

Quality Made in Germany since 1924



Automated polishing with a CNC machining center
in mold making

Automated polishing in mold making | CNC

You have the surfaces - we take care of the finish. Our products are always called for when surfaces cannot be further refined with conventional vitrified or resin-bonded grinding wheels. Contrary to abrasive belts, they can also be used to finish hard to reach surfaces.

In order to transform a manual polishing process for mold making into an automated process inside of a CNC machining center, one needs two things. The matching spindles and the perfect tools. Specially designed radial or axial deflectable spindles are made by companies like son-x, SN-Spindeltechnik or Biax. ARTIFEX offers the matching polishing tools.

WORKPIECES

Molds for injection molding | Forming dies

MATERIAL

Tool steel | Hot die steel

MACHINES

Standard CNC Machining centers

PROCESS DESCRIPTION

Removal of tooling marks

Polishing track wise with a mounted point

PROCESS SETUP

Tool speed v_c :	20 m/s
Form feed v_{fa} :	1,000 mm/min
Infeed a_e :	0.5 μm
Cooling lubricant :	Water Emulsion Oil

RESULT

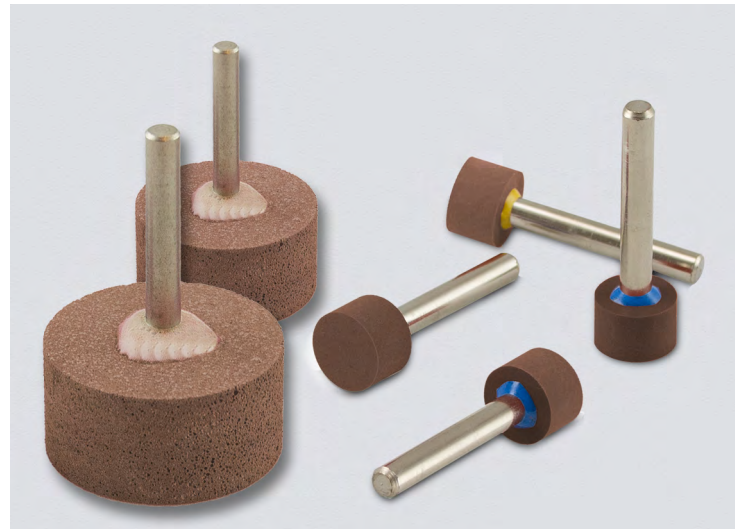
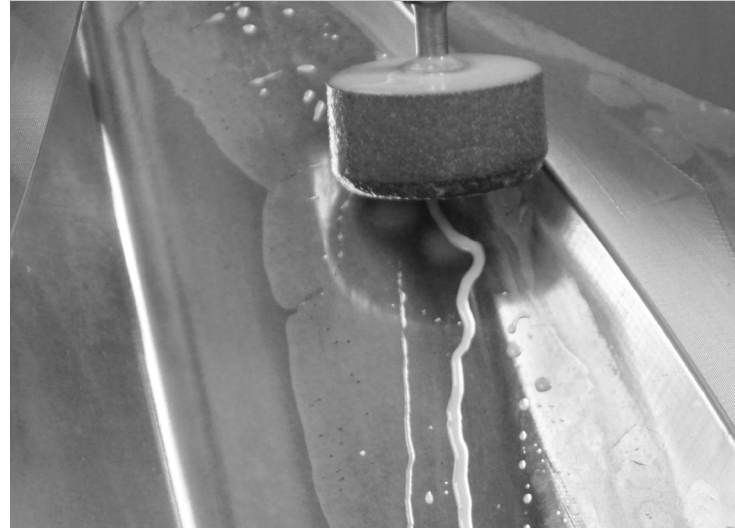
Surface roughness : $R_a < 0.1 \mu\text{m}$

TOOL

Product :	ARTIFEX EK - MG
Bonding :	Foamed polyurethane hard
Hardness :	M (medium)
Grit size :	White fused Aluminium F120 F240
Delivery form :	Mounted points
Dimension :	OD \varnothing 4 - 60 mm

ADVANTAGES

- High wear resistance, therefore high lifespan of the polishing tools
- Tool runs without any dressing
- Little to non cooling lubricant necessary
- No polishing paste or other media necessary
- Reducing the over all process time compared to the manual process by up to 50%



The ARTIFEX promise

We stand for tools that guarantee the highest quality standards. All ARTIFEX products are „**Made in Germany**“ and their above-average service life speaks for itself.

Our service: You have individual requirements, we offer customised solutions regardless of the material, shape or dimensions. We will gladly advise you on your premises.