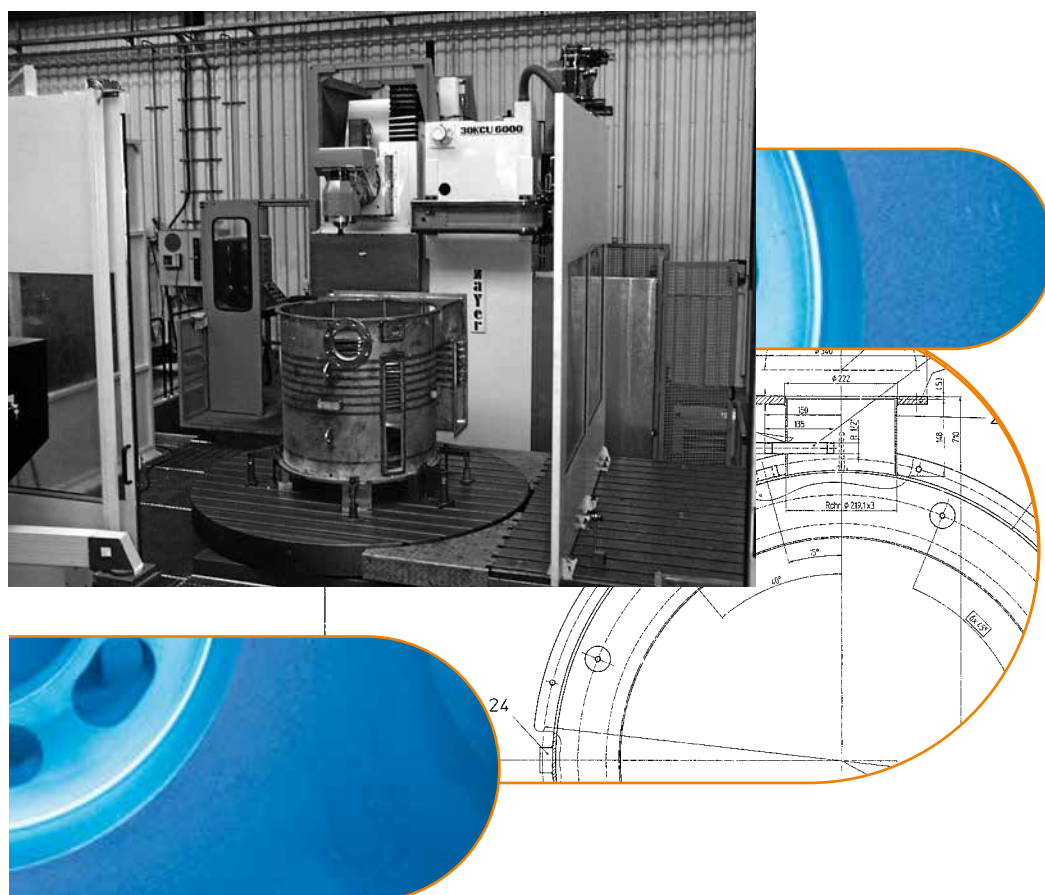


MARTIN LOHSE GmbH
Maschinenbau Lohse GmbH

Production Equipment

selection from our range of machines for min.
and max. production times



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1. Sheet metalworking

1.1. Plasma cutting equipment (erlcut e545)

NC-controlled, with oxacetylen blowpipe and plasma burners
power source: HiFocus 440 i neo
processing size: 3050 mm x 12500 mm
sheet thickness: VA stainless steel = 35 mm
steel = 150 mm



1.2. Ultra-high pressure waterjet cutting robot system (WARICUT HWE-P6030/2-2D)

CNC-controlled with two cutting heads
processing size: 6050 mm x 3050 mm
sheet thickness: 150 mm



1.3. Table shears (EHT TSS 8-31)

cutting length: 3000 mm
sheet thickness: 5 mm

1.4. Three-roller round bending machine (Setrom EMD/074)

roller width: 3000 mm
roller diameter: 380 mm
sheet thickness: 16 mm
bending diameter: 450 mm to 5000 mm



1.5. Three-roller round bending machine (Durst MD HBM 120)

performance:
 e.g. with flat material: 120 mm x 40 mm on end
 roller diameter: 520 mm
 bending diameter: 550 mm to 5000 mm



