

Quality Made in Germany since 1924



Superfinishing of gears

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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 ARTIFEX tools, abrasive grains such as silicon carbide or aluminium oxide are flexibly embedded in elastic materials, such as foamed polyurethane (P) or rubber (Rplus). As a result, our grinding and polishing wheels are sponge-soft, finely porous or hard, but always elastic. Depending on the application, the specifically matched composition of grain and bonding results in the desired finish.

WORKPIECES

Gears

MATERIAL

For Example 20MnCr5

MACHINES

CNC gear grinding machines

PROCESS DESCRIPTION

Profile grinding with path adjustment

PROCESS SETUP

Cutting speed v_c :	35 m/s
Infeed in a_e :	50 μm
Feed rate v_{fa} :	0.5 - 1.0 m/min
Double stroke	
Cooling lubricant :	Water Emulsion Oil

RESULT

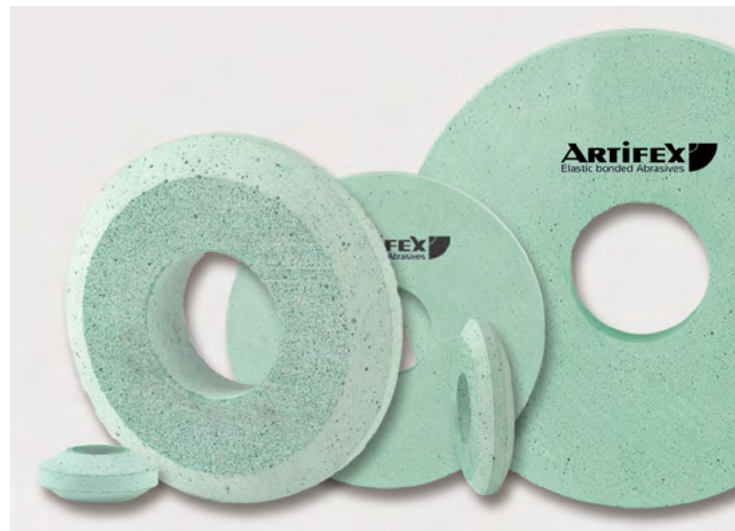
Surface roughness :	$Rz < 1 \mu\text{m}$
Material contact area :	$> 95 \%$
Material removal :	3 - 8 μm

TOOL

Product :	ARTIFEX EK 800 MFP
Bonding :	Foamed Polyurethane hard
Hardness :	M (medium)
Grit size :	Aluminium oxide F800
Delivery form :	Peripheral wheels pre-profiled
Dimension :	OD \varnothing 150 - 400 mm

ADVANTAGES

Complete process in one clamping of the workpiece
 Low risk of grinding burns
 No geometric changes
 Cutting off the peaks of the roughness profile
 No further process or machinery necessary



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.