



**PolishStyl**

---

**SANDING MATERIALS  
AND ACCESSORIES**

---

*Sanding is our passion!*

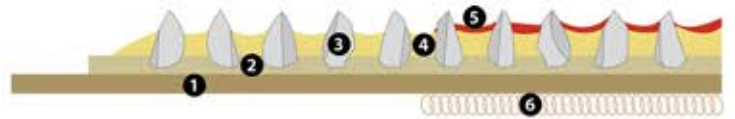
# Introduction to Abrasive materials

## Backing material:

The backing material not only carries the abrasive layers, it must also transfer the sanding power through a surface. This means that larger abrasive grains demand more power and, therefore, also need a stronger backing material. For example, a backing material made of cloth-woven thread is often stronger and more stable than a backing material made of paper. Cloth can be either rigid or flexible depending on a construction and, nowadays, there are also strong paper backings specially developed for challenging sanding applications.

An anti-static backing paper is used for wide belt sanding applications where it helps to keep the machine and the sanding units cleaning of dust. When a superior surface finish is demanded, film backing can provide a good alternative. The advantage of a film backing is the same as for premium light paper backings – it provides a very even surface for the abrasive grains.

## Sanding material construction:



1. Backing material
2. Make coat
3. Grains
4. Size coat
5. Stearate coating
6. Fastening system

## Paper backings:

Paper	Gram	Strenght	Flexibility	Usage
A	< 80 g/m <sup>2</sup>	▲	▼	Hand sanding
B	85 - 109 g/m <sup>2</sup>			Hand sanding
C	110 - 134 g/m <sup>2</sup>	▲	▼	Hand sanding
D	135 - 160 g/m <sup>2</sup>			Machine sanding
E	220 - 269 g/m <sup>2</sup>			Machine sanding
F	270 - 350 g/m <sup>2</sup>			Machine sanding

## Cloth backings:

Cloth	Description	Usage
XY	Extra strong X-cloth of polyester	Heavy duty machine sanding when extra stock removal is required
X	Strong, stiff cotton cloth	Heavy dute machine sanding
J	Flexible cloth (jeans model)	Hand-machine sanding of profiles
JF/JJ	Extra flexible jeans cloth	Hand-and machine sanding of complicated profiles

## Make coat and size coat:

The 'make coat' and 'size coat' are layers of resin. The make coat is the first layer on which the abrasive grains are applied, while the size-coat is added to keep the grains firmly in place. Abrasive materials in wood sanding range are made with animal glue, and synthetic resins.

**Animal glue** – this kind of glue is used when it is necessary to provide high flexibility and finishing of surface.

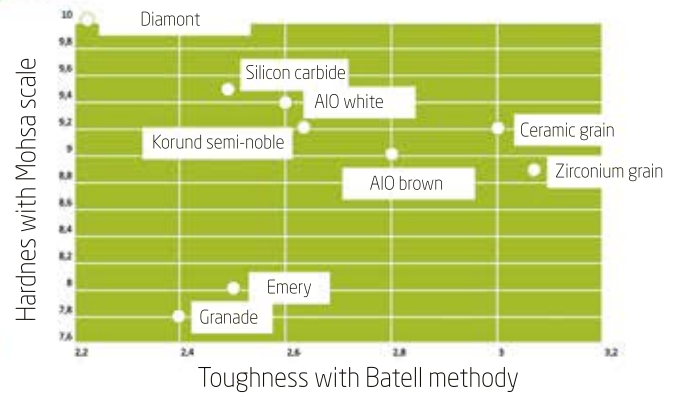
**Synthetic resins** – the most popular resins used in the wood abrasive material are phenolic and urea resins which provide to get very strong connection of the abrasive grain with backing material.

A key factor in producing flexible abrasives is the amount of resin that is applied. A low amount of resin results in an aggressive product but with restricted working lifespan. Increasing the amount of resin increases the products working lifespan.



## Grains and coat:

When it comes to sanding wood the choice of abrasive grain is vital, both for the final result and to achieve the best possible lifespan from the product. Choosing a sharp grain will achieve a good cut, however if a finer surface finish is essential then another type of grain may be chosen. The grain selection process is also affected by the strength required.



## Coat:

The performance is greatly affected by the amount of abrasive grains used. For example, less grains results in an open coating which is highly resistant to clogging, whereas more grains produce a closed coating with good stock removal and a smooth surface finish.



