



**KYEON**

**FIBER LASERS**





Some of the Revolution Machine Tools Team

## ABOUT REVOLUTION MACHINE TOOLS

Revolution Machine Tools (RMT), founded by long time industry leader Kyle Jorgenson, is a metal fabrication machine tools company. RMT's design team has created the most innovative and precise tools in the North American market today. We are partners with leading manufacturers who build our designs to our stringent specifications in state of the art manufacturing facilities.

Kyle Jorgenson started in the Machine Tool industry working with his father, Roger Jorgenson, who founded Jorgenson Machine Tools in 1974. Roger taught Kyle how important relationships and customer service are, and Kyle has built his reputation on those principles. Revolution Machine Tools is supported by an ever expanding team of industry professionals, which include design, marketing, service and support, who have these same values and respect Kyle's vision. Together, they are creating a revolution in the Machine Tool industry.

RMT's main focus is in large cutting, forming, and rolling machines for the metal fabrication industry. RMT's research and development team has created the most innovative, fast, durable and accurate machines in the industry. Our machines are all backed by a strong warranty and an outstanding service team dedicated to keeping your machines operational. We understand the time value of money and how expensive downtime can be.



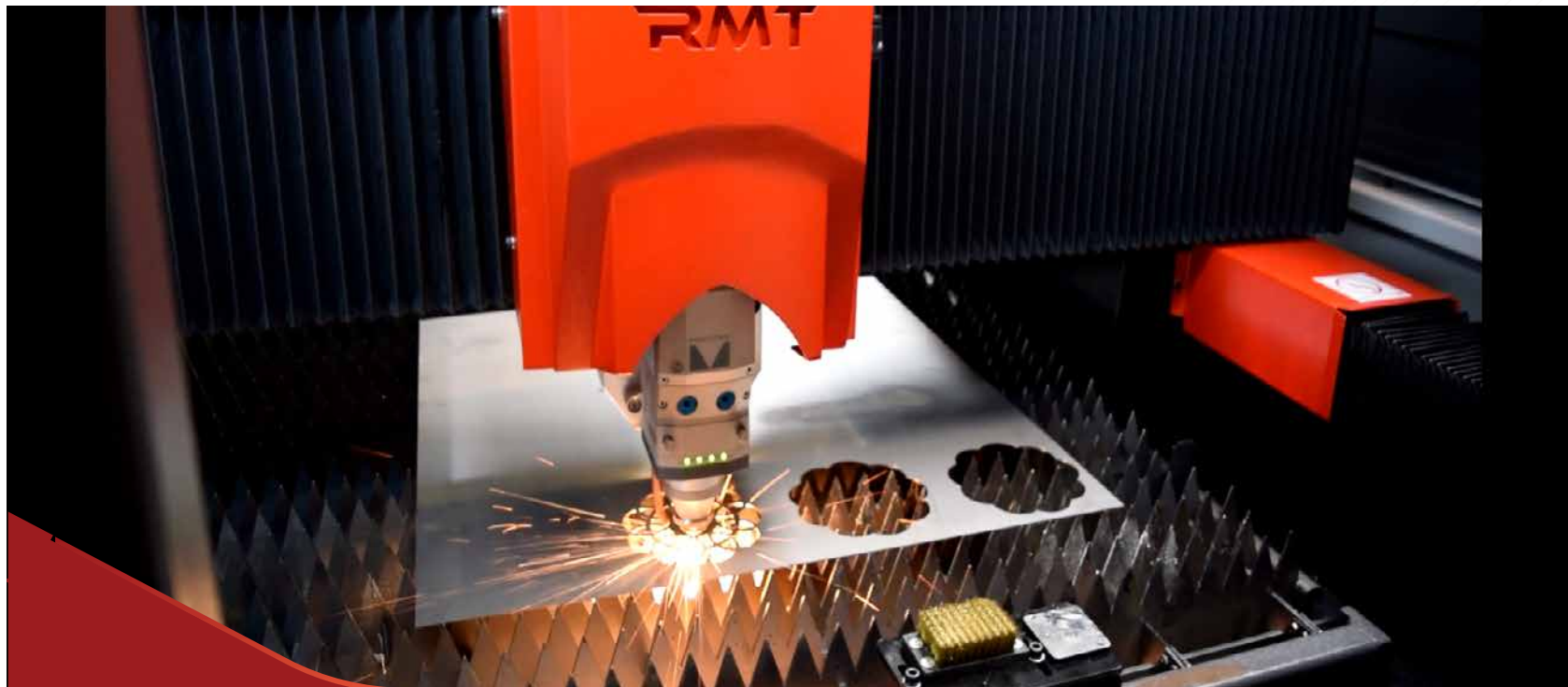


## KYLE JORGENSON / President

RMT offers several innovative machines including Fiber Lasers, Press Brakes, Plate Rolls, Ironworkers, Angle Rolls, Shears, Structural Steel Drills, Band Saws, Hydraulic Presses, Pipe Threading and Beveling and much more. All RMT product designs are built for durability, precision, repeatability, and speed.

## PRE-SALE CONSULTATION

RMT's commitment to service begins with our site assessment consultation. Before we even discuss purchasing equipment we make an assessment of your production area to determine whether the equipment will work well in your manufacturing environment. We look at where the equipment will be placed on the production floor, how it will be brought into the facility, and even ways to make the disposal of scrap and waste easier to remove. We will also recommend the proper installation of our equipment, or we can even come install it for you. More importantly, we can verify adequate electrical, pneumatic or hydraulic requirements and we look at the surrounding equipment to assess if there are any electro-magnetic or vibration interference issues.



We do all of these things because:

**We take pleasure in helping make our customers businesses more successful.**

**Many of our customers have become life long friends that have carried over to several generations.**

# REVOLUTIONARY SERVICE



## QUALIFIED SERVICE TECHNICIANS

Join the Revolution with service technicians from Revolution Machine Tools that can maintain, troubleshoot and fix your machines. Our goal at RMT is to ensure our customers experience smooth operations and greater return on investment by having their machines repaired and maintained by qualified personnel who are committed to the customer's success.

