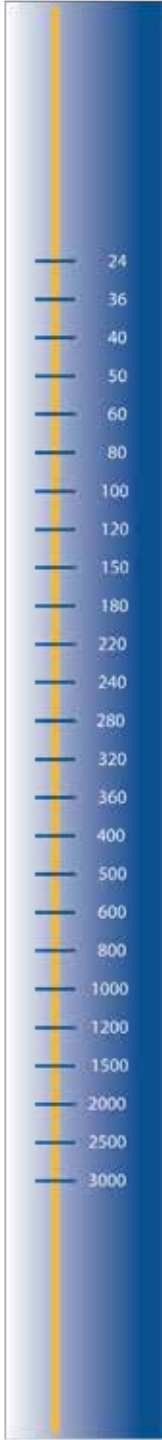
Coated abrasive (Sandpaper) Basics

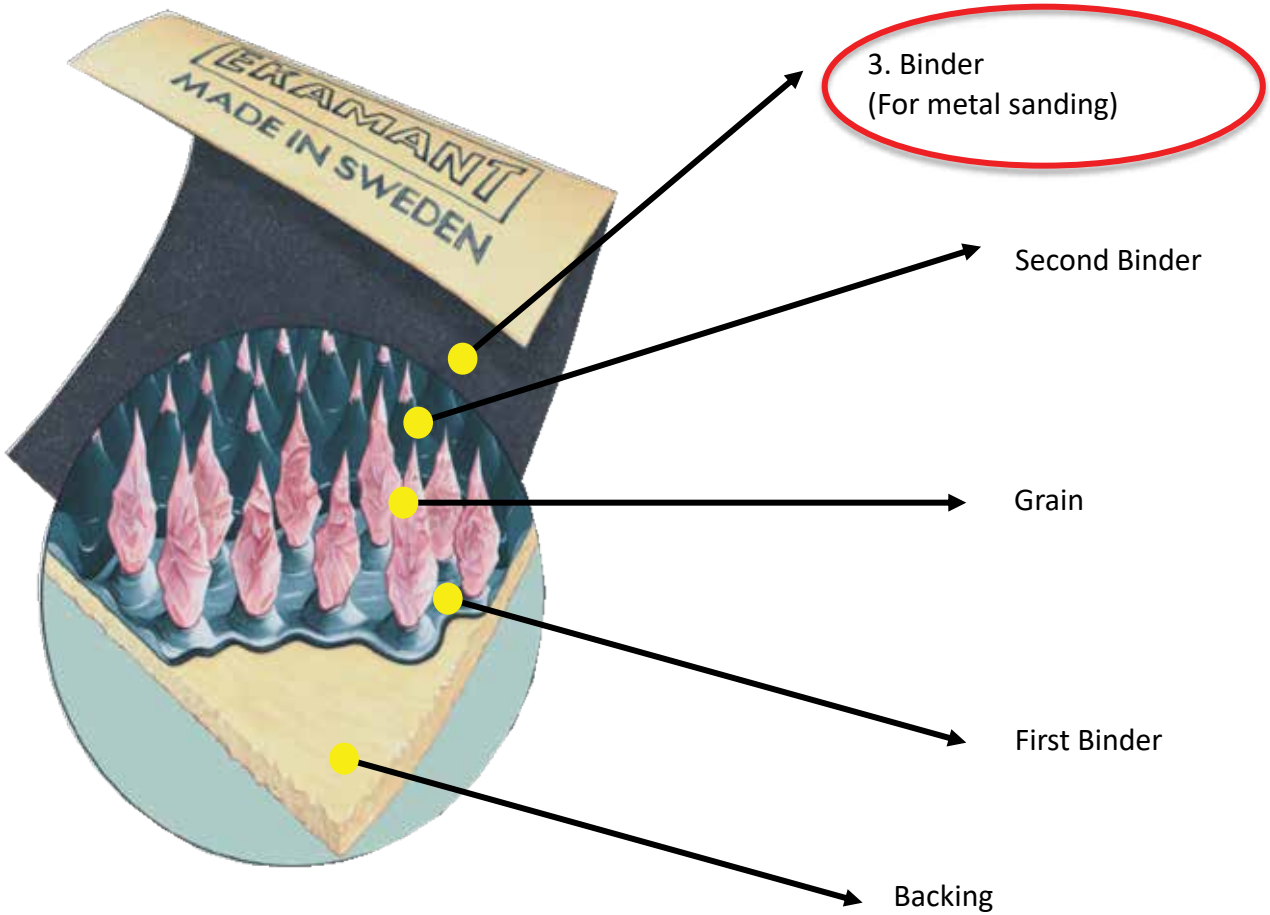
Ace INDUSTRIAL



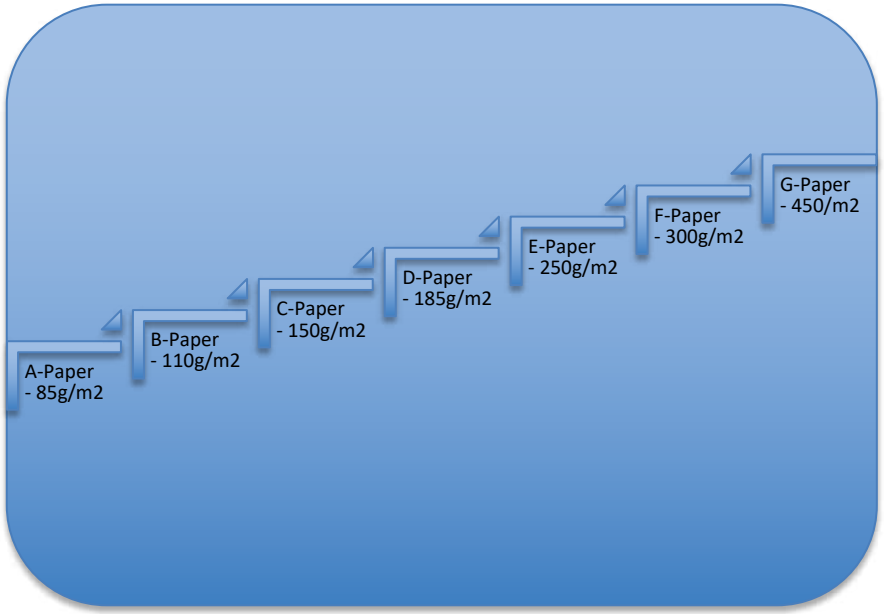
Coated abrasive Basics What is

Sandpaper is part of the "Coated abrasives" family of abrasive products. It is used to remove small amounts of material from surfaces, either to make them smoother (painting and wood finishing), to remove a layer of material (e.g. old paint) or sometimes to make the surface rougher (e.g. as a preparation to gluing “technical sanding”).

