

Grinding with style.

 **webrax** abrasive web belts
for fine grinding metal



All's well that ends well – **webrax** -abras

3 benefits of webrax abrasive web belts

1. The backing

Our abrasive web belts are manufactured from a special fibre web in combination with a cloth backing, with the abrasive grit firmly anchored by a bond to make it correspondingly durable. We supply two designs for use as a grinding belt:

- Abrasive web on X_w -cloth
- Abrasive web, reinforced with cloth

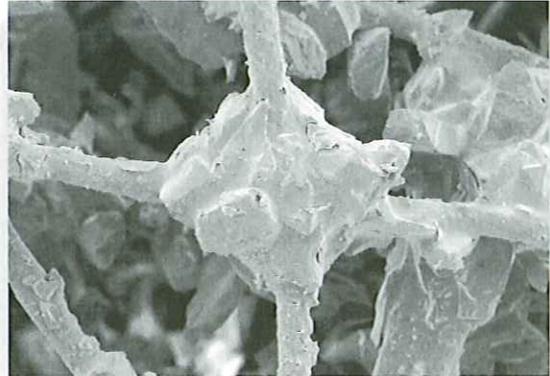
2. Types of grain

We use the following types of grain: Aluminium oxide (Al_2O_3) and Silicon carbide (SiC).

Warning: grinding action and grit size details are not comparable with those of abrasive papers and cloths (see also table entitled "Comparison of roughness values").

3. The bonding

The resin bond allows use under both dry and wet conditions. A benefit you will appreciate.



The magnified photograph clearly shows the open structure of webrax abrasive web.

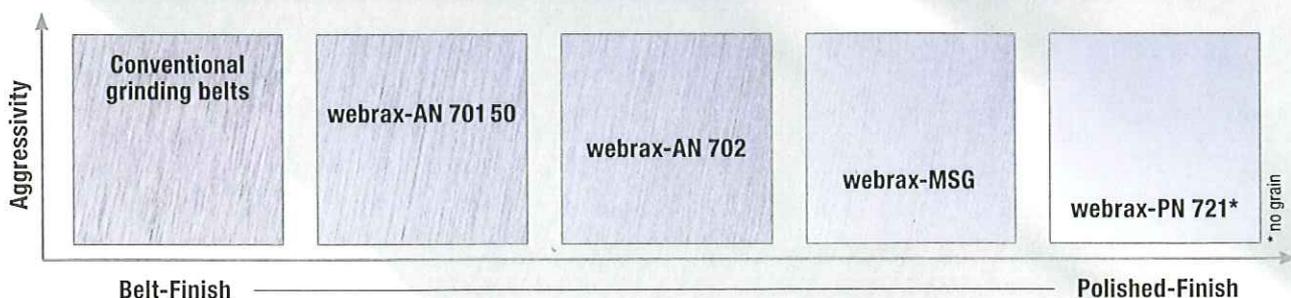
Comparison of grit sizes for webrax abrasive webs (incl. details of product colours)

Hermes standard	+ 80	+ 100	+ 120	+ 150	+ 180	+ 280	+ 320	+ 400	+ 500	+ 800	no grain
Grit name	coarse	medium		fine		very fine		super fine		ultra fine	
webrax-MAG	brown	–	brown	–	–	–	–	–	–	–	–
webrax-MSG	black	–	–	black	black	black	–	black	black	–	–
webrax-AN 701 50	brown	red	–	–	red/blue	blue	–	–	–	grey	–
webrax-AN 702	brown	brown	–	–	brown	brown	brown	brown	–	–	–
webrax-PN 721	–	–	–	–	–	–	–	–	–	–	yellow

Recommended cutting speeds (v_c) for grinding dry

Abrasive web belts and wide belts	Steel, Stainless steel, Non-ferrous metals		
	Fine grinding	Structural grinding	Polishing & Cleaning
webrax-MAG, -MSG	5 - 15 m/s	5 - 15 m/s	–
webrax-AN 701 50, -AN 702	8 - 22 m/s	5 - 15 m/s	–
webrax-PN 721	–	–	10 - 22 m/s