Close coat



Semi-open coat



Open coat

## Stearate coating.

Some products receive a special stearate coating which is designed to prolong lifetime. Usually the stearate is based on zinc or calcium and is like small flakes applied on top of the abrasive.

## Anti-static treatment.

Static electricity load can cause significant dust problems when sanding with a wide belt. However, using anti-static belts prevents dust problems and provides a better work environment

## Cross Sanding:

Wood	Conveyor speed	Belt speed	Stock removals[mm]					
	[m/sek]	[m/sek]	P100	P120	P150	P180	P220	P240
Solid soft wood	10 - 15	16 - 22	0,2 - 0,3	0,15 - 0,2	0,1 - 0,15	-	-	-
Solid hard wood	8 - 13	16 - 22	0,2	0,15	0,1	-	-	-
Veneer	12 - 25	16 - 22	0,15	0,1	0,07	-	-	-
Chipboard/MDF	12 - 25	16 - 22	-	-	-	0,05	0,03	0,02
Board production								
Chipboard/MDF	20 - 30	18 - 24	0,06	0,05	0,04	-	-	-

## Surface sanding:

Wood	Conveyor speed	Belt speed	Stock removal [mm]					
	[m/min]	[m/sek]	P100	P120	P150	P180	P220	P240
Solid soft wood	10 - 15	18 - 23	0,4 - 0,5	0,25 - 0,35	0,15 - 0,25	0,1 - 0,15	0,07 - 0,1	0,05
Solid hard wood	8 - 13	18 - 23	0,4	0,25	0,15	0,15	0,07	0,05
Veneer	12 - 25	18 - 23	0,3	0,2	0,1	0,1	0,05	0,03
Chipboard/MDF	12 - 25	18 - 23	0,25	0,15	0,1	0,1	0,05	0,03
Board production								
Chipboard/MDF	20 - 26	20 - 26	0,25	0,18	0,07	0,05	0,04	0,03
Plywood	18 - 25	18 - 25	0,2	0,15	0,07	0,05	0,04	0,03

## Calibration:

wood	Conveyor	Belt speed	Stock removal [mm]		
	[m/min]	[m/sek]	40	60	80
Solid soft wood	10 - 15	18 - 22	1,3 - 1,5	0,9 - 1,1	0,6 - 0,8
Solid hard wood	8 - 12	20 - 28	1,3	0,9	0,6
Board production					
Chipboard/MDF	20 - 30	25 - 40	0,5	0,4	0,3
Plywood	50 - 70	25 - 35			0,25

## Lacquer sanding:

Type of lacquer	Conveyor speed	Belt speed	Grain	Stearate
Nitrocellulose NC	10 - 15 [m/sek]	2 - 7 [m/sek]	P320 - P400	Tak
Polyurethan PUR	10 - 15 [m/sek]	4 - 8 [m/sek]	P320 - P400	Tak
Hydrogrund	10 - 15 [m/sek]	1 - 4 [m/sek]	P340 - P320	Nie
Acrylic UV	10 - 15 [m/sek]	1 - 6 [m/sek]	P320 - P600	Tak/Nie
Polyester UV	10 - 15 [m/sek]	4 - 8 [m/sek]	P320 - P1000	Tak
Melamin	10 - 15 [m/sek]	6 - 10 [m/sek]	P180 - P320	Nie
Water base lacquer	10 - 15 [m/sek]	1,5 - 4 [m/sek]	P280 - P320	Nie





### AJF461

is an antistatic abrasive product with flexible J-cloth backing. Sharp and aggressive aluminum oxide grain gives this material excellent cutting properties. Material is adaptable for not complicated contours, curves and profiles. Recommended for wide narrow sanding machines and also for hand sanding and brushes.



### TLF

is antistatic abrasive product with extra flexible JJ-cloth backing. The coating of high quality mix of Aluminium Oxide and flexible resin make that this material is highly adaptable to contours, curves and profiles.



### KLX610

strong and stiff X cloth together with durable aluminium oxide grain make that this material work perfectly during heavy sanding of soft and hard wood. Material is excellent for universal work with above average lasting.



### JC122

is an antistatic product with flexible J-Cloth backing and silicon carbide grain. Material is recommended for sending when highest quality of the surface is demanded. Cloth can be used for sanding MDF, soft, hard wood and glass.



### 052J

is a product with flexible J-cloth backing with Ceramic grain. We recommend this material for brushes with metal and Yacht industry and also for sanding composites.