Coated Abrasive
Raw material and production
Build

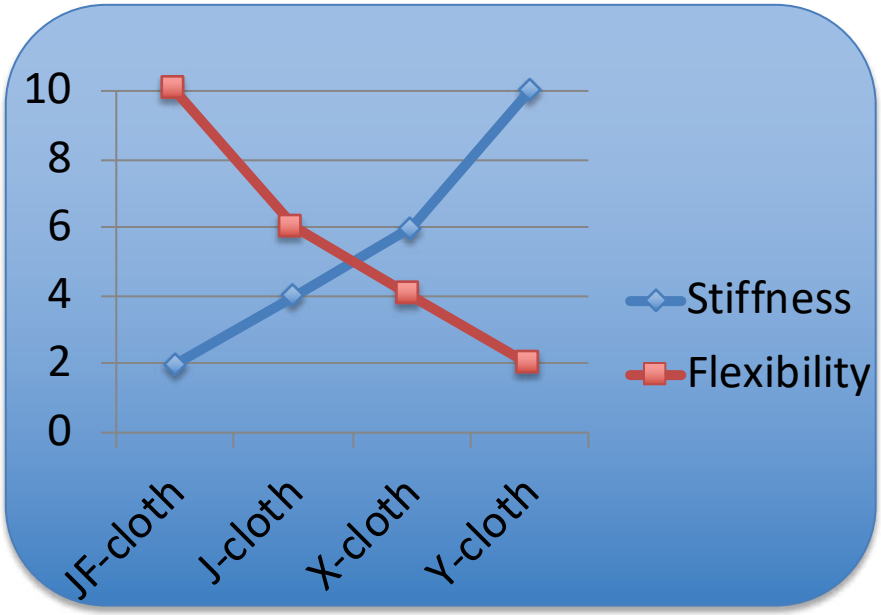


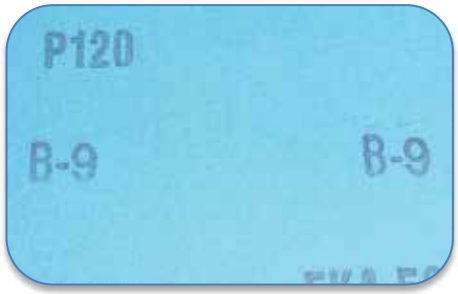
Coated Abrasive
Raw material and production
Backing-Paper



- is cheaper
- has less stability
- available in different thickness
- Classification in g/m2 (A-G, see picture)
- gives a better finishing than cloth
- create less friction heat
- use for light to middle sanding pressure (Cork, wood, lacquers, textiles..)

Coated Abrasive
Raw material and production
Backing-Cloth





- more expensive than paper (3X)
- available in different stiffness (stiff, semi flexible, high flexible)
- good tear resistance in all directions
- most used for metal sanding, high stock removal, older machines and flexible works.
- can be waterproof
- achieve a more flat surface than paper.

Coated abrasive Basics Where to use

















Coated Abrasive
Raw materials and production
Grains-Silicon carbide or Alumina oxide

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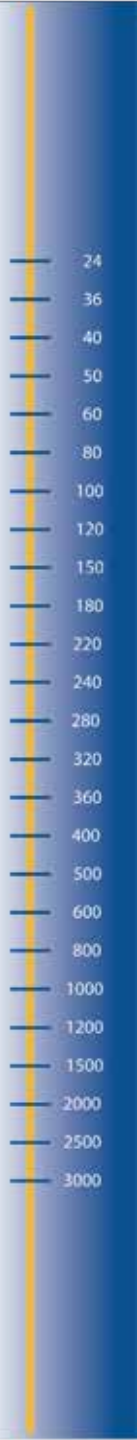
Silicon carbide

- Lacquer and coatings sanding
- MDF, HDF and Chip board sanding
- Final sanding before coatings

Alumina oxide

- Wood – and wooden material sanding
- Melamine sanding
- Polyester lacquer sanding
- Cork sanding (veneer and solid)



