



Sheet metal components & assemblies made of steel, stainless steel, and aluminium



Everything from a single



source

Laser & Punching, Folding, Mechanical Processing,
Connection Technology, Welding, Surface Technology, Metrology

“Everything from a single source”

Under this motto “Everything from a single source” we offer individual complete solutions from the beginning of planning, up to serial production. All production steps from surface treatment to assembly, take place directly in our company. This means that you have only one contact person, short communication channels, minimum logistic costs and highly efficient production processes.

1 Joint development

In the planning and design of individual components or entire production groups, our expertise pays off: experienced engineers advise and accompany you from the first pencil stroke onwards. Together with you, we develop individual optimized solutions. We use different CAD systems such as SolidWorks 3D, Inventor 3D or AutoCad, this simplifies the constant exchange of data.

2 Evaluate and test

In the next step, you receive a near-series or a prototype - to touch, look and try. After careful evaluation and possible fine adjustments, the product is then released for serial production.

3 On your mark, get set, go!

Now, to the use of our high-performance technology: At the beginning of the flexible manufacturing chain with CNC-based machines and integrated quality assurance systems, is one of the largest fully automated high-bay warehouses in Europe: With 840 storing spaces, filled with up to 2.500 t of metal sheets, the sheets are fed to the laser and combination machines accordingly. They are then, punched, lasered, edged, welded and milled as per customer request.

4 Surface treatment – it’s the finishing touch that counts

In the ultra-modern 4-zone powder coating and spraying plant, parts made of steel, niro steel, aluminium and plastic, up to a size of 3.000 x 1.500 x 700 mm are mechanically surface treated. Larger and more complex parts are retouched by hand.

5 Assembly – the whole is more than just a sum of all parts

The variable customizable assembly line with flexible working areas, is individually optimized and configured depending on various assembly units. In addition to the various welding techniques, also tox clinching, pressing/welding of bolts, nuts, blind rivet nuts, rivets and twisting are used. Especially to be emphasized is the aluminium welding competence of system7 metal technology.

6 Pleasant Extras

Highly qualified staff and the latest generation of machinery ensure optimum interaction between humans and technology. Due to 40 years of experience in the industry, we represent a comprehensive know-how, which is rarely seen. Our central location in Oberweis, near Gmunden, offers a crucial logistical advantage. Certified by the European aviation authority EASA under Part 21 and complying with DIN EN 15085-2 CL1 for welding of railway vehicles system7 metal technology is your reliable supplier in the railway and aviation industry.



A strong Partner

system7 metal technology is a reliable partner when it comes to sheet metal. Made from either steel, stainless steel or aluminium, we produce both pre-finished components and complete assemblies.

- certified for railway and aerospace
- modern machinery
- highly qualified staff
- 40 years of know-how
- integrated quality assurance system
- central location Oberweis / Upper Austria



Laser & Punching

Whether thick or thin, our lasers cut through sheet metal like butter. Assembled in one of the largest fully automated high-bay warehouses in Europe. 2.500 tons of sheet metal are waiting here for further processing, e.g. with the new 8kw-fiber laser system.



LASER CUTTING

in mm

max. sheet size	3.000 x 1.500
Plate thickness up to	20
Plate thickness aluminium and niro steel up to	12

LASER-PUNCH COMBINATION

max. sheet size	3.000 x 1.500
-----------------	---------------

Sheet thickness laser

Steel up to	8
Stainless steel up to	6
Aluminium up to	6

Sheet thickness punching

Steel up to	4
Stainless steel up to	4
Aluminium up to	5

Remodelling such as counterboring, threaded screws, bridges, knobs, hinges, engraving, graining, signing



Folding

What would a metal plate be without any rough edges? Definitely not a viable component and certainly not an assembly unit. At system7 metal technology, nine CNC-controlled press brakes provide the right angle for whether a single piece, small or large quantities...



Robot Folding Trumpf BendMaster

in mm

Highest precision for complicated flashings

Electronics and vehicle construction

Folding length max.

3.000

Plate thickness depending on length max.

10

AMADA HG-ATC

Hydraulic press brake

with automatic tool changer

Ideal for small batch sizes and a high range of parts

Folding length max.