### XZ677

is a product with extremely strong XY cloth backing and zirconium grain. It works perfectly with hard wood and parquets. In metal industry is priced for quality and efficiency with reasonable price.



### BORA7

strong polyester cloth with ceramic grain, covered special cooling coat make this material perfect for heavy sanding hard metals.





### CRE

antistatic material with E paper backing and white aluminum oxide make this material excellent for finishing sanding hard wood and veneer and for sanding MDF.



### WPF420

antistatic material with F paper backing and semi-open coat, perfect for sanding hard wood. Work excellent during calibration. Material can be used as universal abrasives for carpenters.



### GA03

antistatic material with F paper backing, extra open coat of aluminum oxide grain. Sharp and aggressive grain gives this material excellent cutting properties and high stock removal.



### GA02

antistatic material with E/F paper backing and semi open coat. Special kind of aluminium oxide grain makes surface perfectly smooth.



### Combilux

This product contains Corundum with coolant additive and a PET film backing bonded with paper, is particularly suitable for the wood industry for sanding veneer, MDF and chipboard, as well as solvent-based polyester, acrylic and poly-acrylic base coats. It is favorite material of all producers of high gloss.



### SES

with excellence antistatic properties is used for sanding lacquer coating on fast industrial UV lines. Flexible E backing paper and white aluminum oxide enable an efficient sanding operation and perfect quality of the surface.



### SE

Silicon carbide grain product with E flexible paper backing allows you to get the highest smoothness of the surface on the lacquer surfaces.



### SD

product which was created for sanding difficult soft lacquers. Very flexible D paper backing enables excellent sanding even on not perfectly flat surfaces of the lacquer coatings. Special kind of glue ensures very soft matt finishing.



### CSER

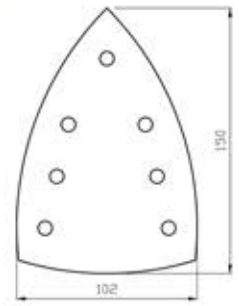
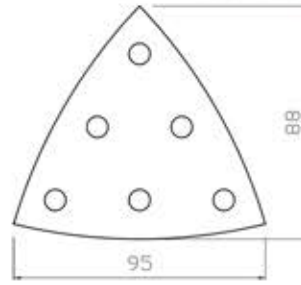
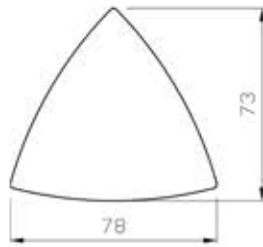
Silicon Carbide grain on the stiff F paper backing makes that this material is used for sanding MDF boards, veneers, and also plastics and stones.



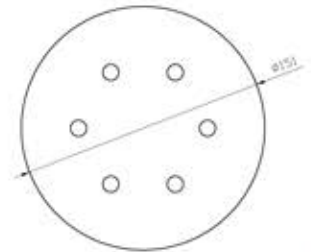
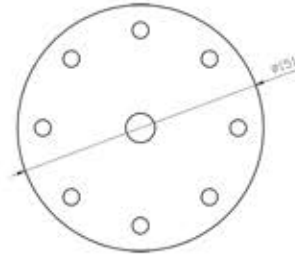
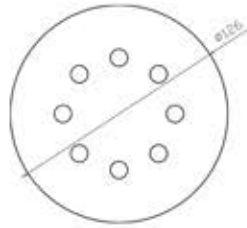




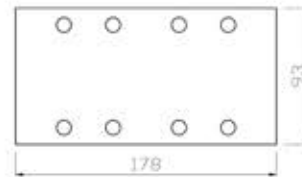
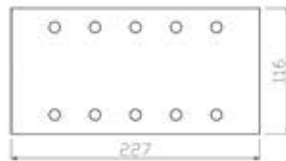
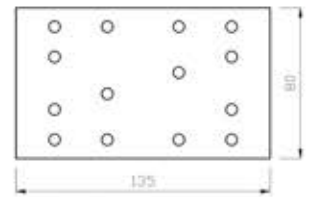
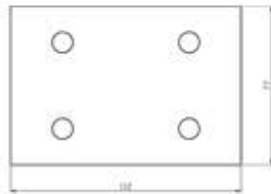
## Delta



## Discs



## Sheets



**All other shapes and dimensions are available on request**

### TYPE-F

Film backing material with special aluminum oxide grain, very strong resin and special top coat to prevent clogging. High resistant for work with edges. Excellent cutting performance and durability.

