



700 x 680 x 500mm

**Annealing**

Laser is used to change the color of the surface. With annealing, the surface stay smooth, so not dirt can be deposited.

Specifications	Stainless Steel	Mild Steel
Material Thickness	> 2mm	> 2mm

**Engraving**

The laser beam removes part of the base material, this creating a depression. This may have steep of beveled edges.

Specifications	Aluminium	Aluminium (Anodized)	Stainless Steel	Mild Steel
Material Thickness	> 0.5mm	> 0.5mm	> 3mm	> 3mm

**Ablation**

Partially removes thin top layers of materials which are applied to the basic material and have very different colors.

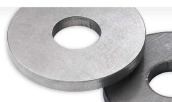
Aluminium	Mild Steel	Stainless Steel
Anodized	EDP & powder coating	EDP & powder coating

FINISHING**Rounding**

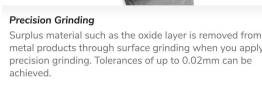
Some products might have rough or sharp edges after production. We offer different degrees of rounding, according to the application.

Deburring

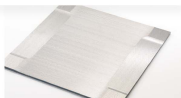
Our timesavers automated deburring machine, that uses a multidirectional brush design which uniformly finishes and deburrs the edges of material in one single smooth pass.

**Oxide Skin Removal**

The process of laser cutting sometimes create and oxide layer that looks slightly darker than the material itself. We offer service to remove this oxide skin with specialized brushes.

**Precision Grinding**

Surplus material such as the oxide layer is removed from metal products through surface grinding when you apply precision grinding. Tolerances of up to 0.02mm can be achieved.

**Powder Coating**

A dry finishing paint process that uses powder paint and electrostatics, it is used in almost 15% of all finishing process market.

- ✓ Attractive Finish
- ✓ Protects against weather, moisture, chemicals
- ✓ Protects against scratches, impact, corrosion, fading

Zinc Plating / Galvanizing

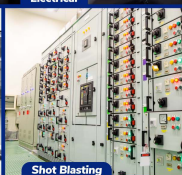
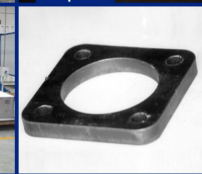
We also accept jobs that require plating such as trivalent zinc plating that prevents corrosion of iron and iron based material.



We offer both threaded fastening produces extremely strong joint that can still be taken apart and reassembled if needed, as well as permanent fastening in forms or riveting and adhesive bonding.

- ✓ Threaded Fastening
- ✓ Adhesive Bonding
- ✓ Riveting
- ✓ Hardware Installation

Delivering Sheet Metal Solutions to Many Industries

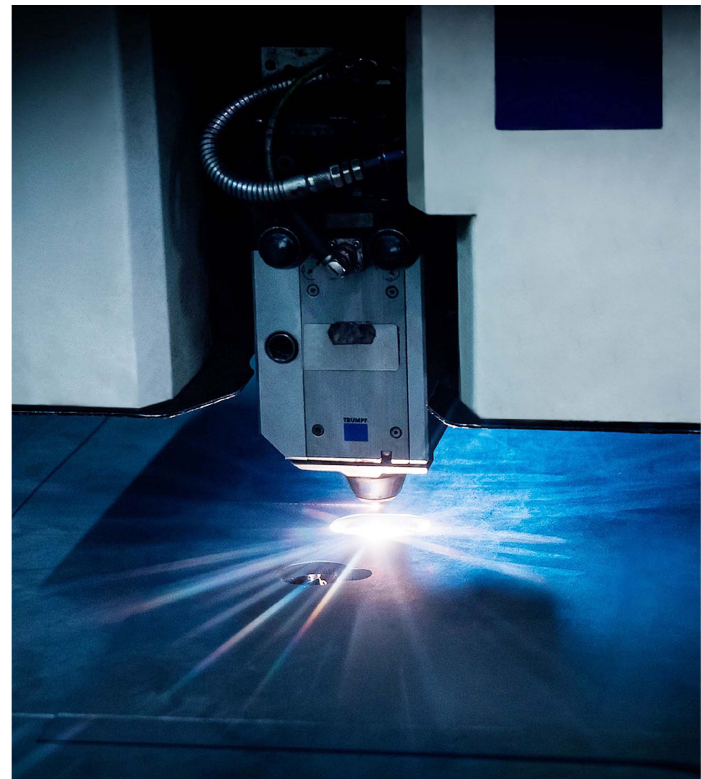
Coffee Roaster**Electrical****Vehicles****Heavy Machinery****Tobacco****Shot Blasting****Point of Sales****Interior****Exterior****Telecommunication****Washing Machine****Component****Furniture****Food****Trusted Experience**

Our team at PT. Duta Laserindo Metal strives to achieve the highest customer satisfaction and quality according to customer specification. We will be our customers first and best choice for the products and services we offer.

Quality in Sheet Metal Engineering

A GAE group company with over 23 years of experience in delivering sheet metal solutions to many industries.

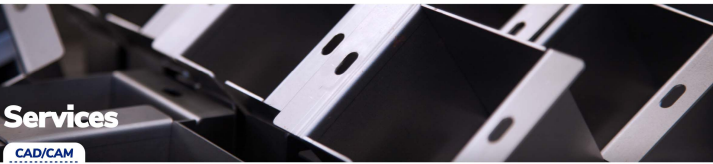
ISO 9001 : 2015 Quality Management System Certified



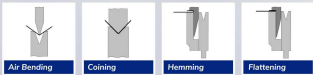
Why Us?

