R	+		П	T						$\dagger \dagger$					$\parallel$			0			0	0
CR 456 Z	45640	Ceramic grain	Z <sub>w</sub>	RPC	+	T	П							П	T		$\sqcap$	П			-				0	D
CR 456 J-flex	45660	Ceramic grain	J-flex	RPC	+	T	П		$\Box$	T							$\Box$	П			-				0	0
CN 464 Z	46440	Ceramic grain	Z <sub>w</sub>	R	+	T	П							П	T			П			_			(		D
CN 466 Z	46640	Ceramic grain	Z <sub>w</sub>	RPC	+									Ħ		Т	Ш				_	0			0	0
CN 466 X-flex	46670	Ceramic grain	X-flex	RPC	+		П									Т	Ш									
FL 390 Eco	39000	Zirconia alumina	Χ	R	#		П							Ħ	T	Т	Ш								- 0	
RB 480 24 YX	48024	Zirconia alumina	YX <sub>w</sub>	R	+	T								Ħ	T		$\Box$						(	$\overline{\cdot}$	0	
RB 484 44 Z	48444	Zirconia alumina	Z <sub>w</sub>	R	+	T								Ħ	T	Т	Ħ								0	
RB 485 Z	48544	Zirconia alumina	Z <sub>w</sub>	R	+	Ť	П							Ħ	T	Ħ	Ħ								0	0
RB 486 24 YX	48624	Zirconia alumina	YX <sub>w</sub>	RPC	+	Ť	Н							Ħ	T		$\Box$						(	$\overline{\cdot}$	Ō	
RB 486 44 Z	48644	Zirconia alumina	Z <sub>w</sub>	RPC	+	T	П							Ħ	T	Т	Ħ								Ō	
RB 486 X-flex	48670	Zirconia alumina	X-flex	RPC	#	Ť	Н							Ħ	T		$\Box$									
RB 308 J-flex	30860	Silicon carbide	J-flex	RAS	Р	Ť	Н		$\dagger \dagger$	T	Ħ	П		Ħ	T						(				n	
RB 315 YX	31510	Silicon carbide	YX <sub>w</sub>	R	Р	Ť																0	(	$\overline{\cdot)}$	0	0
RB 319 X-flex	31970	Silicon carbide	X-flex	R	+	T	П		$\Box$	T											1	0			0	
RB 374 Z	37433	Silicon carbide	Z <sub>w</sub>	RAS	+	t	П							П	T	T	Ħ									0
RB 374 90 ZZ	37490	Silicon carbide	ZZw	RAS	Р	T	•								T		$\sqcap$	П	$\Box$							0
RB 375 Y	37530	Silicon carbide	Yw	R	Р	t	П	T	$\Box$	T								П	Ħ				(	$\overline{\odot}$	0	0
		rate abrasive clo			$\prod$			T	$\dagger \dagger$	$\dagger$				$\parallel$				П	$\dagger \dagger$							
RB 590 Y	59030	MERCURIT®-Aluminium oxide		R	Р	+	H	+	+	+					+				H							0
RB 591 Y	59130	MERCURIT®-Aluminium oxide		R	Р		H	+	+	+	H	$\mathbb{H}$	1		f				+		$\vdash$		-			0
RB 595 Y	59530	MERCURIT®-Silicon carbide		R	Р	+	H	+	+	+									+							0
RB 598 Y	59830	MERCURIT®-Silicon carbide	Y <sub>W</sub>	R	Р		H	+	+	+		$\mathbb{H}$		П												0
		1	I W	11	11		H	+	+	+		H		H	f				П						<u>U</u>	<u> </u>
HERMESIT® A				1	$\coprod$				$\prod$	1				$\coprod$	$\perp$				$\coprod$							
RB 530 J	53060	HERMESIT®-Aluminium oxide		R	Р				$\coprod$	$\perp$	Ц	Ш		1	$\perp$				$\coprod$						<u> </u>	
RB 530 X	53021	HERMESIT®-Aluminium oxide		R	Р		Ц		$\coprod$	1																0_
RB 535 X	53521	HERMESIT®-Aluminium oxide		R	Р		Ц		$\coprod$	$\perp$		Ш							1							0
RB 535 Y	53530	HERMESIT®-Aluminium oxide		R	Р				$\coprod$	$\perp$									Ш							0
RB 545 X	54521	HERMESIT®-Silicon carbide	X <sub>W</sub>	R	Р				$\coprod$	$\perp$			-		ŧ								(	<u>)                                    </u>		0
RB 545 Y	54530	HERMESIT®-Silicon carbide	Yw	R	Р																				0	0