The service team at Revolution Machine Tools is experienced and able to diagnose, repair and install your equipment when you need it. We know that you can't wait for days or weeks to keep your production deadlines, and we are committed to minimizing your downtime and keeping your manufacturing processes moving forward.

## PREVENTATIVE MAINTENANCE PROGRAM

Keeping your machines operating at their peak performance is key to successful manufacturing. At Revolution Machine Tools, we have the right preventative maintenance plan to fit your needs; thus, keeping your machines performing at their most efficient levels.



Our service technicians will create the perfect preventative maintenance plan for you. They will evaluate your machines and provide you with a customized maintenance plan. Each plan will include general maintenance, safety evaluations, suggested repairs and part replacement.

## SERVICE WHEN YOU NEED IT

You can count on Revolution Machine Tools to be there when you need them. How many times have you needed customer service for a machine breakdown? Each and every breakdown equates to a loss in opportunity cost and profit. At Revolution Machine Tools, we are committed to making sure you get the most out of your equipment, and when it does breakdown, providing repair services in a timely manner.

So, if you are in need of a troubleshooting or repair, you can reach a service technician by phone or email and we will strive to respond quickly. You don't need help in two days, you need it now. You can count on Revolution Machine Tools because we are committed to getting you up and running when and where you need us.





# PARTS & TOOLING



## SUPERIOR PARTS AND TOOLING

Every machine used in the chipping, fabrication and forming of metal has consumables and tooling to keep them performing efficiently. These consumables and tools range from hydraulic oil, laser nozzle tips, replacement parts, software and more. Making sure you have the right products to take care of your machines is what we at Revolution Machine Tools specialize in. We stock the highest grade consumables, replacement parts and tooling to fit your needs; and, if on the rare occasion we don't have the part, we most likely know where to find it.

Our parts and tooling department is constantly looking for ways to maximize the potential of your machines. Specialized tooling can be ordered and shipped to your location. We have qualified customer service representatives who can help you find solutions and answers to your manufacturing needs.

Revolution Machine Tools and its staff are committed to providing you the most effective service possible. We encourage you to call, even if we don't carry your brand of machine, and see if we can support you in making sure you have the right parts and tooling to fulfill your production goals and needs.