Grinding patterns compared using grit size 180



webrax web belts for that special finish for metal surfaces

webrax-MAG/MSG for fine finishing of surfaces



webrax-MAG



webrax-MSG

Product description

Type	webrax-MAG
Grain	Aluminium oxide
Bonding	Resin, brown
Backing	Abrasive web on X _w -cloth
Grit range	+ 80, + 120

Type	webrax-MSG
Grain	Silicon carbide
Bonding	Resin, black
Backing	Abrasive web on X _w -cloth
Grit range	+ 80, + 150, + 180, + 280, + 400, + 500

The benefits for you

- **webrax-MAG** is particularly suitable for generating satin-effect stainless steel surfaces
- **webrax-MSG** is particularly suitable for generating bright-effect stainless steel surfaces
- very soft, elastic, voluminous abrasive web which adapts well to shapes and contours
- very fine grinding pattern
- resilient abrasive web means low material removal rate
- shape of workpiece is not changed
- back of belt is smooth, so can be used on grinding machines with a pad
- strong cloth backing increases occupational safety during grinding

Applications

- for fine and finest grinding of stainless steel coil and sheet
- for surface grinding aluminium, copper or brass sheet (e.g. fine grinding before galvanizing/anodizing)
- use on both stroke grinders and wide belt grinders



webrax-AN 701 50 for structural grinding



webrax-AN 701 50

Product description

Type	webrax-AN 701 50
Grain	Aluminium oxide/Silicon carbide
Bonding	Resin (for colours, see below)
Backing	Abrasive web, reinforced with cloth
Grit range	Aluminium oxide + 80 (brown), + 100 (red), + 180 (red/blue), + 280 (blue) Silicon carbide + 800 (grey)

The benefits for you

- very strong, aggressive abrasive web
- very good stock removal rates
- rough grinding pattern
- particularly suitable for generating satin-effect surfaces
- the cloth reinforcement increases occupational safety during grinding
- universally applicable

Applications

- for structural grinding of stainless steel coil and sheet
- for fine grinding stainless steel sheet
- for light deburring work
- for use on belt grinders

webrax-AN 702 for fine grinding



webrax-AN 702

Product description

Type	webrax-AN 702
Grain	Aluminium oxide
Bonding	Resin, brown
Backing	Abrasive web, reinforced with cloth
Grit range	+ 80, + 100, + 180, + 280, + 320, + 400

The benefits for you

- strong, voluminous abrasive web which is highly adaptable
- good stock removal rates
- even, fine grinding pattern
- particularly suitable for generating satin-effect surfaces
- the cloth reinforcement increases occupational safety during grinding
- universally applicable

Applications

- for fine grinding of stainless steel coil and sheet
- to give a satin matt effect to metal surfaces and aluminium, copper and brass workpieces
- for use on belt grinders

webrax-PN 721 cleaning and polishing belts



webrax-PN 721

Product description

Type	webrax-PN 721
Grain	no grain
Bonding	Resin, yellow
Backing	Abrasive web, reinforced with cloth

The benefits for you

- no modification of surface by abrasive grain
- open structure guarantees good absorption of particles of dirt
- especially suitable for polishing
- good absorption of polishing media

Applications

- Cleaning and polishing stainless steel surfaces

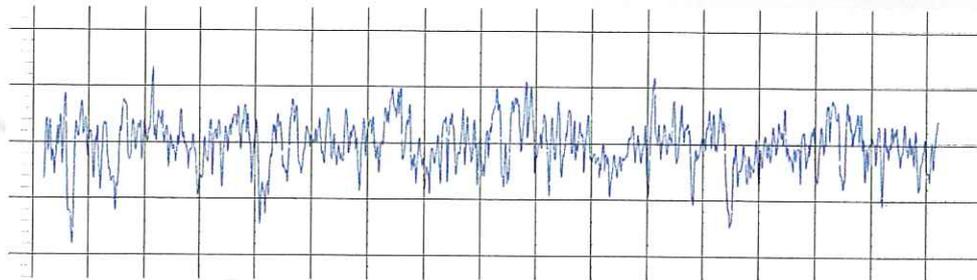
Comparison of roughness values, grinding dry, grit size 180