Туре	Code	Grain	Backing	Bonding	Gı	it ra	ang	je														Delivery form
			_		,	16	20	30	36	40	09	90	120	180	220	280	320	400	800	000	1500	
					H	+	Н		Н	$\Box$	Н	+	+	+	$\forall$		+				-   -   0	
Cork abrasive	طاماه								П													
		TAL 0.1		Б		+	Н	+	Н	Н	Н	$\perp$	+	+	₽		$\mathbb{H}$			Н	+	0.7
RB 525 X	52522	Aluminium oxide-Cork	X <sub>W</sub>	R	Р	$\perp$	Н	+	Н	Н			+	$\perp$	П		$\perp$			Н	+	06
RB 515 YX	51510	Silicon carbide-Cork	X <sub>W</sub>	R	Р	$\perp$	Н	+	Н	Н	Н	$\perp$	$\perp$	$\perp$	$\sqcup$		Ш				$\perp$	06
RB 515 X	51522	Silicon carbide-Cork	X <sub>W</sub>	R	Р	$\perp$	Ц		Ц	Ш	Ш										Ш	06
RB 515 Y	51530	Silicon carbide-Cork	Yw	R	Р	$\perp$	Ц		Ц	Щ	Ш	$\perp$	Ш	$\perp$	Н							06
RB 555 X	55522	Cork	X <sub>W</sub>	R	-	1	Ц		Ц	Ш	Ш		Ш	$\perp$	Ш		Ш		Ш	Ш	Ш	06
Stitch-bonded	abras	ive cloth																				
SB 378 YR	37840	Aluminium oxide	YRw	R	Р				П						П		П			П		06
SB 388 23 Y	38823	Aluminium oxide+Ceramic grain	Yw	R	Р				П						П							06
SB 488 YR	48840	Zirconia alumina	YR <sub>w</sub>	R	+				H					T	$\prod$				П	П		06
SB 379 92 ZZ	37992	Silicon carbide	ZZw	RAS	Р				П						•					П		6
Abrasive cloth	, velou	r-backed			П				П	П				T	П							
RB 346 87 MX VEL	34687	Aluminium oxide+Ceramic grain	Χ	R	Р	t	Н		Н								Н			Н		· · · · ·
RB 530 J VEL	53067	HERMESIT®-Aluminium oxide	J	R	Р	Ť	П		П						П		П			П		<u>○</u> (::)
CR 456 Z VEL	45647	Ceramic grain	Z <sub>W</sub>	RPC	+	T	П		П					$\dagger$	Ħ		П			П		$\odot$
RB 515 X VEL	51527	Silicon carbide-Cork	X <sub>w</sub>	R	Р	Ť	П		П					$\dagger$	П		П			П		$\odot$
Abrasive cloth	. self-s	stick	l.			T	П		П					$\top$	$\prod$		П			П		
RB 346 23 MX SK	<u> </u>	Aluminium oxide+Ceramic grain	χ	R	Р	+	Н		Н								+		$\vdash$	Н	++	$\odot$
RB 530 J SK	53066	HERMESIT®-Aluminium oxide	J	R	P	+	Н		Н		Н	+		+	H		+		$\vdash$	Н	++	<u> </u>
RB 315 YX SK	31515	Silicon carbide	YX <sub>W</sub>	R	Р	t				H	Н		$\forall$	+	H		+		$\vdash$	Н	+	$\odot$
Abrasive fibre	1		vv	1	H				Н	$\parallel$				$^{+}$	$\dagger\dagger$		Н		H	Н	$\dagger$	
RB 314 fibre	31444	Aluminium oxide	X/J	R	Р		H							+	H				+	H	+	<u> </u>
webrax-AN 703 50		Aluminium oxide	Non-woven we reinforced on v		+		H	1	П	H				+	H				+	H		0
RB 514 J-flex	51441	HERMESIT®-Aluminium oxide	J-flex	/ulcanized fibre	Р		H		Н	H		Ŧ			H				+	H		0
CR 456 fibre-Procut	45650	Ceramic grain	X/J	RPC	+		H							+	H				+	H		0
RB 414 X	41420	Zirconia alumina	Х	R	+									+	$\forall$		H		$\vdash$	H		0
RB 414 X-Procut	41450	Zirconia alumina	Х	RPC	+		H							+	$\forall$				+	$\forall$		$\overline{\bigcirc}$
Pad covers an			I	1 0															Ш			
GL 580	u 10aiii 58000		Cloth		П	grar		tod														
GL 580					$\vdash$	grar flak	_	ııeu														
	58100	Graphite	Cloth		-	ııdKı	<del>-</del>															1 3
Foam pad	90096	-	PU-Foan	I	Ш																	

