

# Sheet metal forming in **XXL**



# All-round Service for Dimensions Exceeding Conventional Off-the-Shelf Solutions



factory 1



factory 2

- established in 1988
- niche products
- specialised on editing special press brakes
- 200 employees
- 60.000 m<sup>2</sup> working area
- pressed profiles up to 21 meters
- for bridge and vehicle construction, - machine construction and plant engineering
- railcar construction for subways, interurban and commuter trains



## Technical Portfolio

- bending
- laser welding
- laser cutting
- plasma cutting
- mechanical processing
- shear cutting
- water jet cutting
- preparatory services

In order to provide sheet metal processing in XXL, most of the machinery and systems used at Goecke are special constructions; tools for the press brakes and patterns are manufactured in-house.

Goecke provide you with all-round service for dimensions beyond common standards! Absolute adherence to production schedules at consistent high quality makes Goecke Transformation Technique a qualified partner for sheet metal processing in XXL.



Our certifications can be found on our website [www.goecke.com](http://www.goecke.com)

## An individual solution for any inquiry



State-of-the art mass production in sheet metal processing often provides few options for individual problem solutions.

That is why we are specialized in processing of out of the ordinary sheet metal section.

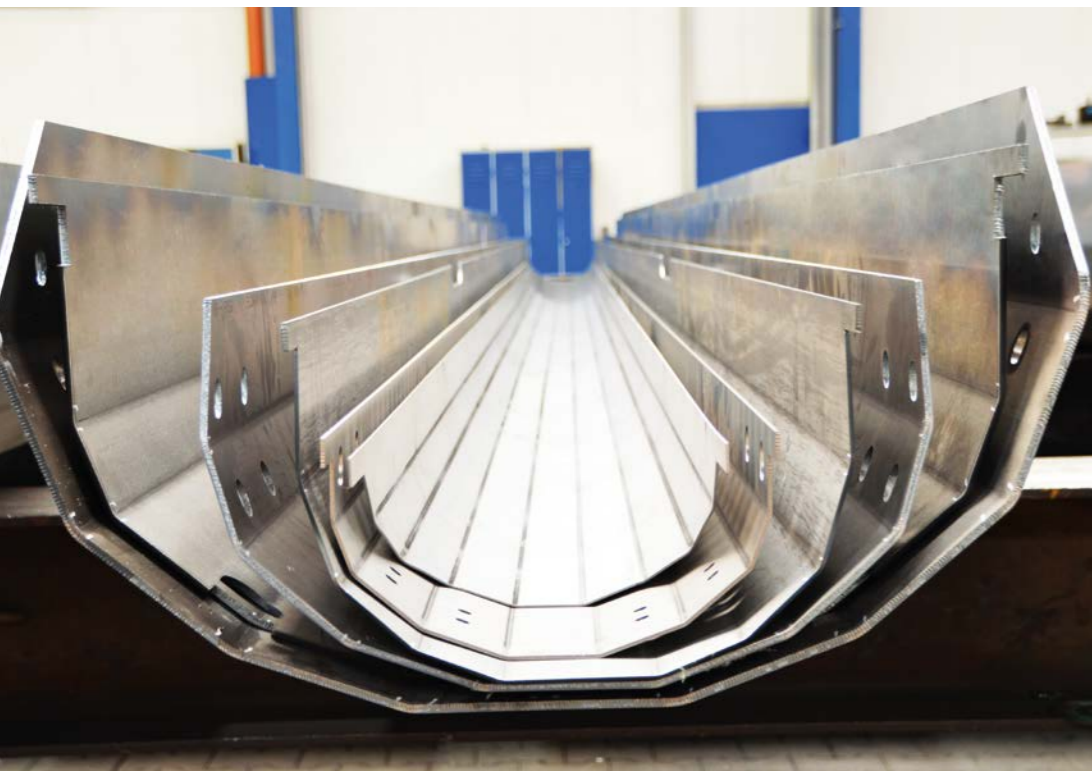
At Göcke almost any customer demand turns to reality on DNC controlled state-of-the-art press brakes.

For this purpose a comprehensive material stock is available, even in special qualities.