Data from technical trials: see table below

Cloth grinding belt RB 377 YX

Roughness values

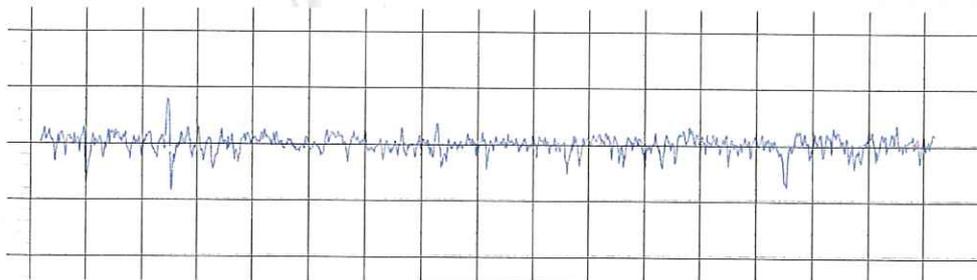
R_{max}	15.5 μm
R_z	12.2 μm
R_a	1.7 μm



Very strong, rigid, aggressive abrasive web belt webrax-AN 701 50

Roughness values

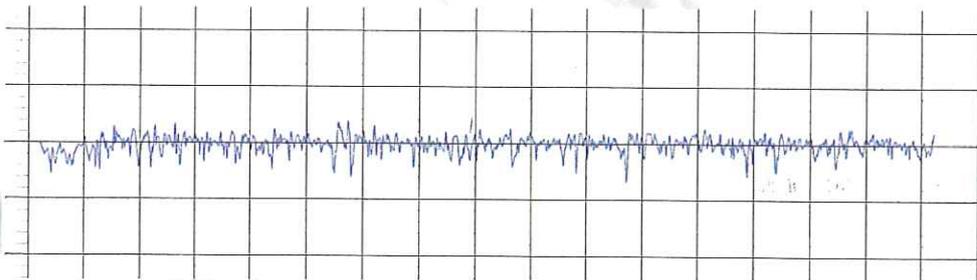
R_{max}	8.3 μm
R_z	5.2 μm
R_a	0.6 μm



Strong, voluminous abrasive web belt webrax-AN 702

Roughness values

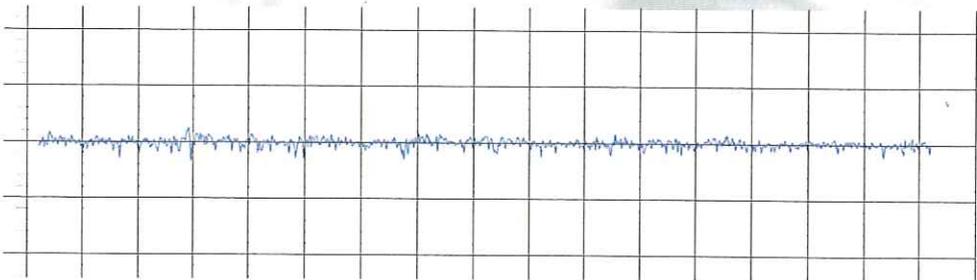
R_{max}	5.6 μm
R_z	4.5 μm
R_a	0.6 μm



Very soft, elastic abrasive web belt webrax-MSG

Roughness values

R_{max}	3.0 μm
R_z	2.3 μm
R_a	0.3 μm



Data from technical trials

Material	Stainless steel sheets (Material no. 1.4301), cold-rolled, 2B, Dimensions: 100 x 500 x 1 mm
Machine	Niederberger / Hermes technical centre / T2068-07 / 5 KW
Cutting speed	Abrasive belt RB 377 YX: $v_c = 26$ m/s, webrax abrasive web belts: $v_c = 13$ m/s
Feed	$v_f = 10$ m/min
Contact wheel	$\varnothing 200$ mm, rubber, 60° Shore A, grooved 1:1
Contact pressure	corresponding $I = 1$ A
Grit size	all belts grit size 180

**For more information from Hermes
about webrax abrasive webs:**



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