*Talip, Parts and Tooling Manager*

## REPLACEMENT PARTS AND ACCESSORIES



**CONSUMABLES**



**FIBER LASER HEADS & OPTICS**



**SPARE PARTS**



# BENEFITS OF RMT KYSON FIBER LASERS

The RMT KYSON Fiber Lasers bring a cost effective, low-maintenance, low operating cost and environmentally friendly solution to your organization. Our fiber laser machines provide quality cutting and tolerances with minimal productivity loss between jobs, equating to a higher return on investment.

- Manufactured by people who use their own machines
- Laser beam transmitted through a fiber optic cable rather than with mirrors and channel tubing resulting in negligible power loss.
- The laser light source has a life expectancy of more than three times that of an equivalent CO2 laser.
- Higher cutting speeds possible
- Dual interchangeable tables allow for faster loading and unloading, reducing downtime
- Laser wavelength is one-tenth of a CO2 laser
- Reduction in cutting variables or tribal knowledge
- Fiber Laser is extremely efficient, equates to very low power consumption
- Low cost of operation, reduced energy cost, no laser gases required to produce beam
- High cutting flexibility (Steel, Stainless Steel, Brass, Copper, Titanium, Aluminum, and more)
- Very few consumables



Conservative Production Capacity		2000 W					3000 W					4000W					6000W								
Material	Assist gas	20 Ga	10 Ga	1/4"	5/16"	3/8"	5/8"	0	13/64"	5/16"	3/8"	3/4"	24 Ga	14 Ga	5/32"	1/4"	3/8"	1/2"	7/8"	0	13/64"	5/16"	1/2"	5/8"	1"
Mild steel	Oxygen	[Progressive bar]					[Progressive bar]					[Progressive bar]					[Progressive bar]								
Stainless steel	Nitrogen	[Progressive bar]					[Progressive bar]					[Progressive bar]					[Progressive bar]								
Aluminum alloy	Nitrogen	[Progressive bar]					[Progressive bar]					[Progressive bar]					[Progressive bar]								
Copper	Oxygen	[Progressive bar]					[Progressive bar]					[Progressive bar]					[Progressive bar]								
Brass	Nitrogen	[Progressive bar]					[Progressive bar]					[Progressive bar]					[Progressive bar]								