3.000

Plate thickness depending on the length max.

10



Mechanical Processing

Our three new high-performance metal machining centers with 3 or rather 5 axes, enable efficient metal processing at the highest precision. They produce highly complex workpieces at high speed with continuously high accuracy.



DMC 100 U duoBlock

5-axis machining center max. table load	2 t
Spindle speed	12.000 U/min
Travel distances	
X-axis	1.000 mm
Y-axis	1.250 mm
Z-axis	1.000 mm

ALZMETALL GS800

5-axis machining center max. table load	500 kg
Spindle speed	18.000 U/min
Travel distances	
X-axis	650 mm
Y-axis	650 mm
Z-axis	550 mm

DMC 1035 V Ecoline

3-axis machining center max. table load	1 t
Spindle speed	12.000 U/min
Travel distances	
X-axis	1.035 mm
Y-axis	560 mm
Z-axis	510 mm



Connection Technology

In the metal sheet-Business, riveting- and nailing down is simply just not enough, therefore system7 metal technology features bolts, bushings and sleeves...



CNC-controlled insertion machines

for accurate insertion of bolts, bushings and sleeves

CNC-controlled stud welding machine

max. thread size

M8x50

max. workpiece size

1500 mm x 2700 mm



Welding

system7 metal technology has exceptional welding expertise: steel, stainless steel and aluminium are welded by robots or manually if required. Some welding methods to choose from are MAG, MIG, TIG, TIG cold wire or MIG brazing. Certification according to DIN EN 15085-2 CL1 enables us to weld statically stressed components in the railway vehicle sector. The impressive Hywema Duo lifting and rotating device can lift up to 5 tons of heavy loads in every thinkable position.



Robotized welding

Aluminium, steel and stainless steel

max. workpiece size

2.000 mm x 1.200 mm x 800 mm

max. weight

800 kg

Manual Welding

Aluminium, steel, niro steel, pipes

Steel thin and thick plates

Steel-aluminium-zinc coating

Hywema-Hub- Rotating devices

Type

HDV-DUO/HDVD050-100A3

Load capacity

5.000 kg

Torque

10.000 Nm

max. component length

7,0 m



Surface Technology

It is not all gold that glitters... it is often “only” just a sheet of metal. Whether glossy or matt, powder-coated or painted - our modern 4-zone system makes it possible to provide each piece with the required finishing touch. Oversized or complex parts are carefully retouched by hand.



Powder coating and wet varnishing

Materials: steel, niro steel, aluminium, synthetic materials of any kind

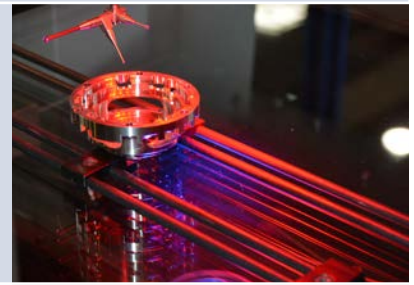
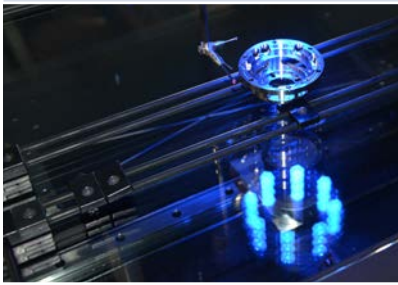
max. size

3.000 x 1.500 x 700 mm



Metrology

Quality requires control. And precision within micrometers requires suitable measuring instruments. Using the latest generation of Zeiss measuring machines system7 scans, analyses and documents parts being produced inhouse or externally.