Fast Processing
We strive to deliver our services as timely as possible as customer's success highly depends lead time. We bring various lean manufacturing and agile methods to action to further serve this purpose.

Customization
Your needs are our concern. We listen to them and provide you a personalized personal service based of them, from prototyping, design, calculation to delivery of the end product.



BENDING



Air Bending
A frequently used, flexible bending method.
✓ Any angle between approximately 32° & 180° can be produced without changing tools
✓ Low bending tonnage requirements

Coining
The bend angle is produced in a form locking manner.
✓ If the required inside radius of the workpiece is less than the sheet thickness
✓ If holes, cutouts / angled edges are located near / on the bending line
✓ Extreme contour accuracy
✓ Cost efficient on large series production

Hemming
A seam is produced along a sheet edge using special tools.
✓ If a seam does not need to be pressed completely flat
✓ To minimize the counter-bend effect in long seam flanges
✓ If a defined dimension needs to be produced between the flanges

Flattening
A seam is produced along a sheet edge using special tools.
✓ Flattening is used when a seam is to be pressed completely flat



PT. DUTA LASERINDO METAL

LASER TUBE CUTTING



Simple Assembly & Positioning Aids

You can easily establish a connection between the flat material and the tube. This allows you to weld quickly and assemble accurately due to an assignment coding system.

Simple Connections

If you cut tubes and profiles using lasers, you can easily join them using inserts if they are user for load functions, or attachments for load-bearing designs. In the case of corners connections, you can reduce the additional work outlay drastically using a precise bevel cut.

Other Connections

Include plugs connections, as well as practical dovetails and bayonet connections. The joining processes that are carried out subsequently are also significantly more precise.

Bend Connections

You can achieve a fast connection composed of just one component. The possibility of a rounded corner opens up a completely new range of parts and designs. In order to ensure that components retain their correct position during and after bending, you can use a lug to fix the bend.

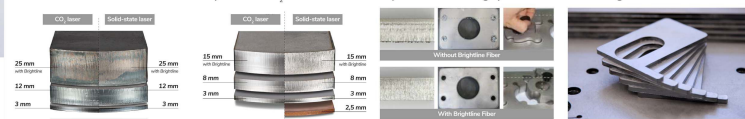
Tube - Blank Connections & Flexible Tube Elements

Join sheet metal parts and tubes simply and quickly. Customizable lugs allows you to attach parts easily and can also take on an assignment coding function. It is also possible to create a flexible cable guide using the laser with the help of flexible tube elements.

LASER CUTTING



We have two 2D laser machines namely TruLaser CO₂ and TruLaser Fiber. CO₂ enable us to use high power laser and cut through thick materials.



Flame Cutting
Cutting process using O₂ gas, there's might be an oxidation process.

Fusion Cutting
Cutting process using N₂ gas, oxide free.

Brightline
A TRUMPF technology to cutting thicker material using cable fiber.

Clean Contour
With laser cutting, it has smooth enough edge and cut that it does not require further post production work.

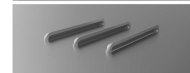
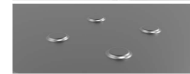
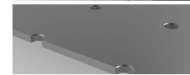
PUNCHING



A separation process in which a sheet is perforated by a single stroke of the machine. Individual hits can produce shapes such as circular holes or outer contours.

Forming

The additional of forming capabilities greatly increases the versatility of punch press. No longer just machines for making holes in sheets metal, punch presses have been used for years to produce common formed features.



Extruding

A forming process that forms material outward that is sometimes used to increase surface grip or used as a process before tapping, to increase the tap length.

- ✓ Pre-Tapping
- ✓ Guide Hole

Tapping

Punch presses can be equipped with tapping tool to produce threads, reducing post process work. Threads are made by first punching a hole and then forming the threads on the inside of the hole.

- ✓ Fastening

Center Boss

Circular, flat elevation on the sheet. A hole is punched only partially through the sheet, causing the slug to protrude from the other side.

- ✓ End stop for inserted elements
- ✓ Assembly / Fastening Aid

Lower

Oblong opening in the sheet resembling a gill. The punch cuts and forms the lower in one stroke.

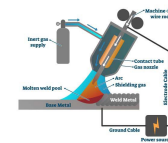
- ✓ Ventilation slots in housing
- ✓ Enclosures

Bridge

A strip projects from the sheets surface in a bridge-like fashion. The bridge is cut and formed in one stroke.

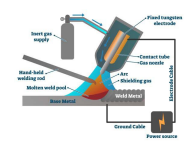
- ✓ Cable Guide
- ✓ Card Holder
- ✓ Spacer
- ✓ Fastening Aid

SPECIAL WELDING



MIG Welding

We use MIG (Metal Inert Gas) Welding for most of our work, being the universal and most flexible type of welding in the sheet metal industry.
✓ Welding thicker pieces
✓ Filler material is needed



TIG Welding

We also provide the option to do TIG (Tungsten Inert Gas) as some cases would benefit from it.
✓ Welding smaller, thinner pieces
✓ Material surface / finish is important (Less Spatter)



3D Manipulator
We use special rotating 3D manipulator tables to enable us to work with bigger pieces with ease, maintaining quality and reducing preparation time.



Robot Welding

The usage of CNC Robot Welding is also possible, it is suitable on higher volume orders with similar welding types.