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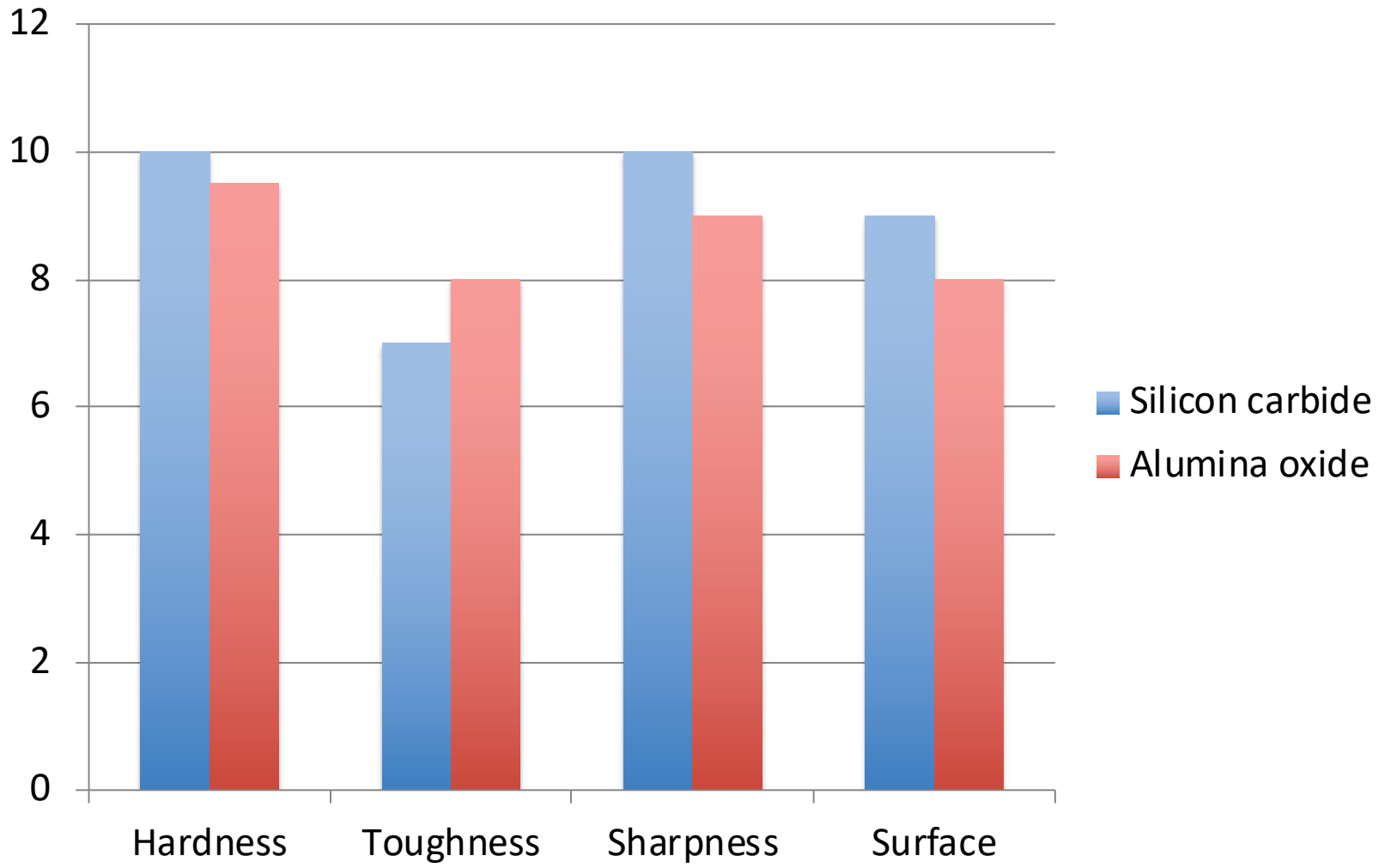
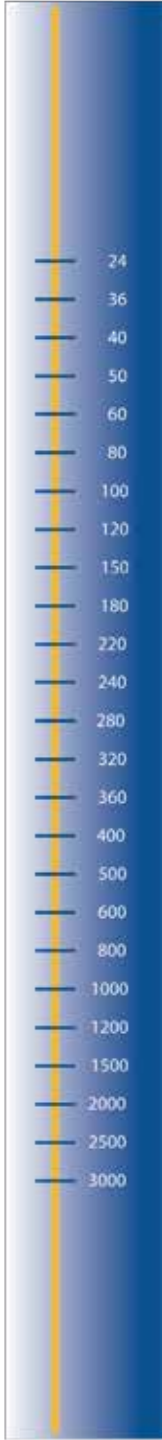
