

HEGGEMANN
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PRODUCTION CAPACITIES



Machining

CNC-Milling

Deckel Maho DMF 500 linear	5000 x 920 x 820	4 axis
Hermle C60	1200 x 1300 x 900	5 axis
Deckel Maho DMU 125 P	1150 x 1000 x 1000	5 axis
Deckel Maho DMC 103 V	1000 x 600 x 600	3 axis
Deckel Maho DMC 100 U duoBLOCK (2 x)	950 x 850 x 900	5 axis (revolving table)
Hermle C42 dynamic	800 x 800 x 550	5 axis
DMG Mori DMU 80 eVo linear	800 x 650 x 550	5 axis
DMG Mori DMU 80 eVo	800 x 650 x 550	5 axis
Deckel Maho DMU 70 eVo	750 x 600 x 520	5 axis
Deckel Maho DMU 80 P	700 x 800 x 600	5 axis
Deckel Maho DMU 50 eVo	500 x 400 x 380	5 axis
Hermle C42 PW850	800 x 800 x 550	5 axis / 5 paletts

CNC-Turning

Gildemeister CTX 510 V3	Ø 400 x 1000	powered tools
Saeilo Contur F50	Ø 300 x 550	
Gildemeister CTX 400 E / Series 2	Ø 270 x 520	powered tools
DMG Mori CTX beta 1250	Ø 410 x 1250	powered tools

Turning-conventional

Gildemeister NEF 520	Ø 280 x 1500
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CNC-Programming

Milling programs:	<i>hyperMILL</i> 5 axis and 3 axis, 5 axis simultaneous MasterCam V9
Turning programs:	Heidenhain Turn Plus TNC
Useable data format:	CATIA, OPEN MIND e3, IGES, STEP as well as all further commonly used data exchange formats

CNC-Cylindrical Grinding

Studer S33	Distance between centers 1000mm/center height 175mm Max.component weight 120kg
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Forming, Bending, Cutting

Pipe and Profile Bending

MEWAG Megalus 60 MD	Ø 10 - 65	9 CNC-axis bending machine w/ offline programming and simulating function
KM 137	Ø 4,5 - 12	CNC bending machine
Transfluid SRM 1565-E	Ø - 65 / Alum. Ø – 80	Rotary SRM Forming Machine

Pressure Forming

Tranemo DPA-H-315-25	2500 x 1100	3150 kN, 250 kN cushion
Exner EEX 40	440 x 500	400 kN
Beyerle CNC-bend press	100 x 3100	1000 kN
PME PHY 200-1000 CS AS	1000 x 600	2000 kN

Laser

Bystronic Fiber 3015	3000 x 1500	3 kW 2D-laser special feature: fiber-laser, dual table
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Lasercutter

Trumpf 3D TruLaser Cell 7040	4000 x 1500 x 750	3kW 3D-Laser or 1736 x 1500 each in two-station operation
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Deburring / Chamfering

Vibratory Finishing Löwer DiscMaster 4TD-1000	with rotary vibrator R320-EC incl. drying system RT250 Sheet Deburring Machine Aluminium und Stainless Steel max. Grinding width 1000mm max. Grinding height 100mm
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Joining

Welding-manual

TIG-welding	10 work places 8 work places 6 work places 2 work places	steel aluminium stainless steel titanium
MIG- / MAG-welding WIG-welding acc. to Nadcap™	10 work places 2 work places	Nadcap™ AC 7110/5

Welding robotic

KUKA KR 15/2, 6 (+ 1) axis	r = 1.570 mm	MIG / MAG
KUKA KR 16/2, 6 (+ 1) axis	r = 1.610 mm	MIG / MAG
ABB IRB 2400 L, 6 (+ 2) axis	r = 1.810 mm	MIG / MAG
KUKA KR 16/2	r = 1.610 mm	MIG / MAG

Spot Welding

Dalex spot welding machine	P _N = 100 kVA P _{max} = 420 kVA	up to 600 daN
Dalex spot welding machine SF8/71	P _N = 8 kVA P _{max} = 23,7 kVA	17 - 235 daN

Assembling

Assembly, service and overhaul	10 work places
Prototyping, samples	3 work places
BENCH RIVETER	12.5" x H = 5"

Heat Treatment

Air Circulating Toploader SNOL	Type: 1000/650; Loadsize: 0 630 mm / 1800 mm	temperature max.: 650°C
Batch furnace THERM CONCEPT	Type KM1000/13 Loadsize: 900x600x1800 mm	temperature max.: 1280 °C
Batch furnace THERM CONCEPT	Type KU500/85 Loadsize: 750x750x900 mm	temperature max.: 750 °C

Measuring, Testing, Marking
Measuring machines

DEA Global Advantage	1500 x 700 x 660 MPE _P 1,7 µm	CNC-coordinate measuring machine
DEA Scirocco-nt	2500 x 1300 x 1000 MPE _P 4,0 µm	CNC-coordinate measuring machine
Brown & Sharp Gage 2000P Q.P.T. ConturoMatic T1	550 x 400 x 300 250 x 320	NC measuring machine contour measuring system

Mobile CAMM-Measuring Devices

Faro Arm PLATINUM 12' (2 x)	r = 1.750	digital measuring arm
Faro Arm PLATINUM 8'	r = 1.150	digital measuring arm

Analysing, Testing

Pfeiffer Vacuum
 Birk Anlagenbau
 Garant; Typ ST1
 Leitner; Typ X1000;

helium leak detection
 burst pressure testing

 Sensor 0 5,5 u. 6 mm
 Workspace 2000 mm

vacuum process
 water pressure process
 roughness measurement
 video endoscope

Non-destructive Testing

Crack detection

Fluorescent penetrant inspection Nadcap™ AC 7114-1
 Magnetic particle inspection Nadcap™ AC 7114-2

Marking
TruMark 3000

SIC WOSTOR c151-ZA
 CCE Code Cube 55L
 GIMA Marking Set GG 3000

Laser marking and labelling
 Dot peen marking
 Ink jet marking
 Electro-chemical marking

Material Testing
Hardness Testing

Equipment:
 Test Methods:

Hardness Testing Machine BRVZ-KB250 (KB Prüftechnik)
 Brinell, Vickers, Rockwell, Super Rockwell

Evaluation of Mechanical Properties

Equipment:
 Test Methods:

Material Testing Machine Z100 THW Allround-Line (Zwick)
 Tensile Testing, Compression Testing, Bend Test, quasi-static
 Testing of Components

Chemical Analysis

Equipment:
 Base Alloys:

Spectrometer PMI Master+ (Oxford Instruments)
 Ferrous, Aluminum, Titanium, Nickel

Production of flat tensile specimens

CNC milling machine Datron Neo
 Workspace 500x500mm, vacuum table

Metallographic Examination

Equipment:

Cut-Off Machine Mecatome T255/300 (Presi)
 Burnishing and Polishing Machine Saphir 550/Rubin 520 (ATM)
 Camera EOS 700D (Canon)
 Reflecting Microscope Jenavert (Zeiss)

Examinations:

Image Management and Surveying Software EasyLab (Imagic)
 Metallographic Macro- and Micro Etching
 Digital Surveying and Examination, Examination of Weld Seams,
 Microstructural Examination, Failure Analysis