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#### **COMPANY**

Company Kovinc d.o.o. is a manufacturing company with a 40-year old tradition of locksmithing and metal machining. We are distinguished by excellent organization, quick response, professionalism and flexibility. The number of employees exceeds over 70 permanently employed professionals and experts in the mechanical field.

Nowadays, our production is carried out on a total of 5000 m<sup>2</sup> of manufacturing, 2000 m<sup>2</sup> storage and 4000 m<sup>2</sup> outdoor, partially covered areas. The products are manufactured in accordance with all the requirements and standards, as evidenced by the obtained certificates ISO 9001, ISO 14001, ISO 45001, EN 3834-2, and EN 1090-1.

#### **PROGRAMS**

We specialize in the following production programs:

- program of metal interior and exterior equipment;
- program of welded heavy metal constructions;
- program of welded metal constructions for mechanical engineering;
- program of railway network metal equipment for railway electrification;

#### **OFFER**

We offer a wide range of services related to sheet metal and profile reshaping with the latest CNC machines. Our company is guided by the technological progress and we keep our production up to date. We offer products and services from design, consulting and manufacturing to assembly on site.

**Experiences. Quality. Progress. Insight into the future.** 







# Technological Equipment, Software and Hardware

#### **Tube Laser Cutting**

- Tube laser cutting machine with fiber tehnologie ADIGE LT5
- Tube laser cutting machine ADIGE LT8
- Overhead crane 5t INSEM ATMOS
- Gas supply installation for laser operation (laser gases and cutting gases)

## Laser cutting of sheet metal:

- Laser cutting machine PLATINO FIBER EVO 1530 (with dimensions up to 1500 x 3000 mm) with a built-in automatic rack storage with 10 loading and unloading places
- Screw compressor ABAC for laser operation
- Overhead console crane TYPE KŽ 1t x 4.5 m manufactured by INSEM Atmos
- Gas supply installation for laser operation (laser gases and cutting gases)

#### Sheet metal cutting

- CNC shears Gasparini CO3010
- Plasma TOMAHAWK 1025
- Plasma TOMAHAWK 1538

#### Sheet metal punching

- CNC punching machine up to 6mm Technology Technonumeric 30 C.S.M.
- CNC punching machine IMS PHY 120 CNC up to 20 mm
- Angle notcher FIM Versa 2004
- Eccentric press MIOS T 150 tonnes
- Eccentric press MIOS T 40 tonnes

#### Sheet metal bending:

- CNC bending machine Gasparini PBS 075
- CNC bending machine Gasparini PSG 250/3000 with numeric controller Delem DA 66 W
- CNC bending machine Digibend 360
- Hydraulic press

#### Manual welding:

- MIG-MAG (35 welding machines manufactured by Merkle for welding metal materials)
- MIG-MAG (5 welding machines manufactured by Merkle for welding aluminium materials with argon)
- TIG (5 welding machines manufactured by Fronius for welding Inox materials
- Electric resistance welding (1 appliance manufactured by EV d.o.o. Lendava)
- Overhead crane INSEM 8t
- Lifts with console control lifting up to 1.5t (6 sets)
- Welding tables with clamping tools (10 sets)

#### **Robotic welding:**

 Robotic welding cell equipped with a MOTOMAN HP20-6 robot, a NX 100 robot controller, a turning positioner around the horizontal axis RM2-3E and with three external robotic axes, each piece weighting up to 500 kg, with dimensions up to 1400 x 2500 mm.

# Removing the oxide and chamfering the edges

Lissmac SBM-M 1000 B2

#### **Profile cutting**

- CNC band saw Pedrazzoli SN350 AP-CNC
- NC band saw Pedrazzoli BROWN SN270
- NC circular saw for cutting aluminium profiles TEKNA TK133
- Table saw for cutting Fe profiles MEP PA101
- Table saw for cutting aluminium materials DEWALT

# Bending of profiles, tubes and full materials

- NC bending machine Digi-bend 360
- CNC 5-axis bending machine Crippa Linear CA563 (up to 60mm diameter)
- NC bending machine for circular, square and rectangular tubes Gantar

# Flatting of profiles, tubes and full materials

• Bending machine Ercolina CE N3

#### **Profile drilling**

- Automatic drilling machine Sermac R32
- Automatic drilling machine Dalmastroj MK4
- Drilling machine (2 sets)

#### Tapping machine

 Teknomasyon BHK01.MQL-DC from M5 to M24

#### **Engraving machine**

- Automated needle marking device ADP 5090 AC500
- Automated marking system Telesis