#### Key to kind of tool





Туре	Code	Grain	Backing	Bonding	Gı	rit ra	ang	e														Del	iver	y fo	rm			
					1	15	20	30	36	50	09	100	120	180	220	280	360	500	009	1000	1500	2007						
Abrasive pape	r						П														Ħ							
BW 110	11000	Aluminium oxide	Е	R	Р																		<u> </u>		···· (	$\overline{\odot}$		1 1
BW 114	11400	Aluminium oxide	F	RAS	P		H														++					$\frac{\smile}{\odot}$		1 0
BW 115	11500	Aluminium oxide	F	R	P		Н													Н	++					<u> </u>		1 d
BW 116	11600	Aluminium oxide	F	RPC	P		Н		H	Ŧ																		<u>) v</u> 1 K
CB 115	11523	Aluminium oxide	F	RAS	+		Н		$\vdash$	+						Н	7	7										) (
VC 152	15200	Aluminium oxide	D	R	P		Н					Ŧ	Н	Ŧ	Н	H	+										L	<u>v</u> v
VO 102	10200	7 Harring Marco	С	R	P		Н		H	7											++							
VC 154-Longlife	15470	Aluminium oxide	С	RPL	Р		Н		$\Box$	$\dagger$												6						1
CR 116	11623	Ceramic grain	F	RPC	+		П			t							T				$\dagger \dagger$	1	, L					16
BW 184	18400	Zirconia alumina	G	R	+									$\dagger$	Ħ	$\Box$	$^{\dagger}$				H		<b>M</b>		(	$\overline{\odot}$		10
BS 118	11800	Silicon carbide	G	RAS	Р					$^{+}$	Н	$^{+}$		$^{+}$	$\dagger\dagger$	$\parallel$	$^{\dagger}$									$\overline{\odot}$	_	16
			F	RAS	Р		Н																			$\overline{\odot}$		10
BS 119	11900	Silicon carbide	D	RAS	Р		Н			$^{+}$	Н	$^{+}$		$^{+}$							+							16
BS 119-Longlife	11970	Silicon carbide	D	RAS/PL	P	+	H		$\dag \uparrow$	+	H	+		+						H	$\parallel$							10
SF 168	16810	Silicon carbide	A	R	P		H		$\forall$	+									+	H								v U
BS 179	17900	Silicon carbide	G	RAS	Р		H		$\forall$	$^{+}$					╫	$\forall$	$^{\dagger}$						<i>P</i>   L					16
MEDCUDIT® A		1			Н		H			$\dagger$		t		$\dagger$	Ħ						Ħ							<i>V U</i>
BW 590		erat-abrasive par		П	Р		Н	+	Н	+		+		+	Н												n Z	<u> </u>
BW 590	59010	MERCURIT Aluminium oxide	F	R	P		Н		Н	+		+		╀	H						+						10	
Abrasive pape	r, self-	stick																										
BW 110 SK	11005	Aluminium oxide	Е	R	Р																					$\odot$	<u>:</u> )	
VC 152 SK	15205	Aluminium oxide	D	R	Р										Ш											<u></u>	<u>:</u> )	
			С	R	Р																					$\odot$	<u>:</u> )	
VC 154-Longlife SK	15475	Aluminium oxide	В	RPL	Р																				<del></del> (	$\odot$	<u>:</u>	
BS 118 SK	11805	Silicon carbide	F	RAS	Р																				(	$\odot$	<u>:</u> )	
SF 168 SK	16815	Silicon carbide	А	R	Р									-										[	(	$\odot$		
Abrasive pape	r, velo	ur-backed																										
BW 114 VEL	11407	Aluminium oxide	F	RAS	Р		Н		$\Box$	$^{+}$					$\dagger\dagger$	$\forall$	$^{+}$				H				(	$\overline{\odot}$	 ::)	
VC 151-Longlife VEL		Aluminium oxide	С	RPL	Р		Н		$\forall$	$^{\dagger}$													<b>M</b> [				<u></u> ::)	
VC 151-Longlife VEL		Aluminium oxide	С	RPL	Р		Н		$\Box$												+	6						_
Multihole																							)) 					<i>"</i>
VC 152 VEL	15207	Aluminium oxide	D	R	Р									$\perp$	Ш											$\odot$		
			С	R	Р																			][	<u>.</u> (	$\odot$	9	
VC 153 VEL	15307	Aluminium oxide	Е	R	Р				+	+		+													<u></u> (	$\odot$	: <u>:</u> )	
VC 154-Longlife VEL	15477	Aluminium oxide	В	RPL	Р							+													<u></u> (	$\odot$	: <u>:</u> )	
VC 154-Longlife VEL Multihole	15479	Aluminium oxide	В	RPL	Р																							)
CR 116 VEL	11623	Ceramic grain	F	R	+																					0	<u>:</u> )	
BW 184 VEL	18407	Zirconia alumina	G	R	+				H						$\prod$											0(		
BS 118 VEL	11807	Silicon carbide	F	RAS	Р				H																	0(		
VC 158 VEL	15807	Silicon carbide	Е	RAS	Р									I											(	<u>) (</u>	::)	
Abrasive pape	r, foan	n-backed																										
VC 154-Longlife Foam	15478	Aluminium oxide	С	RPL	Р		H		$\forall$	+	H												<u> </u>					
VC 154-Longlife soft, VEL	15487	Aluminium oxide	С	RPL	P				$\forall$	+				Ŧ	H				T	H	+							
Foam with net			1 -						$\parallel$					$\dagger$									×1					
FineNet FN 915 VEL		Silicon carbide	PU Foam wit	h net	+		H		+	+				+									Г	_	(	<u></u>	::)	
			1		1.1																							