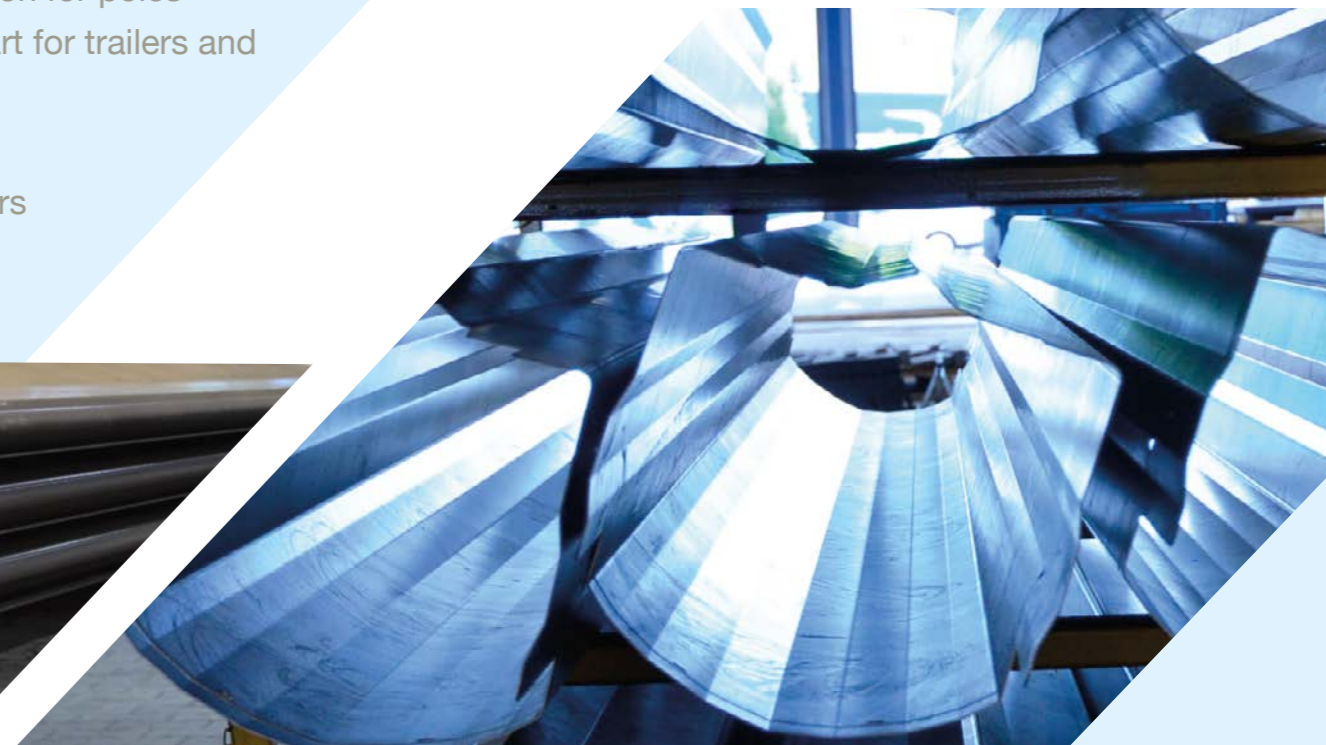


**Pressed Sections up to 21 m**  
**Press Capacity up to 3,000 t**





- Bend sections for civil engineering
- Halfshell section for poles
- Wear resistant part for trailers and containers
- Cargo hold for vessel
- Profiles for lignite excavators



- Parts for roadsign bridges
- Bended section for rail road vehicles
- High performance profiles for machine construction
- Mobile crane booms with an enormous lift capacity





## Plasma Cutting



Our plasma cutting systems are technologically up-to-date and stunning in precision and possibilities. They allow for high quality cuts, with minor roughness depth, small angle deviation and high reproductive precision. Many options are provided with this technology.



### Working Length up to 25 m

### Sheet Thickness up to 40 mm

Chamfers up to 45° are cut with the revolving chamfering head, thus providing optimum conditions for subsequent welding processes. Plasma cutting is a thermal cutting procedure for all electrically conductive materials such as aluminum, copper, construction steel and high alloy steels.



#### High focus Plasma Systems

Working Width 5 m • Chamfers up to 45°



## Shearing



## Nice Cut

### Working Length up to 10,2 m

### Sheet Thickness up to 16 mm

With our CNC controlled guillotine shears, sheets of up to a length of 10.2 m can be processed.