Zeiss Contura Coordinate Measuring Machine

3D-Measurements (dimension, form, location)

max. workpiece size	1.000 x 1.200 x 600 mm
Load capacity	1.200 kg
Accuracy	1,7 μ +L/350

Zeiss O-Inspect Multisensor Measuring Machine

3D multisensor analysis incl. freeform measurement

max. workpiece size	500 x 400 x 300 mm
Load capacity	25 kg
Accuracy (optical measuring)	1,6 μ +L/250
Accuracy (tactile measuring)	1,9 μ +L/250

Further measurements

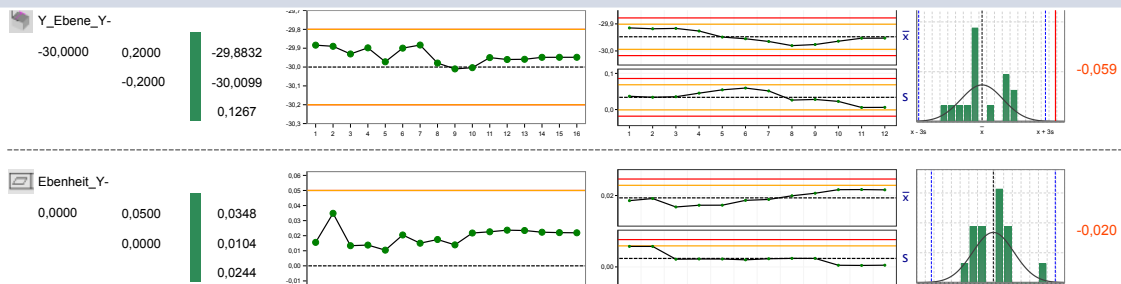
Surface Roughness Measurements

Layer Thickness and Coating Measurements

Weld Seam Inspections (stage VT1 internally/higher stages in cooperation with external partners)

Quality Assurance

system7 metal technology relies on a highly developed and integrated quality management system. Individual production steps are accompanied by constant quality control and all products are subject to comprehensive final inspections ensuring a high level of quality and security.



All processes are certified and are constantly reviewed and improved. Therefore, system7 metal technology meets all requirements of a modern, state of the art quality assurance. Extensive certifications and specific accreditations in the most sensitive areas of aviation and railway traffic document those quality standards.

EASA-approved supplier for aviation industry

Massive investments in modern machinery during the last years, relevant certifications and sophisticated quality assurance enabled system7 metal technology to become an approved supplier in aviation industry. system7 metal technology produces components for the structure and the interior of aircraft, e.g. surface treated sheet metal structures, milled parts and assemblies. Latest manufacturing technologies and processing techniques guarantee the highest quality and compliance with the strictest tolerances.

As one of only 20 workshops in Austria system7 metal technology passed the extensive certification process and received an official EASA approval according Part 21G (POA) in early 2017. This means that structures and components manufactured in Oberweis are provided with a certain certificate of conformity (Form 1) granting benefits for the further supply chain.



Railway competence at its best

Also in the railway sector, system7 metal technology possesses relevant approvals and certificates. Amongst others, system7 manufactures frame parts for railway vehicles of any kind, electrical boxes for commuter trains and components for railway vehicle manufacturers.

When it comes to interior components for rail vehicles, system7 metal technology cooperates with the sales, engineering and design professionals of intirio. Together we provide customized system solutions like luggage racks, ceilings, separating walls and various coverings.

Furthermore, system7 metal technology is an important supplier of components for the innovative railway solutions developed by our sister company system7 rail support.

Comprehensive certification

system7 metal technology is approved by the European aviation authority EASA according Part 21 (POA).

In the rail vehicle sector certification according to DIN EN 15085-2 CL1 permits the welding of statically stressed components. Adhesive bonding of railway vehicles according to DIN 6701-2:2015 can be carried out in cooperation with system7 rail support GmbH.

In addition, system7 metal technology is certified according to ISO 9001, 14001 and 3834-2 and complies with EN 1090-1 for the execution of steel and aluminium structures.

- ISO 9001:2008
- ISO 14001:2008
- EN ISO 3834-2
- DIN EN 15085 CL1
- EN 1090-1
- EASA Part 21
- DIN 6701-2:2015 in cooperation with system7 rail support GmbH
- IGP-certificate for the application of highly weatherproof powder facades
- Austria Quality Seal



Gewerbegebiet Süd 10, 4664 Oberweis, AUSTRIA
phone: +43 (0) 7613 / 20402-0
fax: +43 (0) 7613 / 20402-333
mail: office@s7-mt.com

www.s7-metaltechnology.com
taxpayer's ID: 189/3428
sales tax number: ATU66925303
commercial register: FN 373256 g