Туре	Code	Grain	Backing	Bonding	G	rit	rar	ıgı	 e		-													Delivery fo	rm		
										100	150	180	220	280	320	360	200	800	000	200	000	800	3000	-			
			I	<u> </u>	Н		+	+	H	H	+	H		+	H	+	H	+		1-	2 2	100	വ്യ				
Waterproof abra			15	_		4	+			Н	-		$\perp$	+	Н		Н				Н	Н					
WA flex 28 B	62810	Aluminium oxide	B <sub>W</sub>	**	Р	$\perp$	+	-			_			+							Н	$\mathbb{H}$	-		$\overline{\odot}$		
WS flex 16	61601	Silicon carbide	B <sub>W</sub>		P/ <sub>+</sub>	$\perp$	+																		<u>O</u>		<u></u>
WS flex 18 C	61810	Silicon carbide	C <sub>w</sub>	R	Р		+					H											+		$\odot$		0
Waterproof abra	sive pa	per, self-stick																									
WS flex 16 SK	61605	Silicon carbide	Bw	R	P/ <sub>+</sub>														П						$\odot$		
WS flex 16 SK 302	61608	Silicon carbide	Bw	R	P/ <sub>+</sub>												Ш								$\odot$		
WS flex 18 C SK	61815	Silicon carbide	Cw	R	Р											-					Ш	Ш			$\odot$		
Waterproof abra	sive pa	per, velour-ba	cked																								
WS flex 16 VEL	61607	Silicon carbide	Bw	R	P/ <sub>+</sub>	+	+	t	H	Н	$^{+}$		$\top$	$\dagger$	H		Н		H	t					$\Box$	(::)	
WS flex 16 VEL Multihole	61609	Silicon carbide	B <sub>W</sub>	R	Р																						
Abrasive film																											
FB 637	63700	Aluminium oxide	PES	R	Р		T	Ī		i															$\odot$		0
FB 636	63600	Silicon carbide	PES	R	Р			Ī	Г																$\odot$		
Abrasive film, se	elf-sticl	k								П					П							П					
FB 637 SK	63705	Aluminium oxide	PES	R	Р		T	t	T	Н			T		П		Н								$\odot$		
Sandscreen										П									П								
GA 92400	92400	Aluminium oxide		R	+	T	T	t		П		П	$\top$	T	П		H				П	$\forall \exists$			$\odot$		
GS 91350	91350	Silicon carbide		R	+		T							T	П		П		П		П	П			<u></u>		
Sandscreen, vel	our-ba	cked								П					П				П			П					
GA 92407 VEL	92407	Aluminium oxide		R	+	$\parallel$	$\dagger$	$\dagger$	H	Н			$\dagger$		Н				$\forall$	t	$\parallel$	$\forall$			<u></u>		
Sanding sponge	S									П					П												
White, double-sided	90353	Aluminium oxide	PU-Foam		F	$\dagger$		t							Н		Н	$\dagger$	$\forall$		$\Box$	$\forall$					
FSSA 427, four-sided, super soft	90356	Aluminium oxide	PU-Foam		F										П				П					<i>a</i>			
Medium, single-sided	90358	Aluminium oxide	PU-Foam		Р	+	+												$\forall$		$\forall$	$\forall \exists$	+				
FHA 427, four-sided, hard	90361	Aluminium oxide	PU-Foam		F										П												
Four-sided	90351	Aluminium oxide	PU-Foam		F		+				+			+	H	+	Н	+	H		H	$\forall$	+				
FSSS 105, single-sided, super soft	90359	Silicon carbide	PU-Foam		F										П												
Premium, double-sided		Silicon carbide	PU-Foam		F	$\top$	$\dagger$				$\top$				Н	T	П		Ħ	T	Ħ	Н		8			
Sanding sponge	s, velou	ur-backed								П					П	T	П					П					
FMA 105, VEL	90357	Aluminium oxide	PU-Foam		Р		+				$\dagger$				Н	+			$\dagger$	T	$\dagger\dagger$	$\forall$		<i>a</i>	$\odot$		





#### 3 benefits of webrax Non-woven web

#### 1. Backing

Our non-woven web is manufactured from a special fibre web. During this process, the abrasive grit is firmly anchored by a bond and is correspondingly durable. The following designs are available:

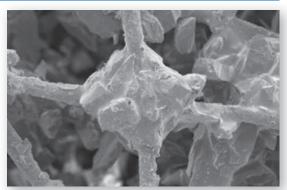
- Non-woven web
- Non-woven web, on X<sub>w</sub>-cloth
- · Non-woven web, high-density
- Non-woven web, reinforced with cloth
- Non-woven web, reinforced on vulcanized fibre

#### 2. Types of grain

Available in grit range 80 to 1500 we use the following types of grain: Aluminium oxide ( $Al_2O_3$ ) and Silicon carbide (SiC). **Warning:** Information on grit sizes is not comparable with that relating to abrasive papers.