#### **Profile milling**

Milling machine ALG 200B

## Turning of profiles and full materials

Lathe HUGE 330X2000

#### Measuring equipment

- Mitutoya digital and caliper gauges
- Mitrutoya altimeter and scrollbar
- Key gauges
- Sets for calibration of gauges
- Digital gauges for thickness measurement AKZ
- Micrometers
- Templates for welding measurements

#### **Design and construction**

appropriate computer hardware

#### Auto park

- 2x fork-lift Linde
- Fork-lift Jungheinrich
- Peugeot Partner
- 2x Peugeot Boxer
- Peugeot JumperManual fork-lifts





• Certificate EN ISO 3834-2:2006 (Quality requirements for melting welding of metallic materials)

tificate CE for Factory 40

- Certificate EN 1090-1:2009+A1:2012 (Construction of steel and aluminium structures)
- Certificate ISO 9001:2015 (Quality Management Systems)
- Certificate ISO 14001:2015 (Environment Management Systems)

**BUREAU VERITAS** 

Certification

- Certificate ISO 45001:2018 (Occupational Health and Safety Management Systems)
- Insurance of manufacturer responsibility
- Certificate of Excellence (AAA)

# CLIENT'S CLAIMS FOR DAMAGES DUE TO A SUDDEN DAMAGING EVENT ARE ENSURED BY:

defective products (material error, structural error, lack of instructions for proper usage) or due to defective works or services that result in damage to persons or things.







#### Certificate SIST EN ISO 3834-2:2006



#### Certificate SIST EN 1090-1:2009+A1:2012



#### Certificate ISO 9001:2015



#### **Certificate ISO 14001:2015**



#### **Certificate ISO 45001:2018**



#### Insurance of manufacturer responsibility





#### Certificate of Excellence (AAA)







Tube laser with fibre technology is a state-of-the-art technological solution for pipe and profile processing. It enables extremely fast and precise product processing. Due to its exceptional speed and accuracy, it is suitable for cutting in large-scale production of products for the automotive, industrial and furniture industries.

Since processing with the LT5 tube laser replaces several classic operations (e.g. milling, drilling, ...), it shortens the product processing time and reduces costs.

With fibre technology, we can process all types of pipes and profiles made from all kinds of materials. In addition to iron, steel and aluminium, we can also process copper, brass and coloured metals.

The tube laser can treat pipes up to 120 mm in diameter, with a weight of 13.5 kg/m and a length of up to 6.5 m.

Laser cutting of pipes with state-of-the-art fibre technology also brings an ecological advantage, since it consumes less electricity compared to other lasers.

#### **ADVANTAGES**

- A state-of-the-art technological solution for pipe and profile processing.
- Extremely fast and precise product processing.
- Suitable for large-scale production of products for the automotive, industrial or furniture industries.
- It replaces several classic operations (e.g. milling, drilling, ...).

LASERTUBE LTS

- Shorter processing time and lower costs.
- Processing of pipes up to 120 mm in diameter, 6.5 metres in length and 13.5 kg/m in weight.

Fast. Precise. Optimal. Innovative. Environmentally friendly.



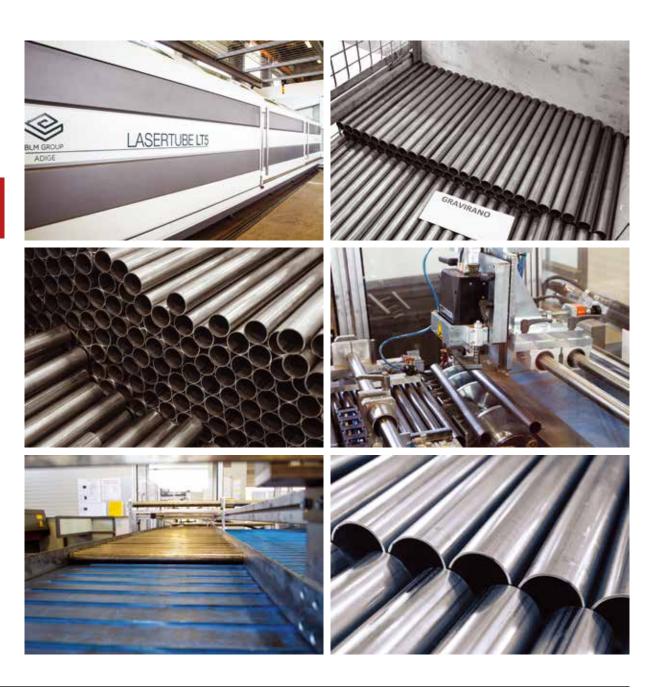




#### **TECHNICAL INFORMATION:**

#### **Tube laser ADIGE Laser tube LT5**

• The area of round tubes	min. Ø 12 mm - max. Ø 120 mm	
<ul> <li>The area of square and rectangular tubes</li> </ul>	max. 100 x 100 mm	
Possibility of processing materials	steel, aluminum, stainless steel, copper, brass and colored pipes and profiles	
Minimum length of workpiece	min. 3200 mm	
Numerical system	Simens 840 D	
<ul> <li>Power of the laser unit</li> </ul>	2000 W	
Management	automatic	
<ul> <li>Maximum weight of workpiece</li> </ul>	13,5 kg/m	
The maximum length of workpiece	6500 mm	