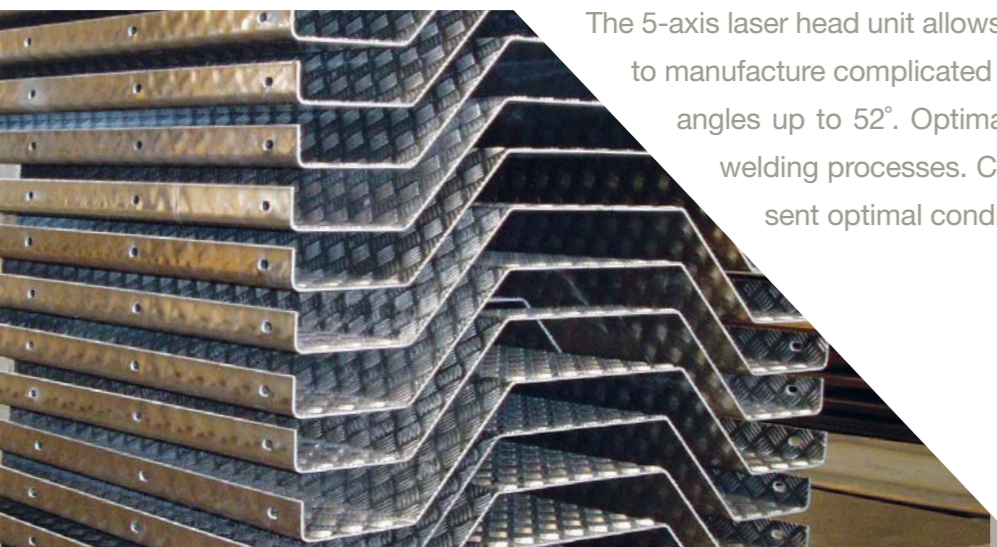
Due to optimal setting option of cutting angle and cutting gap, both thin and thick sheets can be processed, resulting in torsion-free cuts of constant high quality.



Laser Cutting



The 5-axis laser head unit allows Göcke Umformtechnik to manufacture complicated contours and chamfering angles up to 52°. Optimal conditions for subsequent welding processes. Cut edges of the workpieces present optimal conditions for welding processes.



Therefore, highest efficiencies are guaranteed, particularly for single-piece production. Göcke Umformtechnik sets new standards in laser processing with high customer benefit.

The use of the laser beam as a “tool” enables a fast cutting of hard as well as soft materials. Therefore high precision parts can be processed with very little microstructural changes.

**Working Length 35 m**  
**Working Width 3,5 m**  
**Sheet thickness 20 mm**  
**Chamfers up to 52°**



The CO2 Laser system offers the additional possibility marking workpieces in a quick, clear and durable way.







Laser Cutting



## Laser Welding

### Laser Welding System 1

Maximum dimensions of sheets:

Width 4 m  
Length 20 m  
Length of welding seam: 4 m



### Laser Welding System 2

Maximum dimensions of sheets:

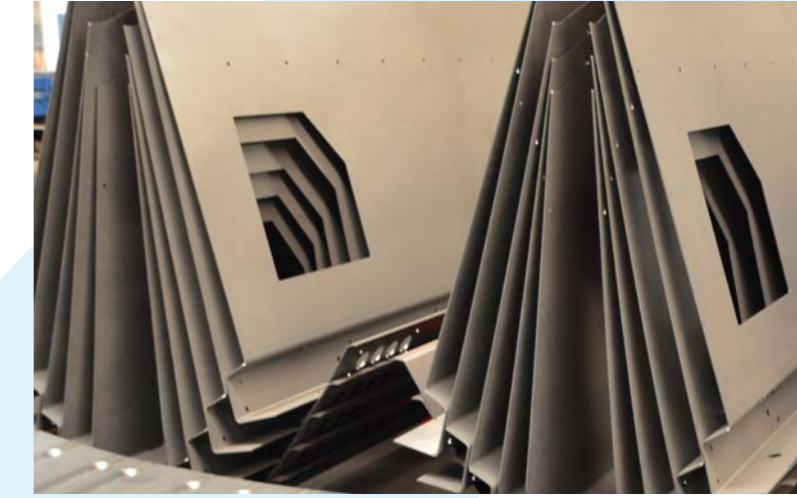
Width 5 m  
Length 12 m  
Length of welding seam: 12 m  
including cold wire feed



