

Metal Design Systms, Inc. (MDSI) currently occupies 125,000 square feet of floor space. Our facility is where your design can be brought to life for a perfect fit.

NEW

Mazak Optiplex 4020 DDL

This new addition to our shop provides MDSI superior performance in processing material. The Direct Diode Laser technology and higher wattage deliver a superior edge quality, more stable cut performance and greater throughput for applications. The Mazak Optiplex manipulates stainless steel, copper, brass, bronze, aluminum, hastelloy, Inconel, titanium, thin gage mild steel as well as other exotic metals.

Material Limitations:

- 72" (6') x 158" (13' 2") bed capacity
- Aluminum 0.630"
- Steel 1"
- Copper 0.375"
- Brass 0.375"
- Galvanized 0.160"
- Stainless Steel 0.630"



NEW

Metalfforming Schröder PowerBend Industrial

This new addition to MDSI is designed for reliable and efficient operation in heavy production. Dual drives on the clamping beam and the folding beam achieve extremely fast clamping and folding speeds. The clamping beam stroke creates a huge part envelope for processing large bulky work pieces.

Material Limitations:

- Maximum bend length 159"
- Minimum back to back bend 0.75"

Material maximum thickness:

- Aluminum 0.196
- Mild Steel (6 Gauge) 0.196"
- Galvanized Steel 0.196"
- Stainless Steel (12 Gauge) 0.1094"
- Copper 0.196"
- Brass 0.196"



4 Roll CNC Roundo Roller

This piece of equipment is crucial to our ability to produce curved panels and our state of the art column covers. The working cycle of this machine is fast, smooth and easy which keeps our product high end and process efficient.

Material Limitations:

- 13' maximum length
- 13" minimum diameter
- .125" aluminum or MCM / ACM material choice
- 16 gauge Stainless Steel

3 Roll Waldemar Roller

This roller allows for larger sheets to be curved providing an accurate and parallel roll position. The roller utilizes a wedge actuated pinch roll positioning system.

Material Limitations:

- 16' maximum length
- 16" minimum diameter
- 12 gauge stainless steel
- 1/4" steel
- 1/8" aluminum
- MCM / ACM with 1" return legs
 - o 8" minimum radius

XYZ 5018 CNC Router Tables – 4

The CNC routers at MDSI represent our main tool for panel dimensioning and cutting. Our programming team converts design information into XYZ technology and is transferred to our CNC tables. This produces accurate panel sizes and returns. The vacuum deck assists us in recycling 85% of our metal waste.

Our bit selection allows us to work with:

- MCM / ACM
- Aluminum
- Acrylic
- FunderMax and other HPL's
- Equitone and other Fiber Cement
- Non Ferrous Metals

Material Limitations:

- 72" (6') x 216" (18') bed capacity
- 1" material thickness



Accurpress 100 Ton x 12' Hydraulic Press Brake

This press brake produces consistently high repetitive accuracies of +/- 0.001". The Accurpress allows us to efficiently produce necessary parts for our end product: fabricated systems.

Material Limitations:

- 12' maximum length
- 1/8" steel for 6' long
- 11 gauge steel for 12' long
- 1/4" aluminum for 6' long
- 1/8" aluminum for 12' long

Roper Whitney Brake

The brake is used in folding and shaping many types of materials with different thicknesses. It provides high ease of use, speed and accuracy which provides MDSI efficiency to allow us to maintain project timelines.

Material Limitations:

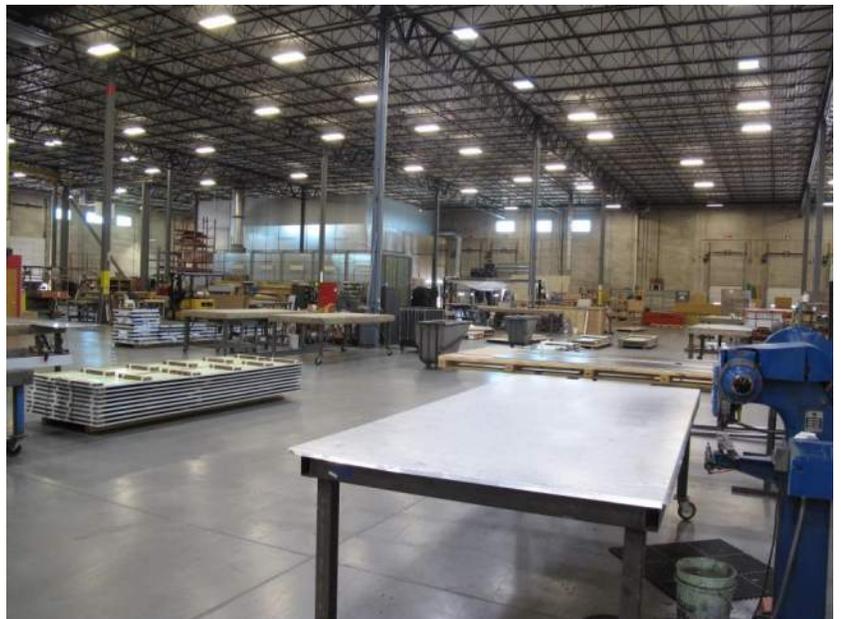
- 10' 2" maximum length
- 1/8" aluminum
- 14 gauge mild steel
- 18 gauge stainless steel

Roper Whitney Shear

An extremely reliable machine, the shear has a lot of standard features and capabilities that are typical within our industry. It has a high cut quality with a fast and highly accurate power backgauge.

Material Limitations:

- 10' 2" maximum length
- 1/8" aluminum
- 14 gauge mild steel
- 18 gauge stainless steel



Welding Department:

Are you looking for depth or dimension for your project? One option is to bring areas off of the façade. MDSI is experienced in constructing structural elements for exterior panels. Constructed frames are put together in our welding department. This provides a consistent approach that will hold / attach exterior panels with a straightforward install. Our welding equipment includes:

1. Lincoln MIG (Metal Inert Gas): MIG welders can work with mild steel, stainless steel and aluminum. Thicknesses can vary from thin gauge sheet metal to heavier structural plates.
2. Lincoln TIG (Tungsten Inert Gas)
3. Miller TIG (Tungsten Inert Gas) TIG welders are usually used for thinner gauge material. Power can be lowered so you don't blow through the metal. Heavier gauge material can be worked on; you just have to have a unit that can put out the power necessary.

Elumatec Double Headed Saw

This saw is used for sizing MDSI extrusions, aluminum tube, and plate material. The saw cuts external dimensions at all angle positions, which means no length calculations are necessary.

Material Limitations:

- Aluminum only 4" x 10" tube is max size

Multicyl Punches

MDSI has the capability to unitize our hole punching in our material. Once the configurations for a specific material are set, the machine can quickly accomplish the required tasks. This provides a very efficient process with versatile methods.

Material Limitations:

- Big hole size: 5/16" x 1/2" slot on 1/4" aluminum
- Small hole size: 1/4" holes on 1/8" aluminum

Crane-Tec

The crane in our shop allows us to construct and work on large high end features. These features are kept out of the elements and in the controlled environment in our shop

Material Limitations:

- 3 ton
- 28' max height

Metal Design Systems, Inc. (2018) Shop Equipment Information

