



Machine list as of December 2022

1. Manufacturing capabilities for long and short turning up to Ø 4 mm

5 x CNC special long-turning automatic lathes

- Tornos NANO 4 with a max. pass of Ø 4 mm and max. L 28 mm
 - For micro and nano precision with up to 6 controllable axes
 - Driven tools
 - Precision at watchmaker level

2. Manufacturing capabilities for long and short turning up to Ø 10 mm

88 x CNC long-turning automatic lathes

- Tornos (Evo)Deco 10 with a max. pass of Ø 10 mm
 - Ideal for parts with complex geometry with up to 11 controllable axes
 - Driven tools
 - Short cycle times through simultaneous work on the main and counter side as well as spindle speeds of max. 16,000 rpm
 - Min. tolerance 0.006 mm

3. Manufacturing capabilities for long turning up to Ø 32 mm

22 x CNC long-turning automatic lathes

- Tornos (Evo)Deco 20 / 26 with a max. pass of Ø 32 mm
 - Complex geometry with up to 12 controllable axes
 - Driven tools
 - Short cycle times through simultaneous work on the main and counter side as well as spindle speeds of max. 8000 rpm
 - Min. tolerance 0,006 mm

4. Manufacturing capabilities for short turning up to Ø 42 mm

17 x CNC short turning automatic lathes

- 17x Index C100 (simultaneous processing on 3 turrets) with a max. pass of Ø 42 mm
 - Up to 42 tools in the workspace
 - Short cycle times through simultaneous work on the main and counter side as well as spindle speeds of max. 8,000 rpm
 - Min. tolerance 0.006 mm



5. Manufacturing capabilities for rotary indexing/transfer machine up to Ø 25/32 mm

31x rotary indexing machines with 12 or 16 workstations

- 1x Pfiffner HB 32-16 with 32 mm rod passage
- 30x Pfiffner HW 25-12 with 25 mm rod passage
 - Short cycle times with up to 16 workstations
 - CNC-controlled turning and milling units
 - Complex geometry
 - Max. diameter 32 mm and max. part length 170 mm
 - Max. runout error first to second side smaller than 0.05 mm
 - Min. tolerance 0.01 mm
 - Use of high-pressure units

6. Grinding technology

- For final processing, 6x grinding plants are used:
 - Centreless through-feed grinding from Ø 3 - Ø 150 mm
 - Grinding between centres
 - Flat grinding
 - Min. tolerance 0.005 mm
 - Surface quality of Ra 0.1µm

7. Tool grinding machines

- *Walther Helitronic Mini Power*
 - CNC-controlled tool grinding machine for the production of rotationally symmetrical tools as fully automated complete machining in one clamping
- *EWAG WS11*
 - Universally usable conventional tool grinding machines for the production of form drills, form cutters, form steels and much more
- *Mikromat*
 - CNC-controlled profile grinding machines for the production of complex form tools

8. Sorting facilities for 100% inspection of series parts

- 5x Kistler/Vester VideoCheck VVC 120 and VideoCheck KVC 821
- 5x in-house developed test plants for special components