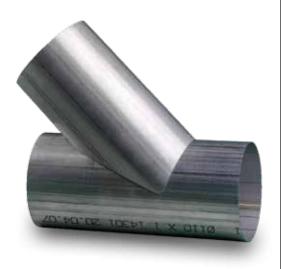


# **3D Laser Tube Cutting**

Tube laser LT8 is a modern technological solution for cutting tubes and profiles. It enables quick and precise manufacturing of products with exceptional repeatability. Treatment with tube laser with one operation replaces several conventional tube treatment methods, such as sawing, drilling holes, milling and decomposition. We can treat open profiles, flat steel, as well as profiles of various shapes, with a diameter 12-220 mm and weight up to 35 kg/m.

#### ADVANTAGES OF 3D LASER CUTTING

- Wide range of usage
- Shorter manufacturing time and thus reduced costs
- flexibility, precision and professional cutting.
- · Automated loading and unloading



Speed. Precision. Flexibility. New solutions. Cost savings.







#### **TECHNICAL INFORMATION:**

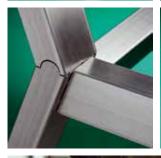
#### **Tube laser ADIGE Laser tube LT8**

Area of operation of round tubes	min. Ø 12 mm - max. Ø 220 mm	
<ul> <li>Area of operation of square and rectangular tubes</li> </ul>	max. 200 x 200 mm	
Options for treatment of materials	steel, aluminium and stainless tubes and profiles	
Numerical system	Simens 840 D Solution Line	
The laser aggregate power	3000 W	
• Operation	automatic	
Maximum weight of the piece treated	28 kg/m	
<ul> <li>Maximum length of the piece treated</li> </ul>	6500 mm	























w w w . k o v i n c . c o m



PRIMA POWER PLATINO FIBER EVO 1530 laser cutting machine for cutting of sheet metal, whose working surface size is equal to 3000 mm x 1500 mm, is at the highest possible technological level with minimal impact on the environment currently present in its industry. The power of the machine is equal to 4000W and it therefore allows cutting the sheet metal of thickness from 0,8 to 20 mm with a precision up to  $\pm$ 0,1 mm.

Platino Fiber

The software of the laser allows the programmer automated managing and making of most challenging and complex geometrical shapes.

Next to the laser machine there is a built-in automatic rack storage with 10 loading and unloading places allowing the operation of the laser without the presence of the operator, which results in allowing us to comply with the shortest delivery times when providing our cutting service.

Sheet metal laser cutting with state-of-the-art fibre technology also brings an ecological advantage, since it consumes less electricity compared to other lasers.

#### **ADVANTAGES**

- Latest technology
- Quality in the implementation of services.
- Significant reduction of production costs.
- Allows cutting all materials (Fe, Rf, Al) of different thicknesses (up to 20 mm) with a precision up to 0.1 mm, and the 3000 x 1500 mm form.
- No unnecessary intermediate storage between phases.
- Possibility to manufacture pin and break joints and positional fittings.
- Simplification of all further manufacturing steps, which in return reduce the volume of installation, welding is no longer strictly necessary.
- Precise and quality manufacture of the most demanding product.
- Short delivery times.
- Good ratio between quality and price.
- Flexibility technical assistance to the client.
- Good material utilization (less residues).

Quick. Simple. Professional. Quality. Favourable.