**Tailored Blanks with  
Thicknesses from 1 to 8 mm**

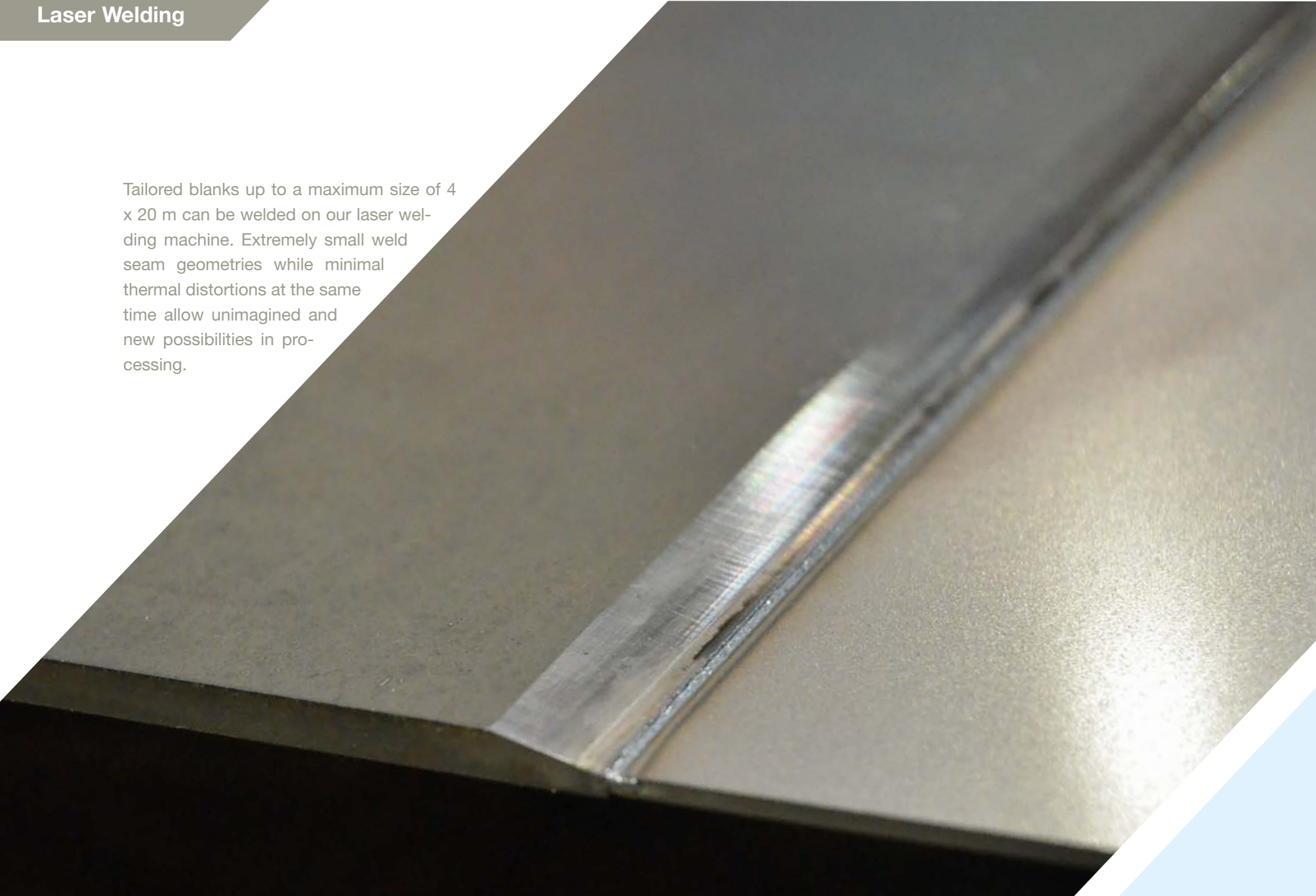
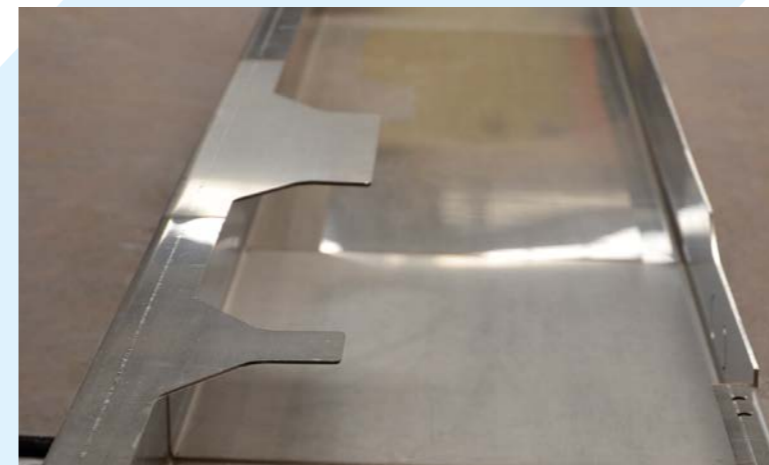