#### 3. The bonding

The resin bond allows the product to be used under both dry and wet conditions.



The magnified photograph clearly shows the open structurwe of webrax Non-woven web

### Comparison of grit sizes for webrax Non-woven web (incl. details of product colours)

Standard-Hermes	+ 80	+ 100	+ 120	+ 150	+ 180	+ 280	+ 320	+ 400	+ 500	+ 800	without grain
Grit name	coarse	med	lium	fiı	пе	very	fine	supe	r fine	ultra fine	
webrax-MAG	brown	-	brown	-	-	-	-	_	-	-	-
webrax-MSG	black	-	-	black	black	black	-	black	black	-	-
<b>webrax</b> -AN 701 50	brown	red	-	-	red/blue	blue	-	-	-	grey	-
webrax-AN 702	brown	brown	-	-	brown	brown	brown	brown	-	-	-
webrax-PN 721	-	_	-	_	-	_	_	_	_	-	yellow

#### Recommendation cutting speeds v<sub>c</sub> (m/s) for grinding dry

	S	teel, Stainless stee	el, non-ferrous meta	ls	Therm	osensitive basic r	naterial
	Fine grinding	Structural grinding	Polishing & Cleaning	Deburring	Wood	Lacquer	Synthetics
webrax Non-woven web disc	S						
without hole	10 - 25 m/s	10 - 25 m/s	10 - 25 m/s	10 - 25 m/s	10 - 15 m/s	6 - 15 m/s	6 - 15 m/s
with hole	10 - 30 m/s	10 - 30 m/s	10 - 30 m/s	10 - 30 m/s	10 - 15 m/s	6 - 15 m/s	6 - 15 m/s
webrax Non-woven web belt	s and wide belt	s					
webrax-MAG, -MSG	5 - 15 m/s	5 - 15 m/s	-	-	5 - 8 m/s	5 - 8 m/s	5 - 8 m/s
<b>webrax</b> -AN 701 50, -AN 702	8 - 22 m/s	5 - 15 m/s	-	-	5 - 15 m/s	5 - 15 m/s	5 - 15 m/s
webrax-PN 721	-	_	10 - 22 m/s	-	-	-	_
webrax Non-woven web disc	s and rollers						
webrax-LMO	10 - 25 m/s	8 - 15 m/s	10 - 22 m/s	-	-	5 - 10 m/s	5 - 10 m/s
webrax-LMI, -LGG, -GWS	10 - 25 m/s	8 - 15 m/s	10 - 25 m/s	20 - 35 m/s	6 - 15 m/s	-	6 - 15 m/s

