

# Machine list Günter Apelt GmbH



## PRODUCTION PLANNING AND CONTROL

- ERP system with integrated electronic planning table combined with the CAQ system for documenting and analyzing production-accompanying inspections
- CAD-CAM solution Solidworks/Solidcam for integration of CAD data and 3D models

## TURNERY

- CNC bar-turning centers with opposed spindle for complete machining available in multiple-axes models with 36, 42 and 65 mm lathe capacities
- CNC bar-turning centers with opposed spindle in multiple-axes models, 3 turrets, 65 mm lathe capacities
- CNC all-purpose lathes with opposed spindle with up to 65 mm lathe capacity on the C and Y axes
- CNC all-purpose lathes with up to approx. 120 mm swing diameter, 350 mm center distance and 50 mm lathe capacity
- CNC ultraprecision lathes for greatest possible precision turning and for hard turning
- CNC plain turning lathe with opposed spindle, 25 mm lathe capacity

## MILLING SHOP

- Vertical machining centers with 5 axes machining range 500 x 300 x 200 mm
- Machining centers with 5 axes, swiveling milling head and palette changer, machining range 600 x 400 x 400 mm, 60 tools
- Vertical machining centers with 5 axes, machining range 600 x 600 x 500 mm with handling system
- Horizontal machining centers with 4 axes and palette changer, machining range 560 x 660 x 560 mm
- Vertical machining centers with palette changer, machining range 500 x 250 x 300 mm

## SAWMILL

- Automatic bandsaw up to Ø 250 mm

## GRINDING SHOP

- CNC all-purpose cylindrical grinding machines with measurement control up to Ø 80 x 350 mm
- External cylindrical grinding machines up to Ø 80x 400 mm
- Centerless grinding machines up to Ø 40 mm
- Surface grinding machines with machining range 300 x 600 mm
- Honing machine with measurement control Ø 1.5 to 150 mm

## MARKING

- All-purpose engraving and marking machine with rotational axis: scribe and needle embossing, engraving

## QUALITY CONTROL

- CNC 3D measurement machine 500 x 700 x 500 mm
- 3D hand-operated measurement machine
- Hardness tester fort Rockwell, Vickers and Brinell
- Profile projector (Mitutoyo)
- Viewing microscopes
- Linear measurement devices, some with data export (Heidenhain)
- Contour measuring console for outer and inner contours
- CNC profile measurement console for roundness, concentricity, coaxiality, radial runout, axial runout, parallelism, perpendicularity, cylindricity, straightness, incline and Fourier analysis
- Optical analyzer for spindles dim. 500 x 120 mm
- Surface roughness measuring devices planning-accompanying documentation on computer-controlled quality and production management (SPC, control cards, measurement series)
- Continuous PC controlled measuring device monitoring
- QM system accredited under EN 9001:2015 and 9100:2018