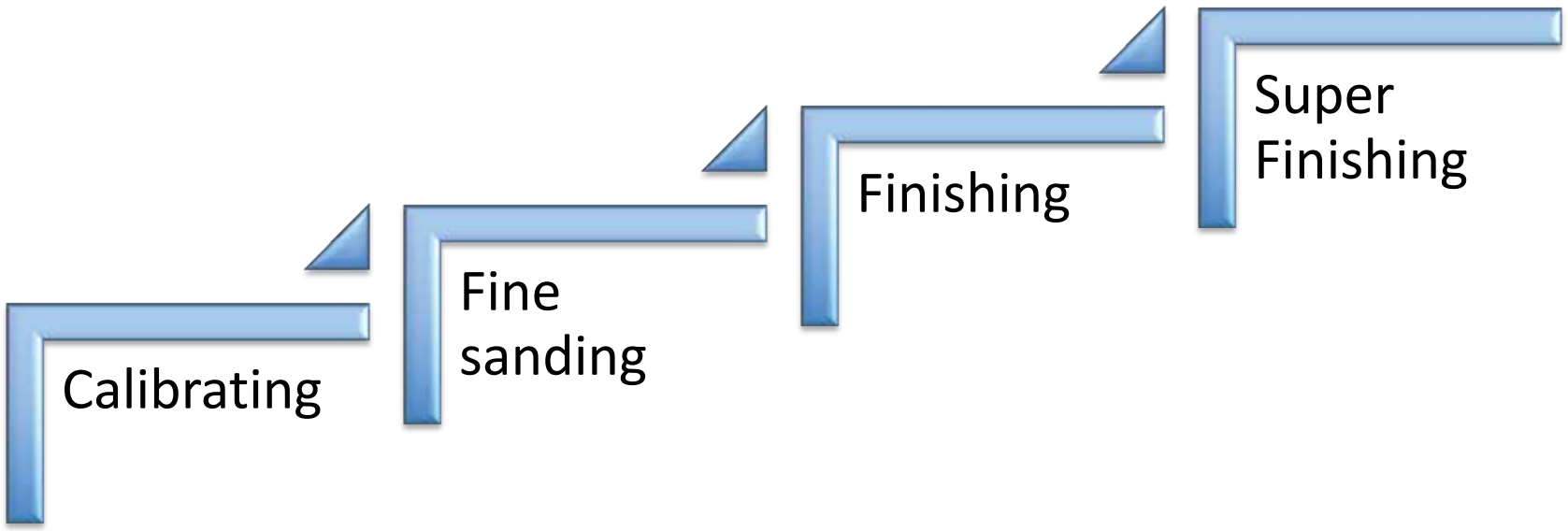
Coated Abrasive
Raw materials and production
Grains-Hardness, Toughness, Sharpness and Surface

