



METAL FLAT GRINDING

Product program



for an
excellent finish

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HERMES: YOUR SPECIALIST FOR AN EXCELLENT FINISH

From effective pre-grinding to the final decor finish: we offer you a wide selection of high-performance efficient, economical and reliable grinding tools and support you at all times with our expertise and our wide range of services.

Pre & repair grinding

Elimination of defects and removal of scale and mill scale in preparation for further processing



Power grinding belts with high-performance grain in grit sizes up to + 80 on hard-wearing cloth backing

Finishing

Decorative finishing
Individual finishing of coils, sheets, square and flat material



Longlife grinding belts with various grain types in grit sizes up to + 1200 on paper or cloth backing for wet or dry grinding

Brush & satin finishing
Individual finishing of coils and sheets



Non-woven abrasive belts and brushes with aluminum oxide and silicon carbide grain in grit sizes up to + 800 for wet or dry grinding

Typical metals that you can process with our products include: stainless steel, steel, high-alloy steels, Titanium, nickel, aluminum, molybdenum, zinc and copper.

Properties and advantages of Hermes quality grinding tools:

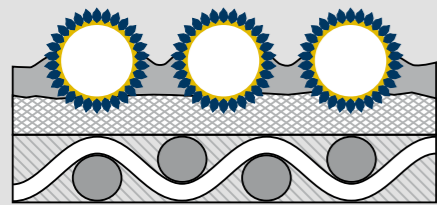
- Products with high removal rates and long service lives
- Creation of consistently high-quality and reproducible surface qualities
- High productivity and cost-effectiveness
- Stable and reliable processes due to heavy-duty belts
- Reduced set-up times and downtimes
- Achievement of your individual requirements in terms of roughness values, grinding patterns and gloss levels

GOOD TO KNOW: THE RIGHT GRAIN

Premium grain for advanced requirements

HERMESIT®

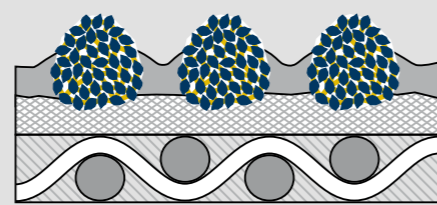
Three-dimensional structure through special spheres covered with grain



Size coat
Maker coat
Backing

MERCURIT®

Three-dimensional structure through abrasive grain agglomerates



- Consistent surface finish and roughness values on workpiece, throughout tool life
- 3-5 times longer service life due to continuous grain abrasion of the special structure
- Creation of special surface effects

CERAMIT®

High performance ceramic grain

- Self-sharpening grain with excellent cutting properties
- High stock removal with long service life

CORK

Combination of high-quality, elastic natural cork particles with fine abrasive grain

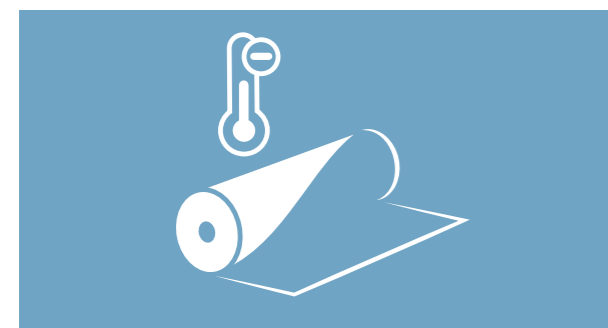
- Creation of the unique Cork Brush Finish (CBF) with a fine, satin finish
- Long service life with consistent polishing effect

Standard grain

Silicon carbide: sharp-edged, hard and less tough; produces a glossy finish

Aluminum oxide: hard and tough, produces a matt satin finish

Zirconia alumina: hard and very tough, self-sharpening



Hermes Topsize

Additional active grinding coating for dry grinding of stainless steel, high-alloy steels and non-ferrous metals

- Protection of the abrasive grain from damage due to excessive heat development during grinding
- Increased stock removal rates
- Increased service life

Hermes products for pre & repair grinding



HERMESIT® 545 Y

Very robust, aggressive HERMESIT® long-life belts with hard, sharp-edged silicon carbide abrasive grain for grinding with open structure for applications with medium to high grinding pressures.