Tailored blanks up to a maximum size of 4 x 20 m can be welded on our laser welding machine. Extremely small weld seam geometries while minimal thermal distortions at the same time allow unimagined and new possibilities in processing.



Laser welding is normally conducted without the feeding of additional filler materials. However, upon the request of customers, a filler material can be added, particularly for high-strength materials.

A high welding speed increases the productivity and with it the value-add. Materials like steel, stainless steel and aluminium are appropriate for laser welding.





## Extreme Loads – Extreme Responsibility

As flexible as bended profiles can be processed, they are equally flexible in the field of application. Stabilizers for a container trough to the heat shield for space operations. Many processing stages are automated today. However, special processing steps must still be carried out manually by professionals. This process provides highest standard of quality and perfection.

- Rolling • Weld Seam Preparations • Welding
- Drilling • Sawing • Milling • Blanking



## Deburring/ Edge Rounding

Deburring and edge rounding of parts on both sides.

Water Jet Cutting

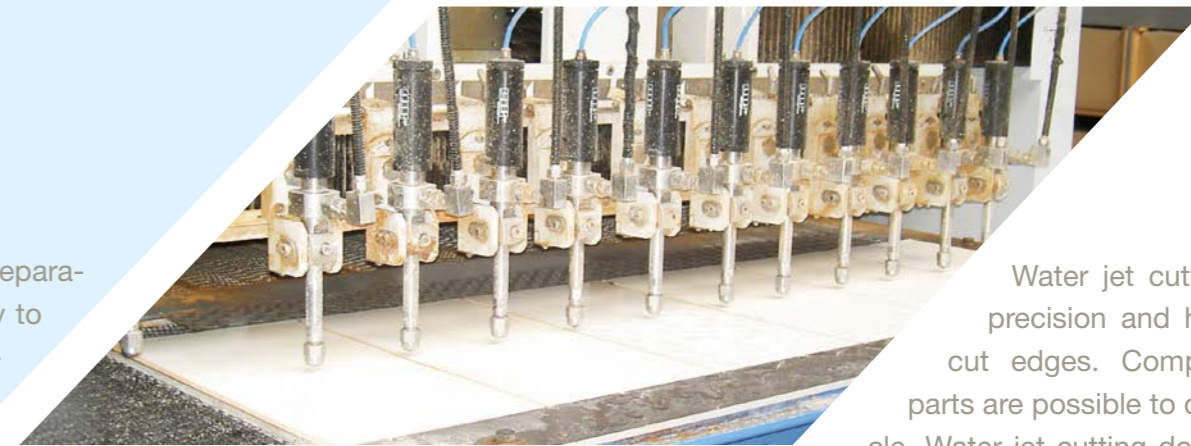
# Innovative Procedures, Efficient Production