1.6. Three-roller round bending machine (Durst MD RWASV 2005)

roller width: 2000 mm
 roller diameter: 180 mm
 sheet thickness / length: 4 mm / 2000 mm
 bending diameter at least: 200 mm

1.7. Bending machine (Cone 1600)

bending length: 1600 mm
 press capacity : 440 kN

1.8. Hydraulic press (Exner, Witten EXSBZR 600/200)

with drawing cushion
 cushion pressure: 200 tons
 table size: 1200 mm x 1600 mm x 600 mm
 performance: 600 tons



1.9. Eccentric press (Helmerding ERH 2508)

with roll-off device and coil processing
 coil width: 300 mm (with 3mm metal sheet)
 table size: 1500 mm x 750 mm
 stroke: 13 mm - 150 mm + 100 mm
 performance: 250 tons

1.10. Coordinate punching press (EDEL Stanzomat 407-Z)

table travel: 800 mm x 1250 mm
 performance: 400 kN
 (e.g. with 3 mm VA sheet and 20 mm die diameter)

1.11. Locating machine (Schnutz RME 2/90/17-300)

opening: 340 mm
 sheet thickness: VA stainless steel = 10 mm

1.12. Balancing machine (Reutlinger Losenhausen VHK 32N)

load weight:	300 kg
balancing weight:	3 kg to 300 kg
diameter:	1200 mm
length:	2200 mm



1.13. Horizontal balancing machine (Hofmann UHK 16)

weight:	up to 115 kg
max. diameter of rotor:	785 mm
length:	1140 mm



1.14. Press brake machine (EHT S 32-55)

edge cutting length:	6000 mm
cutting force:	320 tons

1.15. Notching machine (Boschert LB 15)

cross-section surface:	120 mm ²
sheet thickness:	6 mm

1.16. Radial drill (Invema KR 75/2400)

Range of operation:	R = 2650 mm
	H = 1400 mm
	(H max. = 2250 mm and \varnothing = 1100 mm)

2. Surface processing methods

2.1. Sandblasting equipment

cabin dimensions: 8 m x 5 m x 4 m
weight: 12 tons



2.2. Sandblasting equipment

VA stainless steel
part dimensions: 1000 mm x 75 mm x 70 mm

2.3. Spray pickling line

part dimensions: 15 m x 6 m x 4,5 m
weight: 10 tons



2.4. Caustic dipping

size of tank: 2,8 m x 1,2 m x 1,4 m

2.5. Round vibrator (Rösler ST60H TMS HPU25/3,8/0)

vibratory grinding machine for large components
size of vat: Ø2200 mm



2.6. Round vibrator (Rösler R 780 EURO)

vibratory grinding machine for small components
part dimensions: 300 mm x 150 mm x 150 mm



2.7. Painting

factory dimensions: 15 m x 15 m

2.8. Grinding machine (Naxos-Union FR 750)

vertical turntable grinding machine with grinding segments
magnetic turntable: Ø 750 mm
part dimensions: max. Ø 1250 x 200 mm

2.9. Grinding machine (TimeSavers)

horizontal grinding machine
part dimensions: max. 1350 mm width, 100 mm high

3. Mechanical processing

3.1. CNC machining center (SHW UniSpeed 2000)

double pallet changer
 control system: Heidenhain iTNC-640
 table size: 1600 mm x 1600 mm
 travel distances:
 X = 2000 mm
 Y = 1300 mm
 Z = 1300 mm



3.2. CNC machining center (DMC-100H duo Block)

double pallet changer
 control system: Heidenhain iTNC-530
 pallet size: 800 mm x 800 mm
 travel distances:
 X = 1000 mm
 Y = 1000 mm
 Z = 1000 mm



3.3. CNC milling center (Zayer 30 KCU 6000)

horizontal / vertical
 control system: Heidenhain TNC-430M
 table size: panel component: 4000 mm x 2500 mm
 controlled turntable: Ø 2500 mm
 travel distances:
 X = 6000 mm
 Y = 1500 mm
 Z = 2000 mm



3.4. CNC milling center (SHW PowerSpeed 6)

horizontal / vertical / 5-axis processing
 control system: Heidenhain iTNC-530
 CNC turntable: 1600 mm x 2000 mm
 travel distances:
 X = 3000 mm
 Y = 2100 mm
 Z = 1500 mm



3.5. CNC milling machine (Klopp)

vertical
 control system: Heidenhain TNC-415
 table size: 1800 mm x 500 mm
 travel distances:
 X = 1400 mm
 Y = 500 mm
 Z = 500 mm