#### Grinding patterns compared using grinding belts, grit size 180



Belt-Finish Polished-Finish

Туре	Code	Grain	Backing	G	irit	rai	nge	е									Delivery form
					80	100	150	180	220	240	320	360	500	800	1000	1500	
webrax Non-w	oven web	•															
MAG	70000	Aluminium oxide	Non-woven web on X <sub>w</sub> -cloth	+			ł	t	Н	+	H	+		$^{\dagger}$	$\Box$		
AN 701 50	70150	Aluminium oxide	Non-woven web, reinforced with cloth	+			t		П			$^{+}$		T	$\top$		010
		Silicon carbide	Non-woven web, reinforced with cloth	t		†	$\dagger$	t	Н								
AN 702	70200	Aluminium oxide	Non-woven web, reinforced with cloth	+			Ť		П					T			
AN 703 50	70350	Aluminium oxide	Non-woven web, reinforced on vulcanized fibre	+			Ť		П		П	Ť		T			0
AN 707	70700	Aluminium oxide	Non-woven web, reinforced with cloth	+			Ť	T	П			T		T			010
AN 707 10	70710	Aluminium oxide	Non-woven web, reinforced with cloth	+			Ť		П			T		T			$\odot$
AN 707 20	70720	Aluminium oxide	Non-woven web, reinforced with cloth	+				T	П		П	T		T			$\odot$
OA 708	70800	Aluminium oxide	Non-woven web	+					П					T			
OA 710	71002	Aluminium oxide	Non-woven web	+													-LMO -LGG -GWS
OA 713	71300	Aluminium oxide	Non-woven web, high-density	+	•		İ										
OA 710 / RB 320 X	72000	Aluminium oxide / Aluminium oxide	Non-woven web / X-cloth	+ P	_												⊚-COMBI
MSG	70500	Silicon carbide	Non-woven web on X <sub>w</sub> -cloth	+		T			П						$\sqcap$		
MSG XX	70580	Silicon carbide	Non-woven web on X <sub>w</sub> -cloth	+		T	Ť		П								0
OS 709	70900	Silicon carbide	Non-woven web	+		T	Ť		П			T					
OS 715	71502	Silicon carbide	Non-woven web	+	•												● LMO, LMI 6-GWS
OS 716	71600	Silicon carbide	Non-woven web, high-density	+		Ť	t										GWS -LMO, LMI
MSG SK webrax Non-w	70505 oven web, vel	Silicon carbide	Non-woven web on X <sub>w</sub> -cloth	+		+											$\odot$
0A 708 VEL	70807	Aluminium oxide	Non-woven web	+		T	Ť		П								
0A 710 VEL	71007	Aluminium oxide	Non-woven web	+			ı		П			İ					
0A 713 VEL	71307	Aluminium oxide	Non-woven web, high-density	+			T										$\square$ $\odot$
OS 709 VEL	70907	Silicon carbide	Non-woven web	+													
webrax cleanin	g pads and d	liscs															
GP 706 White	70600	None	Non-woven web	-			T		П								
GP 706 Brown	70601	Aluminium oxide	Non-woven web	+		T	T										
GP 706 Olive	70602	Aluminium oxide	Non-woven web	+		T	T										
Multiclean	70650	Silicon carbide	Non-woven web, high-density	-			T		П								
PN 721	72100	None	Non-woven web, reinforced with cloth	-													
FPA 791 Black	79100	Aluminium oxide	Non-woven web, Thinline	+													$\odot$
FPA 791 Green	79110	Aluminium oxide	Non-woven web, Thinline	+													$\odot$
FP0 791 Red	79130	None	Non-woven web, Thinline	-													0
FP0 791 Tan	79140	None	Non-woven web, Thinline	-													$\odot$
FPO 791 White	79150	None	Non-woven web, Thinline	-		T	T										$\odot$
FPA 792 Black	79200	Aluminium oxide	Non-woven web, Thickline	+		T			П					Т	П		$\odot$
FPA 792 Green	79210	Aluminium oxide	Non-woven web, Thickline	+			T	T	П								0
FP0 792 Red	79230	None	Non-woven web, Thickline	-					П	$\top$					$\sqcap$		$\odot$
FP0 792 Tan	79240	None	Non-woven web, Thickline	-		1			П						$\sqcap$		$\odot$
FPO 792 White	79250	None	Non-woven web, Thickline	-					П	1							$\odot$
									Ш								

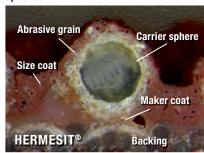


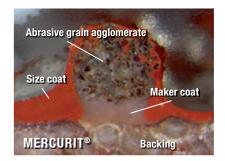
#### Principle construction of coated abrasives

#### Single layer



#### **Spherical**





#### **Key to backings**

Cloth			Paper		webrax Non-woven web
Туре	Property	Backing material	Туре	Weight g/m <sup>2</sup>	Туре
J-flex-w J-flex	Light, extremely flexible Light, very flexible	Cotton cloth	A (A <sub>w</sub> ) B (B <sub>w</sub> )	≤ 85 > 85 - 110	(Listed in order of flexibility)
J	Light, flexible	Cotton cloth	C (C <sub>w</sub> )	> 110 - 135	N
EJ X-flex (X <sub>w</sub> -flex)	Light, flexible Heavy, flexible	Synthetic cloth Cotton cloth	E	> 135 - 220 > 220 - 270	Non-woven web Non-woven web, high density
X (X <sub>W</sub> ) Y (Y <sub>W</sub> )	Heavy, semi flexible Heavy duty, semi stiff	Cotton cloth Synthetic cloth	F G	> 270 - 350 > 350 - 500	Non-woven web, on X <sub>w</sub> -cloth Non-woven web, reinforced with cloth
YX Z	Heavy duty, semi stiff Heavy duty, semi stiff	Polyester/cotton mixed cloth Synthetic cloth			Non-woven web, reinforced with cloth on vulcanized fibre
XX ZZ	Heavy duty, stiff	Cotton cloth			
Stitch bonded c	Heavy duty, stiff	Synthetic cloth	Fibre		Film
Type	Property	Backing material	Туре	Average thickness	Туре
Y YR	Heavy duty, semi stiff Heavy duty, stiff	Synthetic stitch bonded cloth Synthetic stitch bonded cloth	J-flex J	0.40 - 0.55 mm 0.60 - 0.65 mm	PES = Polyester
ZZ	Heavy, stiff	Synthetic stitch bonded cloth	X	0.80 - 0.85 mm	Index <sub>w</sub> = waterproof

#### **Key to bonding**

noy to bonding	,	
Туре	Bonding	Description
R	Resin	
RAS	Resin, antistatic	
RPC	Resin, Procut	Size coat with active additives
RPL	Resin, Prolub	Applied stearate coat prevents premature loading with sanding dust
G	Glue	
GPL	Glue, Prolub	Applied stearate coat prevents premature loading with sanding dust

