



# microtec PSA-backed

# **Microabrasives**

with pressure sensitive adhesive backing for CR-Finishing® solutions Flat Lapping, Edge Finishing, Polishing, Superfinishing

## microtec

## **Technology for surface treatment CR-Finishing®** (Constant Result Finishing)

# **Building Perfection**

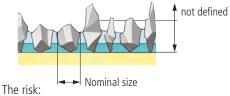
CR-Finishing® is a quality concept aimed at ensuring an efficient process which produces functional surfaces first time. Our microtec products have been designed specifically to suit application procedures, workpieces and materials.

#### **Grit selection**

#### Excellent finish quality thanks to unique grit calibration

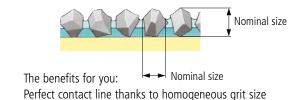
A particularly extensive grit selection guarantees consistent, reproducible machining results. The microtec standard is more precise than the FEPA-P standard. The CR-Finishing® grit therefore guarantees a consistent, first-class surface structure conforming to defined requirements.

#### Structure of FEPA-P standard abrasives



Needle grits can cause scratches

### Structure of CR-Finishing® microtec abrasives



#### Adhesive

#### **Based on synthetic resin**

A special binder system bonds the grit precisely onto the backing material. This ensures constant finishing rates while also permitting the use of modern cooling lubricants, such as emulsions or water (also spray cooling).

#### **Backing**

#### Polyester films as backing material

Due to their precision and quality, polyester films are especially suited as a backing material for precision finishing tools. Since conventional sanding belts made of cloth or paper are compressible, they cannot ensure a constant processing action. This results in undesirable and inaccurate roughness depth values which prevent a consistent and reproducible surface from being achieved.



CR-Finishing® abrasive grit on polyester film

- Perfect flatting thanks to absolutely flat film backing
- Constant finishing action
- Exact roughness depth values

#### High load and endurance strength

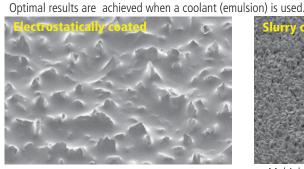
Reproducible surfaces permit defined tolerances. This is essential for the production of precision components in the machine and vehicle manufacturing industries. Finishing is the key to the production of consistent and reproducible technical surfaces. The co-ordinated products from sia Abrasives deliver the consistent quality needed to achieve high cost efficiency in the production process.

What is achieved by the finishing process: 

— Defined surface roughness
— Higher contact ratio thanks to cross-cut

#### 5962/5960 microtec

Electrostatically coated aluminium oxide finishing product 5962 with 125  $\mu$ m (5 mil) and 5960 with 75  $\mu$ m (3 mil) polyester film backing and resin-over-resin bonding, both suitable for applications which demand higher cutting power.



- Grit tips face upwards

#### 5930 microtec

This slurry coated aluminium oxide finishing product with 75 µm (3 mil) polyester film backing and resin-over-resin bonding is particularly suited to machining different materials, such as copper or chrome.

It is normally used together with a coolant (emulsion).

# **CR-Finishing® advantages:**

- ► High cost efficiency and finishing performance
- Defined and reproducible surface roughness
- Constant and precise surface structure
- Reduced process and retooling times
- Cross-cut excellent cutting results
- High material removal rates

- Higher cutting power than slurry coated abrasives - Smoother surface than electrostatically coated products of same grit

Multiple layers of grit embedded in a binder

#### Materials

Metal, High-hardness Metal, Ceramic, Glass, Plastic, Silicon Carbides

**Technology** CR-Finishing®