3.6. CNC milling machine (Matec - 30 HV)

vertical
 control system: Heidenhain TNC 7
 table size: 3500 mm x 1035 mm
 travel distances:
 x = 3000 mm
 y = 1025 mm
 z = 1100 mm



3.7. CNC lathe (Traub TND 400)

with rod loading magazine and power-driven tools
 control system: TRAUB TX 8 F
 rod Ø: max. 60
 turning Ø: max. 240
 turning length: max. 800 mm



3.8. CNC lathe (Max Müller – Gildemeister MD 5 IT)

with rod feed and power-driven tools
 control system: SIEMENS (Sinumerik 840D)
 rod Ø: max. 60
 turning Ø: max. 260
 turning length: max. 1000 mm



3.9. CNC lathe (Böhringer 560 ti)

control system:	SIEMENS (Sinumerik 810D Manuel Turn)
turning Ø (over X-slide):	max. 360 mm
turning Ø (over bed):	max. 560 mm
turning length:	max. 1200 mm



3.10. CNC half-frontal lathe* (KREWEMA HFDM-45)

control system:	SIEMENS 810D (Manuel Turn)
turning Ø (with bed extended):	max. 1625 mm
travel from machine bed:	approx. 2000 mm
turning Ø (over X-slide):	max. 600 mm
turning Ø (over bed):	max. 920 mm
turning length (with bed extended):	max. ca. 3750 mm



3.11. CNC lathe (Weiler E70 HD x 2000)

control system:	Siemens SINUMERIK ONE-SHOPTURN
turning Ø (over X-slide):	max. 430 mm
turning Ø (over bed):	max. 725 mm
turning length:	max. 2000 mm



3.12. Conventional lathe (Weiler DA 210 AC) (machine for apprenticeship)

turning Ø (over X-slide):	max. Ø 245
turning Ø (over bed):	max. 435 mm
turning length:	max. 1000 mm



3.13. Groove drawing machine (Frömag)

grooves up to max. 32 mm to DIN



3.14. Thread rolling machine (UPWS 31.5.2)

metric thread from M10-M20

trapezoid thread left from TR 16 x 3 - TR 36 x 6



4. Transport equipment and maximum dimensions

4.1. Fork lift truck (Linde-Stapler 320 H 60 D)

lift height: 3,20 m
lifting weight: 5770 kg

4.2. Telescopic fork lift truck („Manitou“ suitable for cross-country use; MT 430 CPDS)

without supports:	width:	7,0 m and 100 kg
	height:	12,0 m and 1000 kg
with supports:	width:	7,0 m and 800 kg
	height:	12,0 m and 3000 kg

4.3. Factory bridge crane

2 cranes with a lifting capacity of 16 tons each
(transport weight: 32 tons)
(moving weight: 16 tons)

4.4. Factory door dimensions

height: 5950 mm
width: 4770 mm

5. Welding equipment

5.1. Electrode hand welding machines (ESAB, Oerlikon)

performance: 350 A amount: 13

5.2. MIG/MAG machines (ESAB, Oerlikon, Castolin)

pulse and standard arc welding machines
performance: 500 A amount: 19

5.3. WIG machines (Norweld, Messer Griesheim, Lorch, Castolin)

performance: 300 A amount: 15

5.4. Spot welding machine (Messer Griesheim GVP 188 D750)

performance: 188 kVA amount: 1
sheet thickness: VA stainless steel = 30 mm

5.5. Lift ignition compact welding machine (M. Heberle HBS Typ ARL 2012)

bolt size: M4 to M12 amount: 1

5.6. Spot welding tongs (Dalex)

performance: 25 kVA amount: 1
sheet thickness: 8 mm

5.7. 6-Axis-welding-robot (PerformArc PA-ET-2PD-XL-LC)

with 2 freely programmable turn-over axis
origin of pulse peak: MAG 450 A
rotary-turn-table: 1850 mm x 1050 mm



