



# CNR LAZER

**ÇINAR ELECTROMECHANICAL**  
CONSTRUCTION INDUSTRY AND TRADE CO. LTD.

## CNC Laser Cutting

New generation laser cutting strategy with single head cutting

Cnc Laser Cutting Machines with 4000 W at maximum 3000x1500 dimensions sheet metal sheets 22 mm, stainless steel sheet 15 mm, aluminum sheet 12 mm cut service with capacity.



### Advantages of Laser Cutting:

- The most efficient use of material in production.
- Fast cutting in production, low cost.
- Production without the need for molds with less jobs.
- Reduction of costs with minimum waste rate.
- Production from sheet materials is more economical than machining.
- High precision thanks to the stable structure of the machine and the modern operating and measurement technology (0.01 mm in all sizes).
- It allows for complex laser cuts from simple and internal-external contours, both thin and thick sheets.
- Allows opening of holes up to 0.4 x sheet thickness.
- Scratch-free product is obtained by contact-free operation. Ready-to-assemble production is carried out.
- Marking can be done on the sheet.
- No burr and heat-related deformation occurs on the cut surfaces.
- Minimum roughness in the part and burr-free cutting.
- Low cost and ease of operation in prototype studies.
- Do not touch the material and do not crush the material.
- More flexibility in design.

## Laser Cutting Applications



## CNC Punch Cutting

High production quality with short machining time at one time for stapling and forming of sheets.



Staples are available for various purposes in the puncher magazine of the CNC punch machine.

It is based on making various operations on sheet metal in one order.

The machine can handle up to 58 molds which can handle the capacity 1250x2500 at one time.

Mold part is fixed, sheet metal movement. Where the molds will be processed on the sheet, it is stated in the previously prepared and loaded program.

The sheet part moves on two axes (X, Y). There are two servo motors that move the plate in these axes. The movement of the axes is high.

There are at least two clamps that hold sheet material. These holders ensure that the sheet is held on the machine in the desired position.

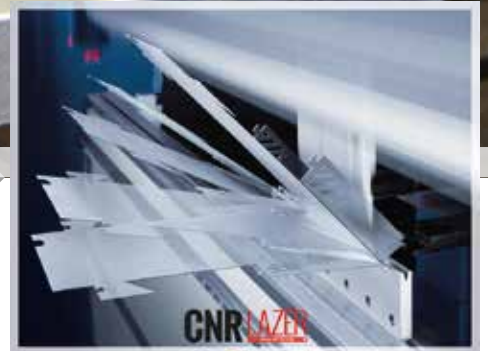
The sheet metal is placed on the machine table thanks to these holders and centering pin.

## Punch Cutting Applications



## CNC Bending Press

It increases the quality and competitiveness of computer controlled production.



Bending press are Bending machines used in sheet metal fabrication. Shelf at certain angles, shape they are used to give.

Our machine capacity : 0.50 mm to 15 mm up to 4 mt. is able to twist on the neck;  
2 meters : 2 pcs / 80 tons  
2.60 meters : 1 pcs / 120 tons  
3 meters : 1 pcs / 150 tons  
4 meters : 1 pcs / 200 tons

**Bending service is provided with 5 machines.**

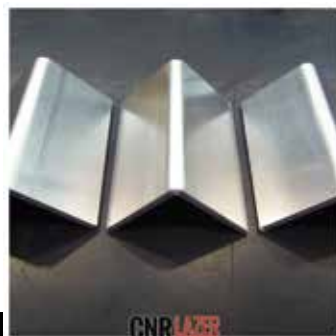
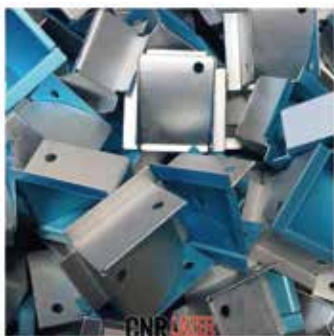
They have a monoblock, welded body and static and dynamic stiffness. It is suitable for fine bending works of thin and thick sheets.

With parallel stabilization shaft which helps parallelism, cutting process is done more smoothly.

Bending machine can be shaped with cylindrical, conical, elliptical and oval shapes. The material length, thickness, material information (stainless, aluminum, normal sheet, ST, etc.) that will be curled in the press brakes are important.

We serve you with our expert staff.

## Bending Applications



## Product Design and Application

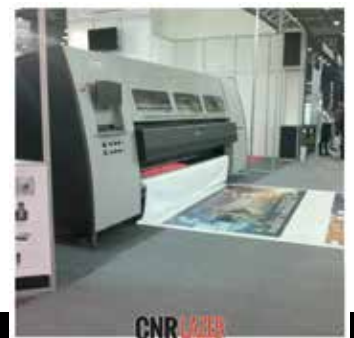
Customized product design for the project



### Design and manufacture of special machines:

- Machine spare parts design and manufacture (broken or deformed machine design and manufacture of parts using reverse engineering or various methods)
- Giving a modern and aesthetic look to the exterior of the machine
- Mechanical installation design of the machine, the time and cost advantage of this mechanical assembly design to the manufacturer, this work is done, the impact of the machine to any place, friction, non-contact, mechanical parts.
- Existing machine design and development.
- Machinability and ease of installation in the design of the machine.
- Draw the production drawings according to the technical drawing standards of the machine.
- Proper drawing of the machine for TSE and patent.
- Transfer all existing drawings and projects to computer environment.
- Display the installation order of the machine on the picture (Numbering).
- Disassembled image support showing where and in which order the machine parts will be installed
- User manual and installation (installation) guide preparation
- We perform design operations such as machine rendering and rendering works for use in other works.