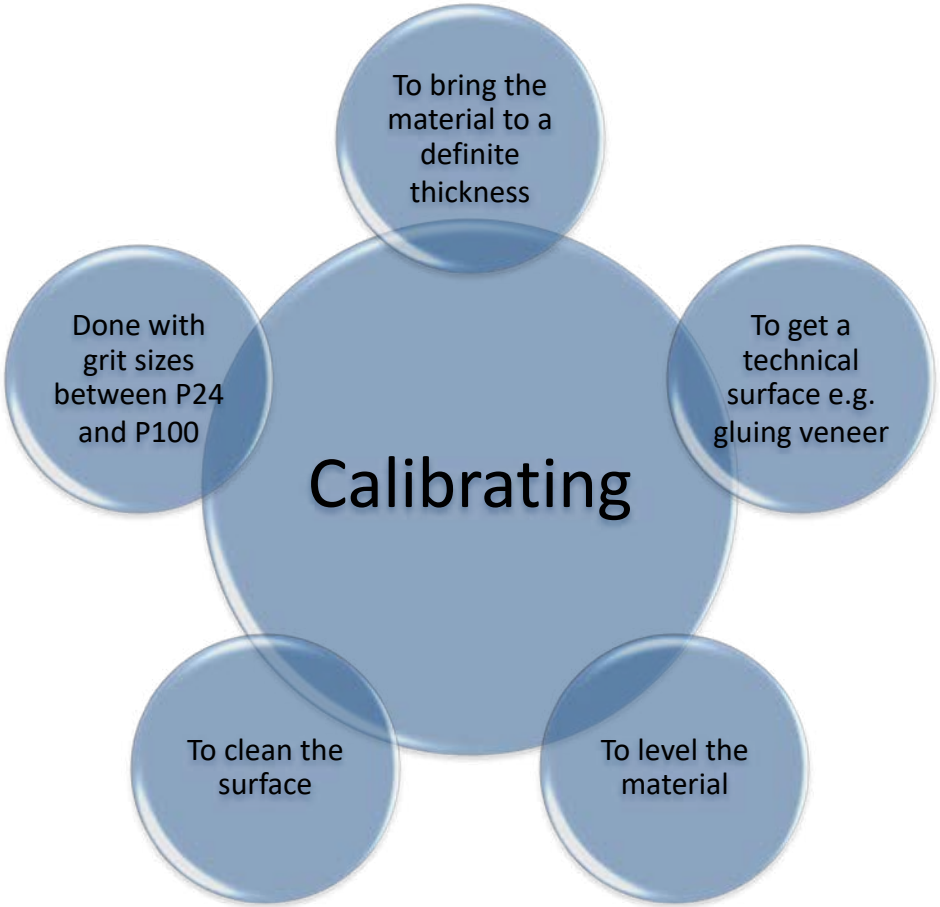




Coated abrasive Basics Sanding method



Coated abrasive Basics Sanding method Calibrating



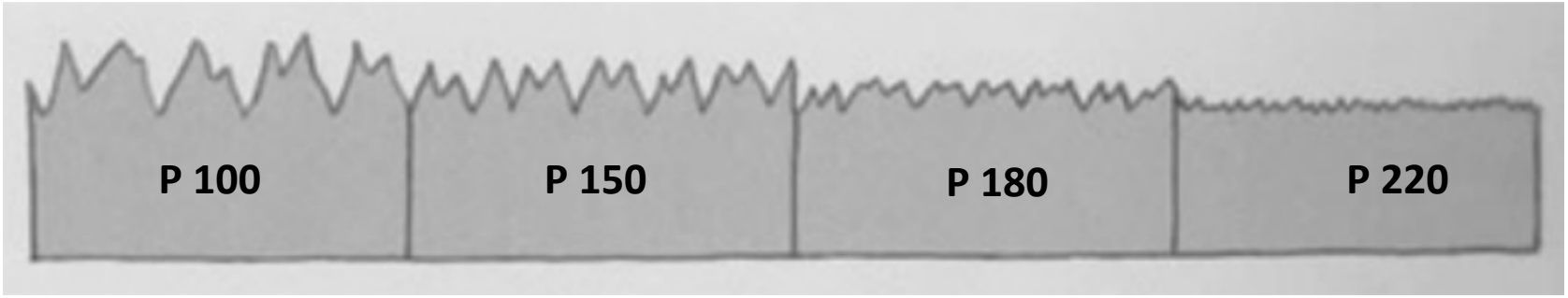
Coated abrasive Basics
Sanding method
Fine sanding

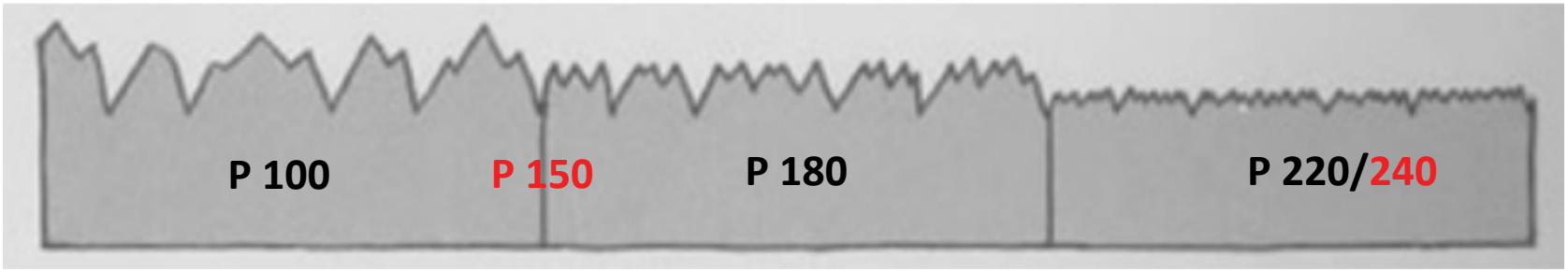
Coated abrasive Basics Sanding method Finishing