#### Abrasive grain and grain standards

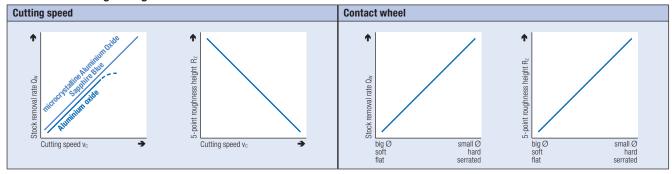
Grain	Grain standard
Aluminium oxide (A/O)	P = FEPA - DIN <b>ISO</b> 6344
Sapphire Blue®	P = FEPA - DIN <b>ISO</b> 6344
(microcrystalline Aluminium oxide)	
Silicon carbide (S/C)	P = FEPA - DIN <b>ISO</b> 6344
Zirconia alumina (Z/A)	# = ANSI - B74.18-1996
Ceramic grain	# = ANSI - B74.18-1996
	+ = Standard Hermes
webrax	
Aluminium oxide	+ = Standard Hermes
Silicon carbide	+ = Standard Hermes
	+ = Standard Hermes
Sanding sponges	
Aluminium oxide	F = FEPA - DIN <b>ISO</b> 8486
Silicon carbide	F = FEPA - DIN <b>ISO</b> 8486

#### Grit size comparison (Abrasive paper, film, cloth, stitch bonded cloth and fibre)

$d_{k = 0}$ (µm) average grain diameter	750 	630	525	400	325	260	200	160	125	93	76 	68	58	52	46	39	35	30	26	22	18	14	12	10	8
FEPA 43-D-1984 R 1993 DIN <b>ISO</b> 6344	P 24	P 30	P 36	P 40	P 50	P 60	P 80	P 100	P 120	P 150	P 180	P 220	P 240	P 280	P 320	P 360	P 400	P 500	P 600	P 800	P 1000	P 1200	P 1500	P 2000	P 2500
ANSI B 74.18-1996	24	30	36	40	50	60	80	100	120	150	180	220		240	2	80	320		360	400	500	600			

The differences of the respective grit size standards are defined in the relevant test standards.

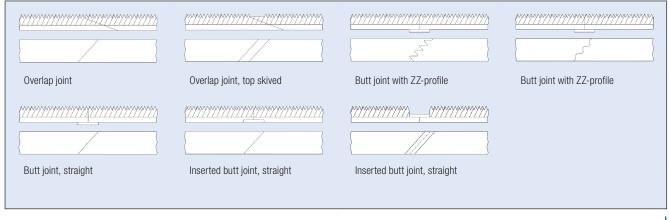
#### Parameter of belt grinding



#### **Recommendations for cutting speed**

Metal				Glass, china, ceramics, leather,	rubber, cork, fe	lt, plastic	
Narrow belts	C	Cutting speed v <sub>c</sub> (m	1/s)	Narrow belts	(	Cutting speed v <sub>c</sub> (m/	/s)
and Wide belts	min	Recommendation	n max	and Wide belts	min	Recommendation	max
Carbon steel	29	35	39	Glass	8	13	18
Tool steel (forging parts)	20	30	30	Crystal-glass (lead glass)	15	20	25
Stainless steel	20	30	30	China, ceramics	10	13	17
Grey cast iron	30	35	40	Leather, rubber, cork, felt	20	25	30
Brass and bronze	27	35	37				
CrNi-base alloy	16	22	28	Plastics			
Aluminium, Al-alloy	28	35	40	- Duroplastic	18	22	26
Titan (dry grinding)	4	8	12	- Plastic (dry grinding)	6	10	12
Titan (wet grinding)	10	12	15	- Plastic (wet grinding)	8	15	18
Wood, lacquer, processed wood	boards, minera	l fibre boards and	melamin	e			
Narrow belts	C	Cutting speed $v_{c}$ (m	1/s)	Wide belts	(	Cutting speed v <sub>c</sub> (m/	/s)
	min	Recommendation	n max		min	Recommendation	max
Solid wood, hard	10	20	24	Solid wood	12	20	24
Solid wood, soft	10	12	24	Veneer	10	20	24
Veneer				Plywood	10	20	24
- Lever stroke sanders	10	12	20	Filler	6	8	10
- Edge sanders	6	10	12	Lacquer	2	6	12
- Profile sanders	6	8	12	Particle board / MDF	12	22	36
Lacquer, general	4	8	12	Mineral fibre boards	12	22	26
- Nitro cellulose	2	4	8	Melamine	8	12	20
- Polyester, clear	6	8	12				
- Polyester, pigmented	6	10	12				
- PU	4	8	12				
- Acrylic, pigmented	8	10	12				

#### Joints for narrow and wide belts



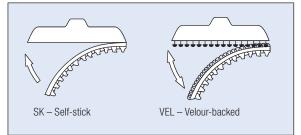


#### Triangulars, with holes

#### System EB **Dimensions in mm** velour-backed Black & Decker, 021 88 x 93 6 x / Ø 52 Bosch, Makita, Metabo Festo 88 x 95 020 022 AEG, 99 x 147 $2 \times 3 + 1 \times$ Atlas Copco 021 Kress 100 x 105 6 x / Ø 52 023 Flex 68 x 121 x 2 + 2 x 1Porter Cable

