

DESIGN AND CONSTRUCTION

Software SolidWorks, 3DQuickPress, Catia, Siemens NX, Visi 21 with Forming simulation and board detection, ANSYS for FEM and CFD, data exchange (DWG, DXF, STEP, IGES, Pro E, Odette, PRT)

FORMING TECHNOLOGY

Punching and bending 1 x Punching machine ebu STA 400/2500 PSR, 400 t Servo - Eccentric press with roller feed and straightening machine, strip width max. 500 mm and material thickness max. 6 mm, table top max. 2.500 x 1.500
 1 x Punching machine ebu, 320 t, table top max. 1.600 x 1.300
 2 x Eccentric presses ebu, 200 t, table top max. 1.200 x 800
 4 x Eccentric presses ebu, 160 t, table top max. 1.200 x 670
 3 x Eccentric presses ebu, 125 t, table top max. 1.200 x 650
 2 x Eccentric presses ebu, 50 t, table top max. 650 x 510
 1 x Punching machine ebu, 40 t, table top max. 700 x 450

Test press Hydraulic presses from 30 t bis 250 t

Laser cutting TRUMPF 2D TruLaser 1030 with 2 KW power, workspace 1500 x 3000

Welding Resistance welding machines
 WIG/MAG welding

TOOLMAKING, FIXTURE AND PROTOTYPE CONSTRUCTION

Milling 5-ohs-Simultan DMU 50 with automation
 5-ohs-Simultan DMU 50
 5-ohs-Simultan DMU 50 eco Mill 3+2 on,
 5-ohs-DMU 50 NEW DMG 3+2 on
 Cover MAHO DMC 100V hi-dyn
 3D-machining center Depo MCFV 1060 with 24-times tool changer and measuring switch, workspace 1.000 x 600 x 600

Turning Mori Seiki CLX 350, max. workpiece Ø 700, max. turning length 1.290
 Cycle-controlled lathe Weiler E80, Weiler E35

Flat grinding Ziersch ZT 510 with Z-Control Controller
 Ziersch ZT48
 Jung JF 415

Round grinding Studer S20
 Studer S40

Tipless round grinding 2 x Monza 500
 2 x Monza 400
 2 x Monza 300
 Ø1,5 to Ø150 up to 1000 length

Wire eroding Fanuc alpha - 1 iD with wire threading, workspace 600 x 400 x 310
 Fanuc alpha 0 iA with wire threading, workspace 320 x 220 x 180
 Fanuc alpha - C600 iA with wire threading, workspace 600 x 400 x 310
 Mitsubishi MV 4800R with rotary axis, workspace 800 x 600 x 310

Laser Lightworx, 50W fibre laser with workstation, marking fields 175 x 175 mm, with rotary axis

3D print Bambu Lab X1E Combo 3D printer

Start hole drilling machine River 3, workspace 300 x 200 x 200

MACHINING TECHNOLOGY

Turn-mill center	Mori Seiki NT4200 DCG, max. workpiece Ø 600, max. turning length to 1000
Horizontal milling	DMG Mori NHC 5000, max. workpiece Ø 800, max. workpiece height 1000 Mori Seiki NHX 5000, max. workpiece Ø 1000, max. workpiece height 1000 Mori Seiki NH 5000/40 DCG, max. workpiece Ø 800, max. workpiece height 1000 Mori Seiki NH 5000/40, max. workpiece Ø 730, max. workpiece height 900 Mori Seiki NH 5000/40 POOL, 5 pool-places, tool magazine with 150 places
Vertical milling	Mori Seiki NV 4000/40 DCG, table size 700 x 450, max. table weight 350 kg Mori Seiki SV 50/50, table size 1320 x 600, max. table weight 1200 kg
Multi-axes-turning with bar loader	Mori Seiki ZT 1500YB, max. workpiece Ø 190, max. turning length 680 Traub TNC 65EGY, max. workpiece Ø 184, max. turning length 450 2x INDEX C200 with FANUC-controler, max. workpiece Ø 140, max. turning length 700 INDEX C100 with FANUC-controler, max. workpiece Ø 140, max. turning length 500 2x INDEX ABC with FANUC-controler, max. workpiece Ø 140, max. turning length 80 Maier ML 32-E long lath, max. Ø 32 2x Maier ML 32-C, max. Ø 32 Maier MLK32 Hybrid long and short lathes, max. Ø 32 Manurhin KMX16 long lath, max. Ø16
Turning	DMG Mori NLX 1500, max. workpiece Ø 386, max. turning length 515 Mori Seiki ZT 1500Y, max. workpiece Ø 190, max. turning length 450 Mori Seiki CL 200 AM Mori Seiki CL 20 B, Mori Seiki DL 151 MC
Washing	Washing machine Dürr Ecoclean Universal 81 W

QUALITY MANAGEMENT

Measuring technique	3D-measuring machine Mitutoyo CRYSTA-Apex S574, workspace 505 x 705 x 405 Profile projector Mitutoyo, workspace 150 x 50 x 70 3D-coordinate measuring machine Mitutoyo Euro C 776 incl. Software MCosmos Contour measuring machine Mitutoyo Contracer CV 3000 incl. Software Formpak Surface measuring instrument Mitutoyo Surftest SJ 401
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MANAGEMENT SYSTEMS

Certification	IATF 16949:2016, DIN EN ISO 9001:2015 und ISO 14001:2004
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