Coated abrasive Basics
Type of sanding
Super finishing

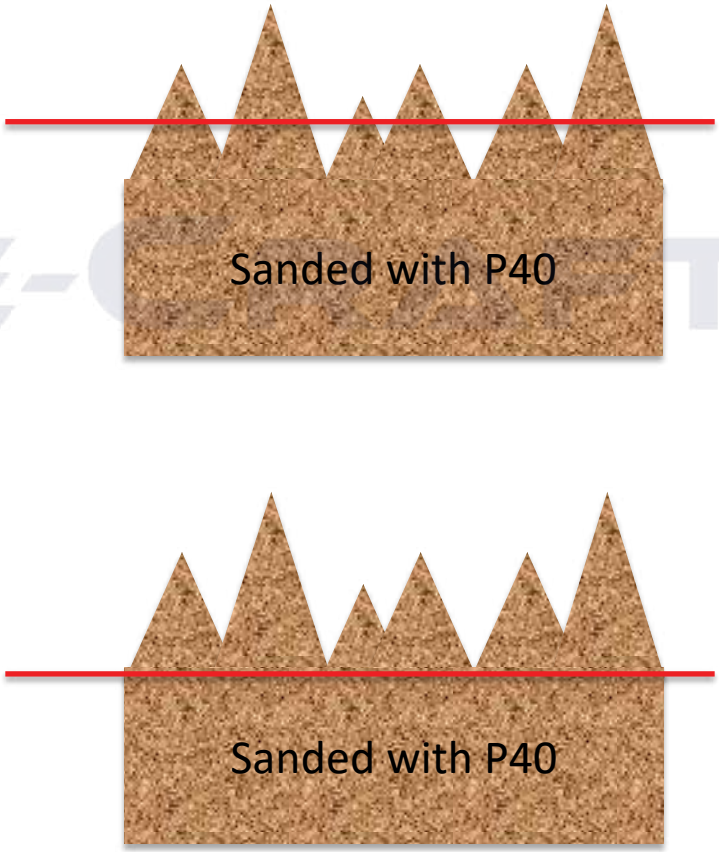
Coated abrasive Basics
How to choose the right grit sequence

- ✓ The grit size should be always as fine as possible and coarse enough to make the job in a short time with less power usage of the machine.
- ✓ As higher the stock removal as coarser the grit size.
- ✓ It is possible to jump between two grains (see picture below).
- ✓ The size of the grain has to be chosen according the hardness, consistency, wear characteristics and the finishing of the work piece you want to sand.





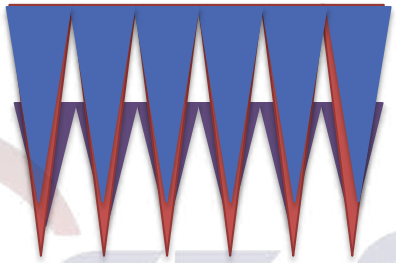
Coated abrasive
Basics
How to choose the right grit sequence



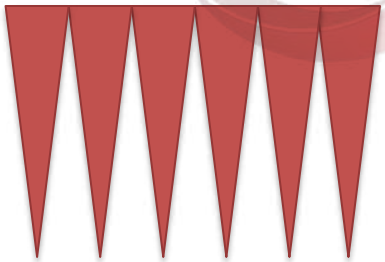
IMPORTANCE OF GRIT SEQUENCE

GRIT 180

GRIT 120



GRIT 80

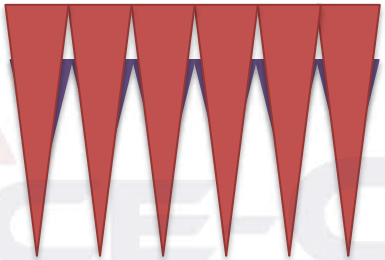


WORKPIECE

IMPORTANCE OF GRIT SEQUENCE

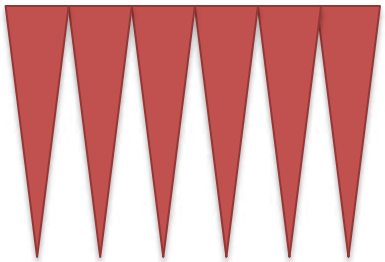
GRIT 180

Grit 80 scratchmarks remain



SKIP GRIT 120

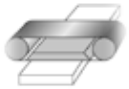
GRIT 80



WORKPIECE

DIFFERENT SANDING PROCESSES

- WIDE BELT SANDING



- NARROW BELT AND STROKE SANDING

- PROFILE AND EDGE SANDING

- PORTABLE BELT SANDING

- RANDOM ORBITAL SANDING

- ORBITAL SANDING

- HAND SANDING