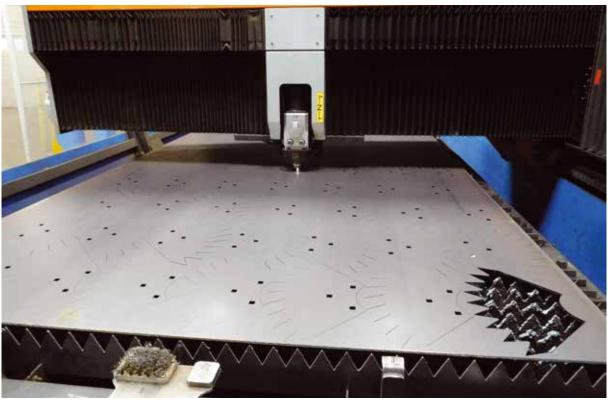


#### **TECHNICAL INFORMATION:**

Machine power

<ul> <li>Cutting thickness</li> </ul>	Fe sheets up to a thickness of	20 mm
	Inox sheets up to a thickness of	15 mm
	Al sheets up to a thickness of	12 mm
• Table size	3000 mm x 1500 mm	

4000 W











#### REMOVING OXIDE IN A SINGLE PASS

#### Machine LISSMAC SBM-B 1000

An oxide removal machine is indispensable to ensure the coating of the surface protection at the edges of the sheet metal and to ensure the required quality of the finished product.

Lissmac's innovative system for chamfering of edges of laser cutting sets up high standards in metal machining.

#### **ADVANTAGES**

- Removing oxide in a single pass on all inner and outer edges of the plate up to a thickness of 20 mm.
- Sheet metals do not need to be turned.
- $\bullet\,$  It is very efficient and saves up to 60% of machining time.

**Quality. Effective. Quick.** 









#### **TECHNICAL INFORMATION:**

Working width	1000 mm
<ul> <li>Working height</li> </ul>	20 mm
Material thickness	20 mm
<ul> <li>Working speed of the machine</li> </ul>	0-4 m/min





#### WELDING INDUSTRIAL ROBOT MOTOMAN EA1900N

The robotic welding cell is equipped with a modern welding industrial robot Motoman EA1900N and a robot controller Motoman NX 100, which quickly, reliably and accurately welds all types of surfaces. The robot optimally shortens welding time, resulting in shorter delivery times as well, ensures high quality and efficiency of the process and enables our company to offer final products at competitive prices.

#### ADVANTAGES OF ROBOTIC WELDING:

- Great precision.
- Reduced working time.
- Very accurate route tracking.
- Optimised movement.
- Vibration control.
- Sensitive crash detection.
- Easy connection to the existing network.
- Remote control and diagnostics of robotic systems.
- Multitasking.
- Automatic calibration.

**Quick. Reliable. Precise. Effective. Safe.** 























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We have a team of 25-30 welders on hand, who are skilled and hold all certificates in accordance with the ISO 9606-1 directive. For our welding quality we have certificate ISO 3834-2, which means we are also ready to rise to especially demanding challenges. Manual welding is mostly needed in the field, when raising metal constructions, but there are also orders where manual welding is performed in our production workshop. If they are boutique or incredibly innovative, we always find the right solution.

We offer different welding procedures which, if necessary, we complete with the use of modern technologies and you can count on our support from the planning stage to the finished product or installation.

# WE OFFER ALL TYPES OF MANUAL WELDING IN FREE ATMOSPHERE AND IN THE SHIELDED ENVIRONMENT:

- arc welding,
- industrial TIG welding,
- MIG welding with argon or helium shielding and
- MAG welding.

Accurate. Flexible.



















Tube and sheet metal bending is mechanical process of metal treatment. The bending is influenced by many factors, such as the quality of the material, the thickness of the material, the quality of tools and the quality of the lubricants.

To bend profiles and tubes with a variable angle we also offer the service of bending up to a diameter of 60,3 mm. We also bend flat, square and rectangular tubes and angle steel.

We also perform sheet metal bending with modern machines, that are supported by computer CNC steering. We can produce elements of the most demanding forms.

#### CRIPPA LINEAR CA 563

For tube bending we are using the CRIPPA LINEAR CA 563 machine. It is suitable for usage in the furniture, automotive and aviation industry. The machine has five axes and is fully CNC controlled, while it is driven by digital electric motors. The maximum diameter of tube bending is 60,3 mm, and the useful length of the tube is 5500 mm. The machine can also bend products, which have a variable angle, while bending into the spiral is also available.