Ø = Bolt circle

#### **Fastening systems**

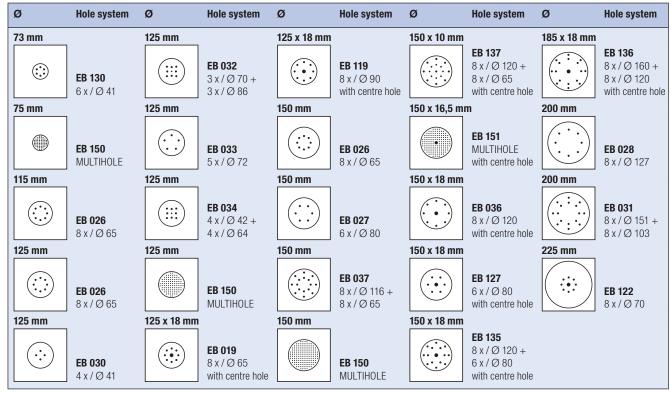


#### Stripes, with holes

EB	System		Dimensions in mr	n
		for clamps	velour-backed	self stick
001	2 x 5	115 x 280	115 x 230 115 x 240	115 x 230 115 x 240
002	2 x 5 / 2 x 2	115 x 280	115 x 230 115 x 240	115 x 230 115 x 240
003	2 x 4	93 x 230	93 x 178 93 x 184 93 x 195	93 x 178 93 x 184 93 x 195
004	2 x 4	81 x 166	81 x 153 80 x 133	81 x 153 80 x 133
005	2 x 3 / 2 x 1	93 x 230		
006	2 x 2 / 1 x 3	93 x 230		
800	8 x / Ø 87		115 x 115	
009	2 x 3	115 x 140	100 x 115	
010	2 x 5	93 x 230	<u> </u>	
011	4 x 2 / 1 x 2		100 x 237	
012	2 x 7		70 x 420	

 $\emptyset = \text{Bolt circle}$ 

#### Discs, with holes



#### Kind of tools and grinding methods

Kind of tools and grinding methods							
0	Narrow belts	Y Sackstand belt grinder	Horizontal platen grinder	Y + Tx  Vertical platen grinder	T + C I		
		TY X	y	Ty Y	Other Control of the		
		Conveyorized through feed belt grinder	Centerless grinder	Double side flat grinder (single belt)			
		Y  Stationary platen grinder	Y Plunge grinder - heavy stock removal	for interior curved surface	for cylindrical workpieces  Swing frame grinding machine		
		Z X Edge sander	Trawer sander	Profile sander			
		X (S)  Lever stroke sander with roller	X   Y   W   W   W   W   W   W   W   W   W	Lever stroke sander with contact bar	X ISI Lever stroke sander with hand block		
	Wide belts	with contact roller  Wide belt machine	with contact roller and shoe	with contact shoe	ECOLORO CARGO MARIANO DICEN		
	Discs	Portable disc grinder	Random orbital sander				
	Flap discs	Portable disc grinder					
	Sheets, strips	X Hand sanding	Orbital sander				
	Rolls	X Hand sanding	Orbital sander				

#### **STORAGE**

Hermes abrasives are quality tools and require appropriate storage conditions. Quality can be impaired by incorrect storage. Careful storage ensures maximum benefit.



- Room temperature 18 22°C
- Relative humidity 45 65%
- Store in original packaging if at all possible, and on shelves or pallets/racks
- Use deliveries in the order they arrived



- Close to radiators
- Extreme temperature fluctuations (cold/hot)
- Store directly on concrete or stone floors
- Store in unheated rooms in winter



#### **SAFETY**



Wear eye protection!



Wear protective gloves!



Refer to instruction manual!



Wear ear protection!



Wear a mask!



Only to be used with a backing pad!



Do not use for wet grinding!

In order to guarentee the greatest possible occupational safety to users of Hermes abrasives, the appropriate safety pictograms appear on the product labels. For more information on the correct use of abrasives, see the safety recommendation leaflets from FEPA.

#### **COME AND SEE OUR PAGE**



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Hermes websites use databases to inform you about new products and application solutions and to provide you with facts and figures about the Hermes Group.

Numerous useful functions help you find out quickly and easily everything you need to know about Hermes abrasives. In the "Product Finder" for example, enter simple search queries to find the correct Hermes type and have its key product information (such as product structure and benefits) and primary applications displayed. Alternatively, use the interactive "Contact Finder" for a list of Hermes experts (both office-based and sales) — all over the world, of course.

### www.hermes-abrasives.com



Regardless of where you are on our websites, whether in the "Product Finder" or in the application solutions or in the "Service" area — you always have the option of downloading information about our products and application solutions for immediate use on your PC, tablet or smartphone.

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