Process	• Pre & repair grinding	• Removing scale	
Material suitability	• Stainless steel	• High alloy steel	• Titanium
Grain	HERMESIT® sphere with silicon carbide		
Grit range	P 40, P 60, P 80, P 100, P 120, P 180, P 280		
Backing	Y-polyester cloth		



CERAMIT® 476 Z

Robust high-performance belts with self-sharpening ceramic grain for high stock removal and temperature-reducing topsize for applications with higher grinding pressure.

Process	• Pre & repair grinding	• Removing scale	
	• Removing mill scale		
Material suitability	• Stainless steel	• High alloy steel	• Titanium
Grain	Microcrystalline sintered alumina		
Grit range	+ 24, + 36, + 40, + 60, + 80, + 100, + 120		
Backing	Z-polyester cloth		



ZIRCONIT ZR 494/496 Z

Aggressive, very economical zirconia alumina belts for processes with high loads and applications with high grinding pressures. Without (ZR 494) and with (ZR 496) topsize coating.

Process	• Pre & repair grinding	• Removing mill scale
Material suitability	• Stainless steel	• High alloy steel
Grain	Zirconia alumina	
Grit range	+ 24, + 36, + 40, + 60, + 80, + 100, + 120	
Backing	Z-polyester cloth	

WET & DRY GRINDING OF COILS & SHEETS



WET & DRY GRINDING OF COILS & SHEETS

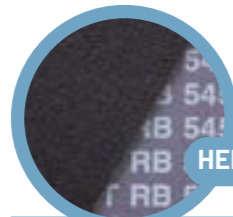
Hermes products for decorative finishing



HERMESIT® RB 535 X

HERMESIT® longlife abrasive with aluminum oxide grain for constant surface roughness and consistently high stock removal over the entire service life. For applications with medium to low contact pressure.

Process	Creation of a matt satin finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Steel 		
Grain	HERMESIT® sphere with aluminum oxide		
Grit range	P 150 P 180 P 220	P 240 P 280 P 320	P 400 P 600
Backing	X-cotton cloth (water resistant)		



HERMESIT® RB 545 X

HERMESIT® longlife abrasive with silicon carbide grain for constant surface roughness and consistently high stock removal over the entire service life. For applications with medium to low contact pressure.

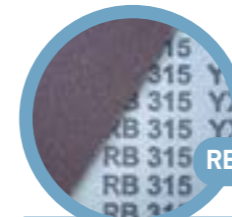
Process	Creation of a glossy finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Titanium 		
Grain	HERMESIT® sphere with Silicone carbide		
Grit range	P 150 P 180 P 220	P 240 P 280 P 320	P 400 P 600 P 800
Backing	X-cotton cloth (water resistant)		



RB 377 YX

High-performance aluminum oxide abrasive with high grinding performance in the coarse grit range and very consistent surface qualities in the fine grit range.

Process	Creation of a matt satin finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Steel 		
Grain	Aluminum oxide		
Grit range	+ 36 + 40 + 60 + 80 + 100	+ 120 + 150 + 180 + 220 + 240	+ 280 + 320 + 400 + 500
Backing	YX-polyester cotton cloth (water resistant)		



RB 315 YX

High-performance silicon carbide abrasive with very good removal rates in the coarse grit range and very consistent surface qualities in the fine grit range.

Process	Creation of a glossy finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Titanium 		
Grain	Silicone carbide		
Grit range	P 24 P 36 P 40 P 60 P 80	P 100 P 120 P 150 P 180 P 220	P 240 P 280 P 320 P 400
Backing	YX-polyester cotton cloth (water resistant)		

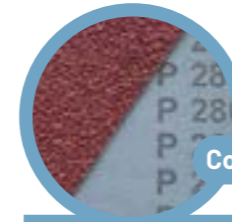
WET & DRY GRINDING OF COILS & SHEETS

Hermes products for decorative finishing



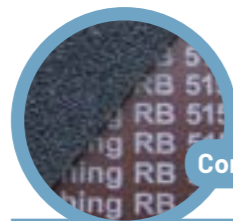
Cork RB 515 X

Adaptable, durable cork-silicon carbide polishing belt for consistently high surface quality throughout entire tool life.			
Process	Creation of high-gloss surfaces with fine, satin finish		
Material suitability	<ul style="list-style-type: none"> • Stainless steel • High alloy steel • Titanium 		
Grain	Cork and silicon carbide		
Grit range	P 150 P 220 P 280	P 400 P 600 P 800	P 1000
Backing	X-cotton cloth (water resistant)		



