

# Quality Made in Germany since 1924



Superfinishing in flat and profile grinding

# Superfinishing in flat and profile grinding

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**

Flat steel | Blocks | Plates | Profiles | Runners | Tracks

#### **MATERIAL**

For example 100Cr6 (HRC 60) | 17MnCr6 (HRC 63) | 42CrMo4

#### **MACHINES**

Conventional and CNC flat grinding machines

#### PROCESS DESCRIPTION

Flat grinding | Profile grinding

#### PROCESS SETUP

Cutting speed  $v_c$ : 35 ms<sup>-1</sup> Infeed  $a_e$ : 30  $\mu$ m Feed rate  $v_{fa}$ : 1 m/min

Cooling lubricants: Water | Emulsion | Oil

#### **RESULT**

Surface roughness : Rz < 1  $\mu$ m Material removal : 3 - 8  $\mu$ m

### **TOOL**

Product : ARTIFEX EK 600 MFP
Bonding : Foamed Polyurethane | hard

Hardness: M (medium)

Grit size : Aluminium oxide F600

Delivery form : Peripheral wheels | pre-profiled

Dimension : OD Ø 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.