**Mechanical Treatment. Complex Shapes. Precision.** 







#### TECHNICAL INFORMATION OF THE MACHINE:

<ul> <li>Maximum diameter of stainless steel tube</li> </ul>	60,3 x 3 mm
<ul> <li>Maximum diameter of steel tube</li> </ul>	60,3 x 2,5 mm
Maximum bending radius	250 mm
<ul> <li>Useful length of the tube</li> </ul>	5500 mm
Maximum bending angle	180+ degrees
<ul> <li>Bending accuracy, C axis</li> </ul>	+/- 0,01°
<ul> <li>Movement accuracy, Y axis</li> </ul>	+/- 0,01 mm
<ul> <li>Rotation accuracy, B axis</li> </ul>	+/- 0,01°
Bending direction	right





#### A LIST OF TOOLS

Ø15 mm x 1,5 mm – 2,5 mm	bending radius 40 mm
Ø18 mm x 1,5 mm – 2,5 mm	bending radius 35 mm
Ø20 mm x 1,5 mm - 2,5 mm	bending radius 35 mm
Ø22 mm x 1,5 mm – 2,5 mm	bending radius 50 mm
Ø25 mm x 1,5 mm – 2,5 mm	bending radius 60 mm
Ø26,7 mm x 1,5 mm – 2,5 mm	bending radius 65 mm
Ø28 mm x 1,5 mm – 2,5 mm	bending radius 70 mm
Ø33,7 mm x 2 mm - 3 mm	bending radius 80 mm
Ø40 mm x 2 mm – 3 mm	bending radius 90 mm
Ø42,4 mm x 3 mm	bending radius 90 mm
Ø48,3 mm x 2 mm - 3 mm	bending radius 100 mm
Ø60,3 mm x 3 mm	bending radius 90 and 120 mm















# **Quality Control and Traceability**

Quality control is carried out by qualified control personnel, in accordance with all prescribed controls and measurements. We produce all the quality control documentation according to the norms, which can be easily traced. This proves the conformity of our products.

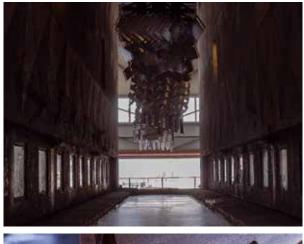






# Cooperation

**In cooperation with our partners**, metal machining (CNC turning and milling on multi-axis machining centres), and surface protection of all types of metals - powder coating according to all colour charts, sandblasting as well as hot and galvanic galvanization is done.













# **Products**

We offer a wide range of services related to sheet metal and profile reshaping with the latest CNC machines. We design, manufacture, assemble and install various medium- and heavy-duty metal constructions for mechanical engineering and business, storage, sports and other facilities for domestic and foreign costumers. In cooperation with other partners, we also protect all metal products against negative effects with powder coating, galvanization or sandblasting.

#### PRODUCTION PROGRAMS:

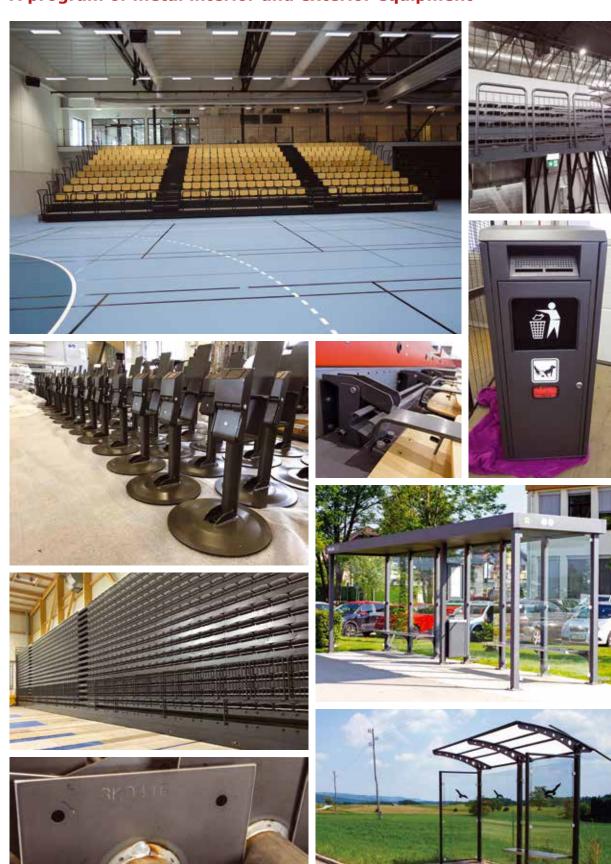
- a program of metal interior and exterior equipment;
- a program of heavy welded metal constructions;
- a program of welded metal constructions for mechanical engineering;
- a program of railway network metal equipment for railway electrification;
- sheet metal products







## A program of metal interior and exterior equipment





## A program of heavy welded metal constructions



















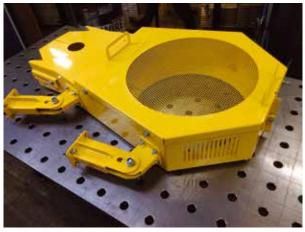




## A program of welded metal constructions for mechanical engineering















## A program of railway network metal equipment for railway electrification











## **Sheet metal products**























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