Cork RB 525 X

Adaptable, durable cork-aluminum oxide polishing belt for consistently high surface quality throughout entire tool life.			
Process	Creation of fine satin matt surfaces		
Material suitability	<ul style="list-style-type: none"> • Stainless steel • High alloy steel 		
Grain	Cork and aluminum oxide		
Grit range	P 220 P 280	P 400 P 600	
Backing	X-cotton cloth (water resistant)		



Cork RB 515 Y

Stable and tear-resistant, durable cork-silicon carbide polishing belt for consistently high surface quality throughout entire tool life.			
Process	Creation of high-gloss surfaces with a fine, satin finish		
Material suitability	<ul style="list-style-type: none"> • Stainless steel • High alloy steel • Titanium 		
Grain	Cork and silicon carbide		
Grit range	P 150 P 220 P 320	P 400 P 800 P 1000	P 1200
Backing	Y-polyester cloth (water resistant)		

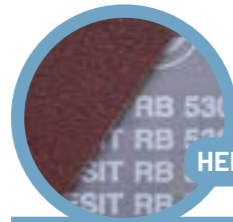


Cork RB 555 X

Adaptable, durable cork polishing belt without grain for a consistent polishing effect throughout entire tool life.			
Process	Production of high-quality, glossy and polishable surfaces		
Material suitability	<ul style="list-style-type: none"> • Stainless steel • High alloy steel 		
Grain	Cork		
Grit range	-		
Backing	X-cotton cloth (water resistant)		

WET & DRY GRINDING OF COILS & SHEETS

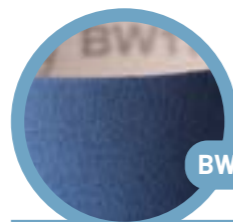
Hermes products for decorative finishing



HERMESIT® RB 530 X

HERMESIT® longlife abrasive with aluminum oxide grain for constant surface roughness, homogeneous finish and uniformly high stock removal over the entire tool life. For applications with medium to low contact pressure.

Process	Creation of a matt satin finish
Material suitability	• Stainless steel • High alloy steel • Steel
Grain	HERMESIT® sphere with aluminum oxide
Grit range	P 120, P 180, P 220, P 240, P 280, P 320, P 400, P 500, P 800
Backing	X-cotton cloth



BW 116

Very high-performance aluminum oxide abrasive belt for rough grinding to finishing on a robust paper backing with high removal rates, long service life and low grinding temperatures due to active ingredient coating.

Process	Creation of a matt satin finish
Material suitability	• Stainless steel • High alloy steel • Steel
Grain	Aluminum oxide
Grit range	P 60, P 80, P 100, P 120, P 150, P 180, P 220, P 240, P 280, P 320, P 400
Backing	F-weight paper



BS 118

High-performance belts for rough grinding to finishing with sharp-edged silicon carbide grain on a firm paper backing with high stock removal and long service life.

Process	Creation of glossy finish
Material suitability	• Stainless steel • High alloy steel • Steel
Grain	Silicon carbide
Grit range	P 16 - P 1200
Backing	F-weight paper



Ceromit® CR 116

Very aggressive belt with ceramic grain for rough grinding to finishing on a robust paper backing with active ingredient coating for low grinding temperatures, high removal rates and long service life.

Process	Creation of a matt satin finish
Material suitability	• Stainless steel • High alloy steel • Steel
Grain	Microcrystalline sintered alumina
Grit range	+ 40, + 60, + 80, + 100, + 120, + 150, + 180, + 240, + 280, + 320, + 400
Backing	F-weight paper



CERAMIT® CR 176



High-performance paper belts with ceramic grain and temperature-reducing Topsize for high loads and productivity.

Process	Creation of a matt satin finish
Material suitability	• Stainless steel • High alloy steel
Grain	Microcrystalline sintered alumina
Grit range	+ 40, + 60, + 80
Backing	F-weight paper



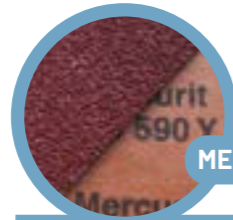
MERCURIT® BW 590

Longlife belts for grinding thin sheets with aluminum oxide micro-agglomerates for constant surface roughness and constant high stock removal throughout entire tool life.