Stainless Steel –  
Non-ferrous Metals -  
Metals – Natural Stones

From subcontract services  
to complete production  
including material



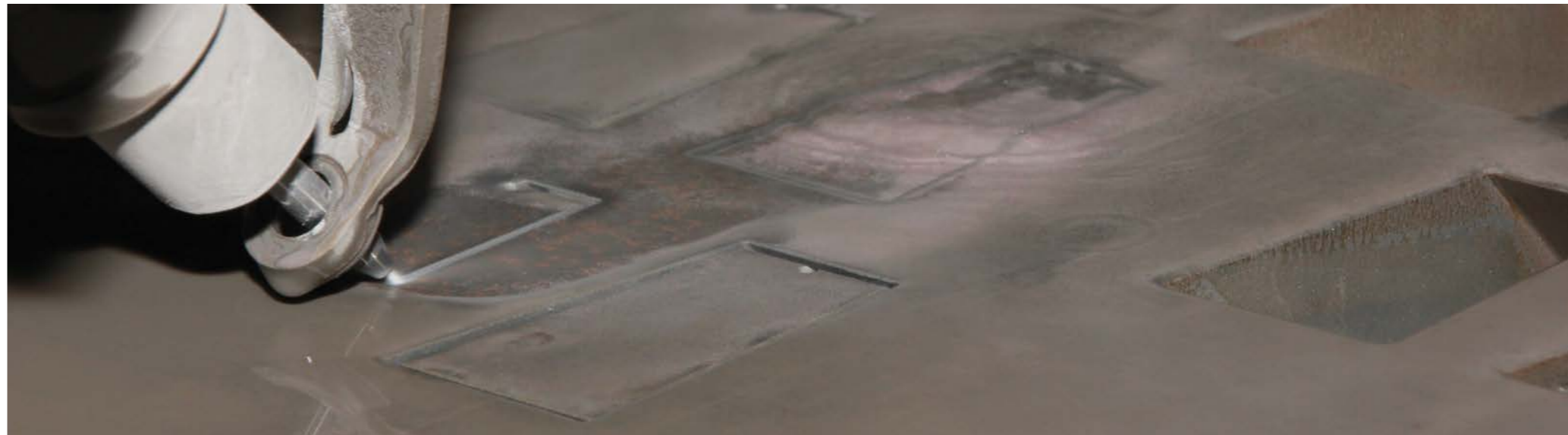
High pressure water jet cutting is a separation process which is complementary to the traditional, mechanical and thermal methods. Steel, aluminium, non-ferrous metal, stone, glass, plastic, or sealing materials can be processed.

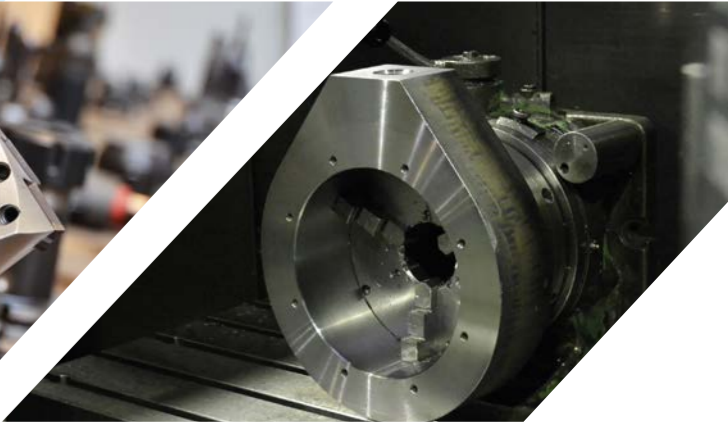
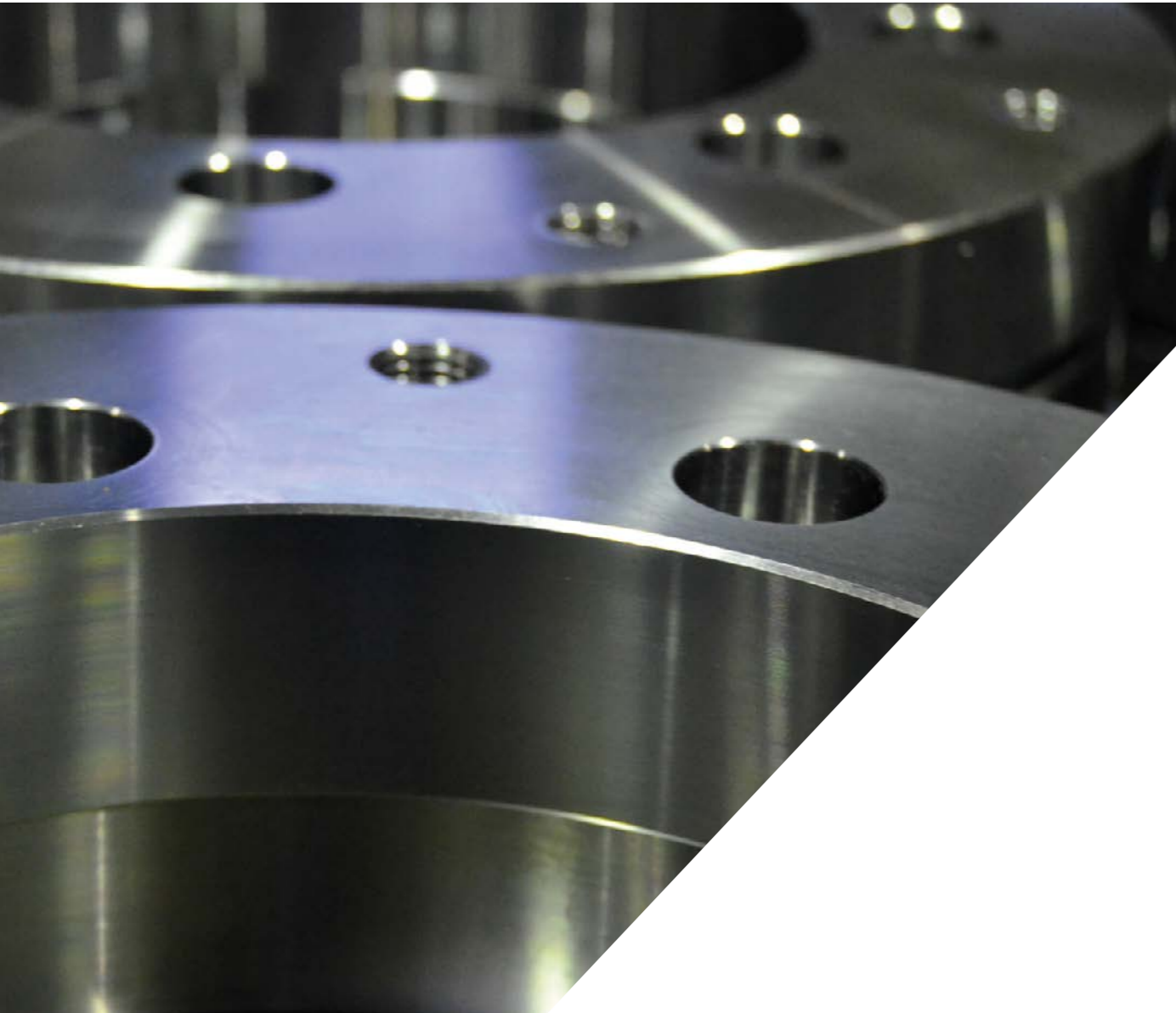