5.8. Welding turntables

payload: 30 – 15.000 kg amount: 6

6. General approvals, inspections and certification

- certified to DIN EN ISO 9001: 2015
- certified to AD 2000 data sheet HP0/TRD 201, testing and acceptance acc. pressure vessel directive 2014/68 EG
- certified to DIN EN ISO 3834-3
- manufacturer qualification to DIN EN 1090 EXC 3
- manufacturer's declaration according to directive 2014/34 EV (ATEX)
- qualified welder to DIN EN 9606-1
- qualified welding methods to EN ISO 15614-1
- manufacturer's declaration and declaration of conformity to directive 2006/42 EG
- approved specialist factory to WHG
- Mobile spectral analysis with accuracy to laboratory standard (including C, P and S)
- noise level measurement
- authorisation to transfer stamp for certificates APZ 3.1
- surface crack inspection (PT) to DIN EN ISO 9712
- layer thickness measurement
- wall thickness measurement

Stay flexible and save money

Top quality components for your customers – we can supply machinery, labour and expertise

Do you supply your customers with metal components and are considering out-sourcing your manufacture? We can serve as an extension to your work bench, provide the plant and support you with our expertise. By using our sub contract manufacturing which **does not rely on any particular sector of industry** you can save on cost and keep flexible.

Save Money



We can provide you through contract manufacturing an array of services and can draw on **over one hundred years of experience in metal machining**. Regardless of whether it is large parts, precision products or plate components – we can **mould, weld, turn and mill** from you. We **chamfer, balance, trim** and take care of **surface treatment**.

Flexibility

Our strengths comprise of: Flexibility, an extensive production capacity and the exceptional expertise of work force. By sub-contracting manufacturing **you can save on investment in your own plant and own expensively trained people**. Our workers and state of the art factory can undertake all this for you! On account of the great variety of machinery at our disposal we are able to manufacture precisely from simple components to the most complex parts requiring turning and milling.

New Production Facilities, up-to-date technology

Highest Quality Standards

You can count on the **first class quality of the products** we manufacture for you. This is not only under-pinned by our accreditation to the OM standard DIN EN ISO 9001. A multitude of other accreditations vouch for the high quality of production – for instance the HP-0 approval for pressure instrument manufacturing and the DIN EN ISO 3834 quality assurance in the case of welding procedures. The adherence to these standards is regularly checked by external assessors – one example being the TUEV. You and your customer can therefore be confident of high Made in Germany quality.



Certification

The following quality management accreditations and quality checks ensure the excellence of our production and thus of your own products:

- Quality management certification according to DIN EN ISO 9001
- Factory production control (WPK) in connection with the welding certificate according to DIN EN 1090
- Portable spectral analysis to record the chemical composition of iron materials
- Inspection testing accreditation in accordance with DIN EN 10204
- HP-0 approval in relation to DIN EN ISO 3834

(The HP-0 approval is required for the manufacture of pressure equipment -pressure vessels, pressure pipe work, boilers). The DIN standard regulates the welding process and the requirements of the work-force.



From raw material...

Our Scope of Service



Plate cutting

Plate is cut using the latest technology at our works using the machinery:

- **Plasma cutting plant** up to 13000 x 3050 x 150 mm thickness
- **Water jet cutting plant**
- **Impact cutter** up to 3000 mm long and 4 mm thickness

We have a multitude of plate and bar material in stock, **steel** in qualities S235 and S355 and **stainless steel** in qualities 1.4307, 1.4571, 1.4539 and 1.4462.



Bending

Re-shaping of plate and bar material is straightforward due to:

- **Folding press** up to 6000 mm length and 320 t press force
- **Plate roller** up to 3000 mm length and 16 mm thickness
- **Ring roller** up to 120 x 40 mm high edge
- **Plate roller** up to 2000 mm length and 4 mm thickness



Welding, repair and re-conditioning

Do you require large sized components? We can manufacture these for you in our large workshops:

- **Workshop 1:** 80 x 20 m with two 16 T cranes
- **Workshop 2:** 60 x 15 m with two 10 T cranes
- **Welding turn table:** up to 15 T



Milling – Turning – Chamfering – Balancing

This work is carried out with the most up-to-date plant including:

- **CNC Turning machines** up to 1625 mm dia and 3500 mm long
- **CNC Milling machines** up to 6000 mm long
- **Balancing** up to 300 kg
- **5 axis CNC machining** up to 60 mm dia
- **Thread tapping** from M10 up to Tr 36x6



Surface treatment

It goes without saying that all surfaces receive the most appropriate finish:

- **Sand blasting** - cabin 8 x 5 x 4 m, component weight up to 12 T
- **Pickling Plant** - 15 x 6 x 4.5 m, component weight up to 10 T
- **Surface grinding plant** - up to 1800 x 600 x 600 mm
- **Coating**

...to the finished article



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