Process	Creation of a matt satin finish
Material suitability	• Stainless steel • High alloy steel • Steel
Grain	MERCURIT® mirco agglomerate with aluminum oxide
Grit range	P 180, P 240, P 320, P 400, P 600
Backing	F-weight paper

WET & DRY GRINDING OF SQUARE & FLAT MATERIAL

Hermes products for decorative finishing



MERCURIT® RB 590 Y

MERCURIT® agglomerate longlife belt with aluminum oxide grain for constant surface roughness and consistent high stock removal throughout entire tool life. For applications with high to medium contact pressure.

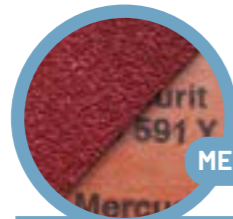
Process	Creation of a matt satin finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Steel 		
Grain	MERCURIT® agglomerate with aluminum oxide		
Grit range	P 80 P 120 P 180	P 240 P 320 P 400	P 600
Backing	Y-polyester cloth		



MERCURIT® RB 595 Y

MERCURIT® agglomerate longlife belt with silicon carbide grain for constant surface roughness and uniformly high stock removal over the entire tool life. For applications with high to medium contact pressure.

Process	Creation of a glossy finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Titanium 		
Grain	MERCURIT® agglomerat with silicon carbide		
Grit range	P 80 P 120 P 180 P 240		
Backing	Y-polyester cloth		



MERCURIT® RB 591 Y

MERCURIT® agglomerate longlife belt with aluminum oxide grain for constant surface roughness and consistent high stock removal over the entire tool life. For applications with low to medium contact pressure.

Process	Creation of a matt satin finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Steel 		
Grain	MERCURIT® agglomerate with aluminum oxide		
Grit range	P 180 P 240 P 320	P 400 P 600	
Backing	Y-polyester cloth		



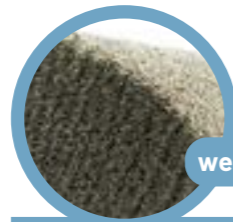
MERCURIT® RB 598 Y

MERCURIT® agglomerate longlife belt with silicon carbide grain for constant surface roughness and uniformly high stock removal over the entire tool life. For applications with low to medium contact pressure.

Process	Creation of a glossy finish		
Material suitability	<ul style="list-style-type: none"> Stainless steel High alloy steel Titanium 		
Grain	MERCURIT® agglomerate with silicon carbide		
Grit range	P 240 P 320 P 400 P 600	P 800 P 1000 P 1200	
Backing	Y-polyester cloth		

WET & DRY GRINDING OF COILS & SHEETS

Hermes products for brush & satin finishing with non-woven brushes



webrax®-0A 710 (LMO/LMI)

Stiff, dense non-woven fabric for high removal rates and homogeneous, satin matt surfaces			
Process	Creation of satin / brushed finish		
Material suitability	• Stainless steel • Zinc alloys	• Aluminum • Brass	• other non-ferrous metals
Grain	Aluminum oxide		
Grit range	+ 80 (CRS) + 100 (MED) + 120 (MED)	+ 180 (FIN) + 280 (VFN)	



webrax®-0S 715 (LMO/LMI)

Stiff, dense non-woven fabric for high removal rates and homogeneous, glossy surfaces			
Process	Creation of satin / brushed finish		
Material suitability	• Stainless steel • Zinc alloys	• Aluminum • Brass	• other non-ferrous metals
Grain	Silicon carbide		
Grit range	+ 100 (MED) + 120 (MED)	+ 180 (FIN) + 280 (VFN)	+ 500 (SFN) + 800 (UFN)



webrax®-0A 713 (LMO/LMI)

Stiffer, highly dense non-woven fabric with increased grain and bonding for higher removal rates and homogeneous, satin matt surfaces			
Process	Creation of satin / brushed finish		
Material suitability	• Stainless steel • Zinc alloys • Aluminum	• Brass • other non-ferrous metals	
Grain	Aluminum oxide		
Grit range	+ 100 (MED) + 180 (FIN)	+ 280 (VFN)	

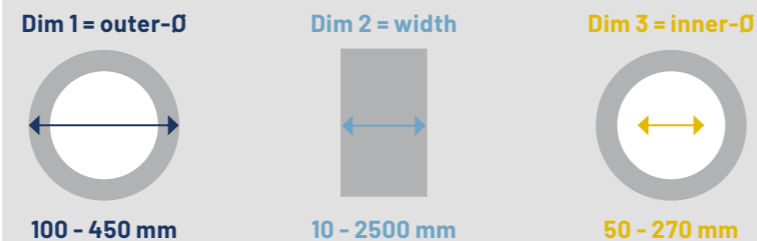


webrax®-0A 710 / RB 346 23 MX (Combi)