Water jet cutting provides high precision and high quality of the cut edges. Complex and filigreed parts are possible to cut in one work cycle. Water jet cutting don't have any influences on hardness of thermal changes on the material.



**Working Dimensions 8 x 4 m**  
Material Thickness up to 200 mm





More and more frequently the demand on higher precision and machined part of laser and water cutted were requested.

Therefore we invested in a „Vertical-Horizontal Processing Centre“ to fulfill the demands of our customers. The wide range of application possibilities of these machines with its extended table for dualzone and long bed processing.

**The Vertical Rotary Head Processing Center for Long Bed and Pendulum Processing**

X Stroke: 8000 mm  
Y Stroke: 900 mm  
Z Stroke: 950 mm



## Our Activities:

- **Press Brakes:**  
Working length 21 m  
Press capacity 3000 t
- **Shearing:**  
Working length 10.2 m  
Sheet thickness 16 mm
- **Plasma Cutting:**  
Working length 25 m  
Working width 5 m  
Sheet thickness 40 mm  
Chamfers up to 45°
- **Laser Cutting:**  
Working length 35 m  
Working width 3.5 m  
Sheet thickness 20 mm  
Chamfers up to 52°
- **Laser Welding System 1:**  
Maximum dimensions of sheets to be manufactured: 4 x 20 m  
Width 4 m  
Length 20 m  
Length of welding seam 4 m
- **Laser Welding System 2:**  
Maximum dimensions of sheets to be manufactured: 5 x 12 m  
Width 5 m  
Length 12 m  
Length of welding seam: 12 m including cold wire feeding
- **Water Jet Cutting:**  
Working length 8 m  
Working width 4 m  
Sheet thickness 200 mm  
Chamfers up to 90°
- **Preparatory Services/ Deburring:**  
Weld seam preparation, welding, drilling, sawing, milling, blanking, rolling
- **Mechanical Processing:**  
X Stroke: 8000 mm  
Y Stroke: 900 mm  
Z Stroke: 950 mm

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