### TYPE-C

double resin, C paper backing material with sharp aluminum oxide grains makes this material value for quality, efficiency and reasonable price level.







### GoldFlex

paper on sponge with very flexible b/C paper backing. Product with very high performance, leaves the perfect quality of surface. Product is valued due to good relation between price and quality.



### RedBox

film backing material with foam thickness 4 mm, Very strong backing and special top coat to prevent clogging. Perfect material for sanding difficult applications, where the highest efficiency is needed.



### One side pad

these pads are highly flexible, slim and can be easily folded without cracking. Pads produce an excellent quality of the surface. The special foam prevents appearing of fingers shadows. Pads can be used for wet and dry sanding. Available with grit: #60 up to #280



### Two sided pads

created for hand sanding, extra soft backing foam allows to adapt all product work pieces. Can be used for wet and dry sanding. Product is available with Silicon Carbide and Ceramic grain with grit #60 up to #220



### Four sided blocks

The biggest advantage of this sponges is possibility to sand inside corners and profiles with the same efficiency as flat surfaces. Can be used for wet and dry sanding. Product is available with Aluminum oxide and Ceramic grain with grit from #60 up to #220



### Shaped blocks

product designed for sanding corners and profiles, special shape of the foam (with angle or radius) enables to sand difficult inside profiles and corners. Available grit #60 - #280

**Other grits of the sponges and blocks are available for special request.**



## POLISHING

process of helping to obtain high gloss on flat surfaces or profile of the furniture lacquered components, car bodies and gelcoat surfaces. Depending on the type of material, color and gloss polishing is carried out in one or a multistage process.

Due to the production scale of polishing, it can be made:

Manually – using electric or pneumatic polisher fitted with a tool in the form of wool pad, sponge or felt pad and polishing pastes or lotions.

Mechanically – using special polishing machines equipped with polishing tools in the form of cotton wheels, wool pads or felt belts and polishing pastes and lotions.



### Green Line Product

(PC120, PC141) aggressive polishing compound and moderate shine effect. They are recommended for preliminary polishing with hard foam, felt pad or aggressive wool pad.

### Yellow Line Product

(SG220, SG230) polishing compound with allow to get high shine effect and moderate aggressiveness. Recommended to work with medium hard foams pad soft wool pads. In case white color compound can be used as a last step.

### Blue Line Product

(FF310, FF320) no aggressive compound produce high shine effect, recommended to work with soft foams. Designed to easily remove holograms and swirl marks left by previous polishing process.

### Red Line Product

(SW510, NW520, SC900) complementary products as a waxes and brighteners and control spray for cleaning the surface after polishing proces.



# POLISHING TOOLS



**FRESHPADS** foam pads with high sanding-polishing properties for professional purposes. Enable for perfect control of the polishing surface. Product is easy to clean. Pads are available with three hardness: white – hard, blue – medium hard, black – soft.

**Wool pads with natural merino wool** available with hard pad which reduce heating effect on the polishing surface. Product available with different kind of wool for different application. Diameter from 80 mm up to 220 mm.



**Polishing foam pads** made with special kind of foam with special polishing-sanding properties. Product available as a flat foam, spider sandwich pad, or waffle finishing pad with diameter 150 and 180 mm. Present with Velcro or M14 fixing system.

**Versatile pad** enable to adapt different kind of polishing tools.







### Flap wheels

The wheels are composed of nonwoven flaps radially glued around a central fiber core. Flapwheels are available with different grid, kind of grain (silicon Carbide, Aluminum Oxide, zirconium) and density.



### Mixed paper flap wheels

They are composed of nonwoven flaps alternated with paper or abrasive cloth flaps radially glued on a fiber core. Their composition is very varied: all the types of nonwoven are combined with the many grades and backings of the flexible abrasives to offer a vast range suited for every type of working.



### Abrasive wheels

Are produced with a solid resinous material which is bonded together with a synthetic adhesive or gum. Similar to other Scotch Bride wheels are available with different grain and grit. Hard and compact structure of the abrasive wheel allows shapes the profile with ease and holds its profile perfectly throughout its life.



### Convolute wheels

The convolute wheels are made with nonwoven material wound in a spiral fashion, compressed and injected with special resins with addition of first quality abrasive and glued around a bakelite core. Convolute wheels are available with different grid, kind of grain (silicon Carbide, Aluminum Oxide, zirconium) and density.