Combination of non-woven and cotton-based material for maximum removal rates and homogeneous, satin matt surfaces			
Process	Creation of satin / brushed finish		
Material suitability	• Stainless steel • Zinc alloys • Aluminum	• Brass • other non-ferrous metals	
Grain	Aluminum oxide		
Grit range	+ 80 (CRS) + 100 (MED) + 120 (MED)		

Delivery forms

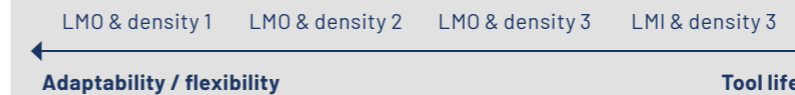
webrax® non-woven brushes are individually manufactured and are available in the following dimensions:



Versions

Depending on your surface and process requirements, our pure non-woven brushes (webrax®-0A 710, webrax®-0A 713, webrax®-0S 715) are available with and without additional active ingredient impregnation and in various densities.

The respective design influences the flexibility and service life of the tool.



LMO: brushes without additional impregnation
LMI: brushes with additional impregnation
Density: number of flaps

WET & DRY GRINDING OF COILS & SHEETS

Hermes products for brush & satin finishing with non-woven belts



webrax®-AN 702

Medium flexible, robust surface conditioning belt with open non-woven structure and cloth reinforcement			
Process	<ul style="list-style-type: none"> • Cleaning, rust removal, surface preparation • Light deburring • Creation of a matt finish 		
Material suitability	<ul style="list-style-type: none"> • Aluminum • Brass 	<ul style="list-style-type: none"> • Bronze • Steel 	<ul style="list-style-type: none"> • Stainless steel
Grain	Aluminum oxide		
Grit range	+ 80 (CRS) + 100 (MED)	+ 180 (FIN) + 280 (VFN)	+ 320 (VFN) + 400 (SFN)



webrax®-AN 70150

Stiff, robust, aggressive surface conditioning belt with cloth reinforcement			
Process	<ul style="list-style-type: none"> • Cleaning, rust removal, surface preparation • Light deburring • Creation of a matt finish 		
Material suitability	<ul style="list-style-type: none"> • Stainless steel • Steel 		
Grain	Aluminum oxide (+ 80 to + 280), Silicon carbide (+ 800)		
Grit range	+ 80 (CRS) + 100 (MED)	+ 180 (FIN) + 280 (VFN)	+ 800 (UFN)



webrax®-MSG

Very soft, flexible finishing belt laminated on cloth for the creation of brilliant glossy surfaces			
Process	Creation of satin / brushed finish		
Material suitability	<ul style="list-style-type: none"> • Aluminum • Stainless steel • Non ferrous metals 		
Grain	Silicon carbide		
Grit range	+ 80 (CRS) + 150 (FIN)	+ 180 (FIN) + 280 (VFN)	+ 400 (SFN) + 500 (SFN)



webrax®-MAG

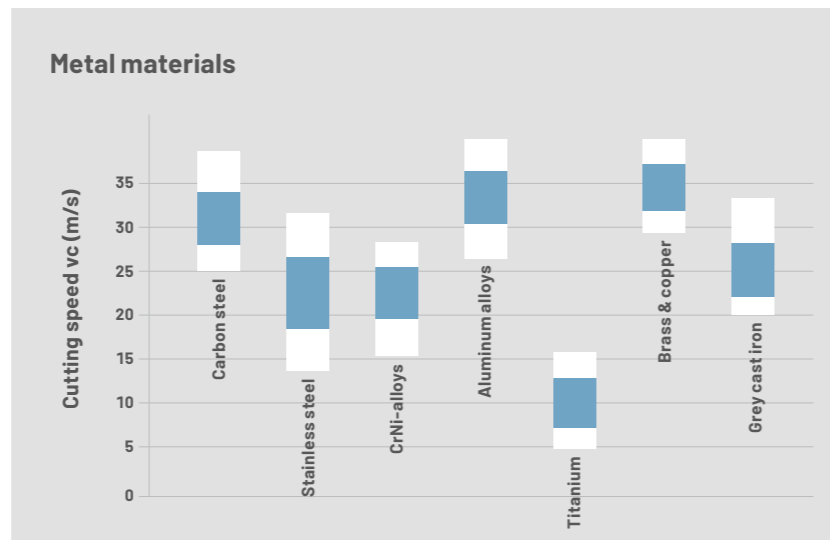
Very soft, flexible finishing belt laminated on cloth for the creation of satin matt surfaces			
Process	Creation of satin / brushed finish		
Material suitability	<ul style="list-style-type: none"> • Aluminum • Stainless steel • Non ferrous metals 		
Grain	Aluminum oxide		
Grit range	+ 80 (CRS) + 120 (MED)		

