



POLYGON TURNING

FOR SHAFT-HUB CONNECTIONS APPLICATIONS

➤ APPLICATION

The polygon turning process is a machining process for the production of polygonal geometric shapes in or on shaft ends. A special feature of this process is the possibility of producing polygonal profiles through a continuous cut (turning process).

By superimposing linear axis movements and using electronic gears between the workpiece and the tool, profiles with an axially constant course and also an axially variable course can be produced, such as conical polygons.

➤ ADDED VALUE

The process enables the production of shaft-hub connections (WNV) which, in addition to a frictional connection (interference fit connection), also has a positive connection (polygon with n drivers) and thus has an increase in transmission capacity or a higher level of safety compared to conventional WNV.





➤ HIGHLY EFFICIENT MANUFACTURING PROCESS

- based on a turning process and thus has a low processing time
- cutting edge is always engaged on the polygonal contour
- turns precise contours
- polygonal contours can be created inside hollow shafts as well as on the outer contour
- can be applied to hardened and unhardened components
- process can be used to produce low-notch profiles and shape elements such as notch radii in a targeted and contours can be reproduced accurately
- have an increased torque transmission capacity due to the superimposed form closure