### Brushing Technology

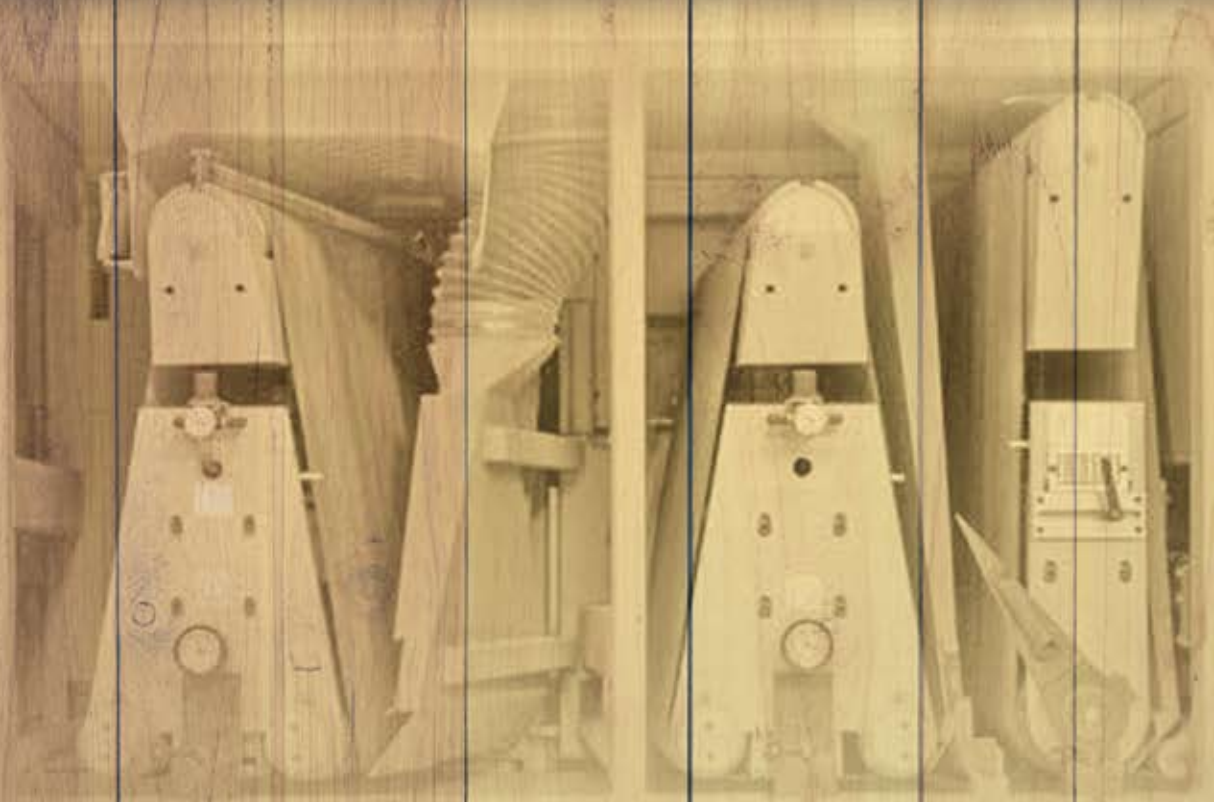
- Exchangeable brushing system is a perfect flexible sanding tool for quick and effective sanding of wood and wooden derivative elements in piles. Depending on technology of surface finishing we can offer You brushes with sanding cloth, nonwoven, natural leather, abralon, natural fibers or horse hair. The suitable choice of sanding material, grain, cuts and support system guarantees the optimal effect during sanding, polishing or grinding of oil or wax.

- Structuring brushes - PolishStyl is a pioneer of effective wood sanding and getting a result of an old (rustic) outlook. We are able to offer many different structuring Tynex and Steel brushes with different kind of wire in order to give You various wood structures and meet individual needs of our Customers.

- Dust extraction brushes - Both exchangeable brushes and rollers are always produced with high quality of Tampico fibre or mixture of horsehair that helps to keep cleanliness of elements under difficult conditions.







*„There is hardly anything in the world  
that some man cannot make a little worse and sell a little cheaper,  
and the people who consider price only are this man's lawful prey”*

*John Ruskin (English reformer 1819-1900)*

**PolishStyl**  
**ul. Dzieci Warszawy 27B/4,**  
**02-495 Warszawa**  
**tel./fax: 22/40-727-40**



**PolishStyl**