



REVOLUTION OF FINISHING PROCESSES

CIRCLE SEGMENT RADIUS





We design these special tools based on four different basic shapes and adapt them to the customers special requirements.

VAR-X guarantees advantage

One tool for all finishing processes - The underlying concept is the combination of large lateral cutting radii of up to 1.000 mm and the spherical tip. Due to their large lateral radii, *VAR-X* tools enable significantly larger machining paths and thus tool capabili-

ties with the same surface roughness as conventional ball-nosed end mills.

The result: highest productivity due to the reduction of the machining time and in addition excellent surface quality with comparatively little polishing effort.

Significantly larger stroke intervals with the same theoretical surface roughness

Convincing Performance

- Up to 90% less machining time with significantly longer tool life
- Reduced polishing effort with significantly better surface finish
- Ideal for spots that are difficult to access
- Axis deviations of the machine have less pronounced effect on the workpiece due to the specific processing strategies
- Reduced number of tools needed due to the very wide range of applications
- Due to the spherical tip, the tools are also designed for use as ball-nosed end mills
- · Very high wear resistance



VAR-X

The large cutting radius enables significantly larger stroke intervals and thus tool capability



Ball-Nose End Mill SGK-Z4 Ø10

The small contact area requires many machining paths to achieve the surface roughness demanded

Ball-Nosed End Mill SGK-Z4 Ø10 machining time: 8,5 min Ra: 0,864 ųm ap: 0,3 mm

VAR-X machining time: 1,25 min Ra: 0,850 ųm ap: 3 mm