## Machine Design and Application



# Electrostatic Powder Coating

## Sheet, Metal Painting Application



Powder coating is removed by special spray guns in the paint booth. Passing the gun electrostatic powder coating particles adhered to the material to be painted in the cabinet and the coating process is carried out.

The material must be well grounded so that the powder coating adheres completely to the material surface. The excess paint is collected and recycled by means of the paint recovery system in the cabin. The paint recovery system is one of the biggest economic advantages of electrostatic powder coating technology. After the material is coated with powder paint, it enters the cooking oven. The furnace temperature, which is 200°C, ensures that the powder paint melts and adheres to the material. The result is a very durable, economical, environmentally friendly, wide range of colors and a glossy surface finish.

## ADVANTAGES OF ELECTROSTATIC POWDER PAINT

- Provides the opportunity to reach the optimum painting thickness at very close tolerance intervals for the thin or thick film layer.
- Smooth or wrinkled surface roughness selection according to special requirements, color tone at low or high brightness degree and a wide range of colors
- Due to the high compatibility of pigments and epoxy and polyester resins, the color of the painted parts does not fade and has a long life.
- Excellent corner and edge finish on workpieces. The products have high quality and durable surface due to the dripping, flowing and local absence of the powder coated products.
- Automated surface treatment with automatic spray gun
- In the thermoblock tunnel furnace, the film layer on the surface of the workpiece has a very fast curing time, no flash-off time and no drying time.
- It is both environmentally friendly and cost-effective due to the fact that the residual powder coating mass, which does not cling to the surface of the part and which is in the cabin as a cloud of dust, is recovered by 95% of the multi-cyclone and auto-recycle units and the powder paint that has been gained can be reused in some extent.
- Environment-friendly technology because solvent-free powder paint does not emit any volatile organic compounds into the air.

## CNC Cylinder Bending

Fason Conical Bending Sheet Metal Curling Service



First of all, the plates we use as raw steel are stored in our factory in size of 1500 x 3000. The thickness of these sheets can be from 0.20 millimeters to 10 millimeters. These products are bent to the desired extent after the required cleaning work, if necessary, they are cut millimeter just before bending. It is delivered to our customers to be put on the market as useful products processed according to the request of our customers. Rack products, refrigerators, industrial dishwashers, automobile industry are seen in many different areas.

## All Welding Works

Professional service with our welder staff



Welding processes of stainless steel and carbon steel products are carried out in a professional manner with our certified welders. During the welding process, the electrode, arc and weld pool are protected against atmospheric air with inert shielding gas. The gas nozzle and the shielding gas are delivered to the welding area and removes the atmospheric air here. The welding is separated from the other arc welding processes by the electrode used, as in other processes such as MIG / MAG and MMA, the electrode is not consumed. If it is necessary to use filler material, the filler wire is automatically or manually added as bare wire.

## Production Plant and R & D Center

We have been responding with our experienced staff in the subcontracting sector since 2005. 1200 square meters closed and 1600 square meters in total with our latest technology machines, CNC Laser Cutting, CNC Punch Cutting, CNC Press Bending, CNC Cylinder Bending, Welding construction, Electrostatic Powder Coating, Semifinished Product Design and Installation services. The areas we serve include advertising, automotive, construction, compressor booths, sheet metal cladding, souvenirs, furniture, industrial kitchen, medical equipment and on-board equipment.

### Equipment List

1 Piece CNC Laser Cutting Machine 1500x3000 mm,  
3 Piece CNC Punch Press Cutting Machine 30 Tons,  
5 Piece CNC Bending Machine 200 Tons,  
1 Piece CNC Guillotine Shear 3m 6mm,  
1 Piece Cylinder bending Machine,  
2 Piece Profile Circular Cutting Machine,  
5 Piece Mig Welding Machine,  
1 Piece Tig Welding Machine,  
1 Piece 4m Overhead Conveyor Oven Electrostatic and Powder Dyeing Plant

### From the sectors we serve:

Automotive Industry | Furniture Industry | Construction Industry | Mold Industry | Food Industry | Chemical Industry | Defense industry

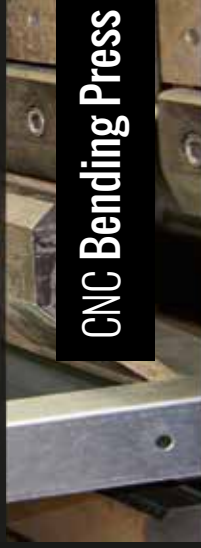




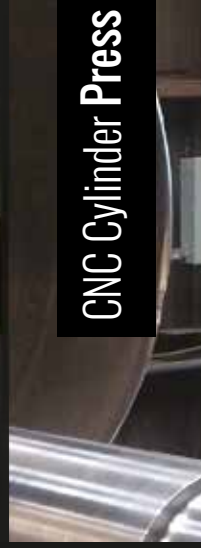
**CNC Laser Cutting**



**CNC Punch Cutting**



**CNC Bending Press**



**CNC Cylinder Press**



**Electrostatic Paint**



**Welding Services**



**Design-Manufacturing**

**ÇINAR ELEKTROMEKANİK İNŞAAT TAAHHÜT SAN.TİC.LTD.ŞTİ.**