

QUINDOS Worm Wheel for cylindrical Worms

Inspection and evaluation of worm wheels (worm gears) for cylindrical worms on precision 3D coordinate measuring machines.

The cylindrical worm can be of generation type ZA, ZI, ZN, ZK and ZC (see DIN 3965).

The geometry of the wheel is considered as a conjugate gear to the worm. This is a unique feature not offered by any other worm wheel inspection system.

Besides other evaluations, the package can also best-fit the axial position of the wheel in order to find the optimum mesh position.

Evaluations include:

- Pitch in the mean plane
- Tooth thickness
- Runout
- Dimension over balls
- Profil
- Flank
- Topography
- · Axial best-fit with displacement

The package QUINDOS Worm Wheel generates automatically the moving path and all required probing points and scan lines, including start and stop points and probe changes, for the 3D coordinate measuring machine.

For the measurement of worm wheels on a CMM with QUINDOS a rotary table is not required, i.e. several wheels can be mounted and measured on a pallet. This leads to a tremendous increase in throughput compared to a conventional gear tester.

Due to the usually tight tolerances of worm wheels, only 3D coordinate measruing machines with a small probing error P and scanning capability (i.e. Leitz PMM-C) should be used for such measurements.

Worm wheel inspection technology by Hexagon Metrology: fast, precise, unmatched!







Messtechnik Wetzlar GmbH 35578 Wetzlar, Germany www.mtwz.com www.quindos.com www.hexagonmetrology.com