GOOD TO KNOW: FURTHER INFORMATION ABOUT HERMES GRINDING TOOLS

Grit size comparison standard & webrax® grinding tools

Standard grit size		+ 80	+ 100	+ 120	+ 150	+ 180	+ 240	+ 280	+ 320	+ 360	+ 400	+ 500	+ 800	+ 1500	No grain
webrax® grit size description / webrax® type	Product code	Coarse (CRS)	Medium (MED)		Fine (FIN)			Very fine (VFN)			Super fine (SFN)		Ultra fine (UFN)		
webrax®- AN 702	70200	brown	brown	-	-	brown	-	brown	brown	-	brown	-	-	-	
webrax®-AN 70150	70150	brown	red	-	-	red/blue	-	blue	-	-	-	-	-	grey	
webrax®-MAG	70000	brown	-	brown	-	-	-	-	-	-	-	-	-	-	
webrax®-MSG	70500	black	-	-	black	black	-	black	-		black	black	-	black	
webrax®-OA 710	71002	brown	brown	brown	-	brown	-	brown	-	-	-	-	-	-	
webrax®-OA 713	71300	-	brown	-	-	brown	-	brown	-	-	-	-	-	-	
webrax®-OS 715	71502	-	black	black	-	black	-	black	-	-	-	black	black	-	

Recommended Cutting speeds



Achievable roughness depths according to grain size

Grit size	R _a * [µm]	R _z * [µm]
P 80	1.5 - 2.5	12 - 16
P 150	1.0 - 1.2	7 - 9
P 180	0.8 - 1.0	5 - 7
P 240	0.6 - 0.7	5 - 6
P 280	0.5 - 0.7	4 - 5
P 320	0.4 - 0.5	3 - 4.5
P 400	0.35 - 0.45	2.5 - 3.5
P 600	0.25 - 0.35	2 - 3

When grinding coils and sheets with conventional belts, the specified roughness depths can be achieved by setting the usual machine parameters, taking the grain size into account.

The specifications given are approximate values. By changing parameters, such as cutting speed, feed rate, back-up roller hardness, grain type, sanding belt structure (conventional or three-dimensional), dry or wet grinding conditions, deviating values are possible.

*Values determined with conventional aluminum oxide abrasive belts.

For comparable R_z-values, select one to two grit levels finer for HERMESIT® and MERCURIT® products than for conventional abrasive belts.

Storage of grinding tools

Hermes grinding tools are quality tools and require appropriate storage conditions. Inadequate storage can lead to a reduction in performance. Careful storage ensures maximum performance.



- Storage at room temperature 18 - 22 °C and relative humidity of 45 - 65 %
- Store in original packaging on shelves or on pallets/racks
- Deliveries must be used in the order in which they are received



- Do not store near radiators
- Do not expose products to extreme temperature changes
- Products should not be stored directly on concrete or stone floors
- Do not store in unheated rooms in winter

HERMES ABRASIVES - MORE THAN GRINDING TOOLS!



EXPERTISE & CONSULTING

Whenever you need support: our experts are there for you. Whether it's choosing the right grinding tool, process optimization, product testing or training your employees. Whether at your or at our premises, by phone or email - you can count on us.



TUV NORD
TUV NORD CERT GmbH

SEAM
Sustainable Environmental Assessment

01 Environment

02 Labor

03 Economy

RESPONSIBILITY & SUSTAINABILITY

Responsible action and sustainable management are and have always been key components of our corporate strategy. We are continuously developing our activities in this regard, are regularly certified and are measured against our successes at all times.

HERMES CONNECT

ONLINE-SERVICE PORTAL

Get information, order goods and track them - around the clock! Hermes Connect is your key source for all important services and information on our abrasive tools: stock availability and prices as well as a direct shop function and your personal order overviews.



CONTACT

Contact us at any time so that we can find the right solution for you. In the contact area on our website hermes-abrasives.com you can find with just a few clicks the right contact person responsible for you.



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