**WHY?**  
 RMT MACHINES  
 CUSTOMER FRIENDLY  
 SUPPORT  
 INNOVATIVE  
 POSITIVE  
 PRECISE  
 TIMELY

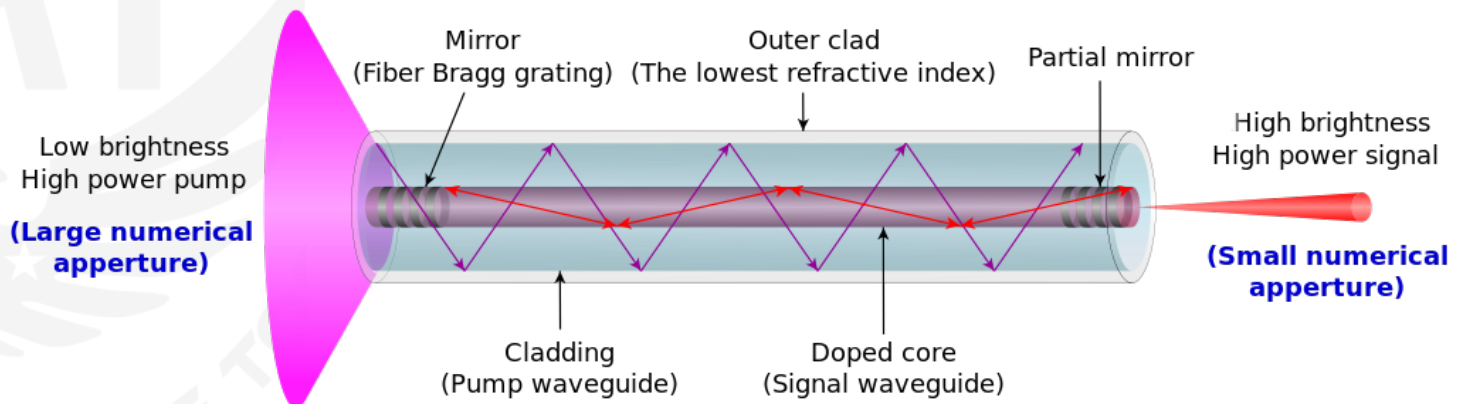
# MAIN FEATURES



## LASER LIGHT SOURCE AND CHILLER, IPG LIGHT SOURCE, OR NLIGHT

RMT has partnered with industry leaders for the highest quality laser light sources on the market. Ytterbium fiber lasers operating at the 1070 nm wavelength are perfect for laser cutting. The operating wavelength, multi-kilowatt power, good beam quality, wide operating power range, power stability and small spot size on our laser are perfect for most cutting applications. Fiber lasers have a wide dynamic operating power range and the beam's focus and position remain constant, even when the laser power is changed, allowing consistent processing results every time. A wide range of spot sizes can be achieved by changing the optics configuration. These features enable the end user to choose an appropriate power density for cutting various materials and wall thicknesses.

The laser light source chiller is a closed-loop liquid cooling system. The temperature of the light source is constantly monitored by the chiller, ensuring the light source is running at optimal temperatures. The standard cooling system will protect the laser in an environment up to +190 °F.



We benefit from:

- No mirrors
- No glassware
- No cathodes
- No anodes
- No turbines/fans
- No vacuum pump
- No laser light source lasing gases
- No loss of power over time
- No beam divergence



1" mildsteel cut with a 4 kW RMT KYSON Fiber Laser



## YLS SERIES

### HIGH POWER CW YTTERBIUM FIBER LASER SYSTEMS



#### Applications

- ▶ Cutting
- ▶ Drilling
- ▶ Annealing
- ▶ Brazing
- ▶ Welding
- ▶ Cladding
- ▶ Heat Treating



#### Efficiency

- ▶ >40% Wall Plug Efficiency (WPE)
- ▶ >50% WPE on ECO Series
- ▶ Industry Leading Diode Lifetime
- ▶ Hot Diode Redundancy



#### Capabilities

- ▶ Plug & Play Design
- ▶ Compact, Rugged & Efficient
- ▶ Output Power up to 120 kW



The YLS series fiber laser, with output powers up to 120 kW, was developed as a complete system for industrial applications. It has garnered wide acceptance in the very demanding automotive, aerospace and oil and gas industries. All YLS systems are housed in a NEMA 12, air-conditioned and sealed cabinet adding to the robustness of the unit. These systems are controlled by either digital I/O, analog control or IPG LaserNet software with the additional option to add either DeviceNet, Profibus or Ethernet interfaces. This design features the widest range of fiber diameters, as well as the option to terminate to up to 6 ports from one power source.

### YLS Configurations

#### **NEW!** YLS-U Series 1-10 kW

The Smallest Form Factor Industrial Lasers in the World!

The YLS-U Series is developed specifically for applications where space is a premium. YLS-U lasers provide up to 10 kW average power in the smallest form factor available on the market. Having full featured interfaces and safety electronics of the new generation IPG fiber lasers, the YLS-U design is cost/performance optimized and can be easily integrated within cutting machines. Internal dehumidifier enables the laser to be used in the harshest of production environments.



#### **NEW!** YLS-AMB

Adjustable Mode Beam Capability  
Independent Power Control of  
Core and Ring

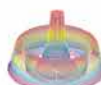
**Adjustable Mode Beam (AMB)** capability on the flagship YLS family of lasers allows customers to change the output beam mode on-the-fly and increase flexibility in cutting and welding applications. AMB enables programmable adjustment of the output beam mode to any combination of a small-spot high intensity bright core to a larger ring-shaped beam. AMB allows processing a wider range of material thicknesses and improves welding and cutting quality and speed.



Central Beam,  
up to 12 kW



Ring Beam,  
up to 15 kW



Central + Ring Beam,  
up to 20 kW

- ▶ On-the-fly Beam Mode Tunability
- ▶ Widest Range of Applications
- ▶ Process a Variety of Materials
- ▶ Improve Process Quality

#### YLS

The Highest Laser Powers with  
Unmatched Flexibility of Options  
1-8, 10, 12, 15, 20, 30, 50, 100 and  
120 kW  
Custom Higher Output Powers are  
Available.

The low order mode YLS fiber lasers operate in CW/modulated modes up to 5 kHz with wall plug efficiencies >40%. The wide dynamic power range with no change in beam divergence or beam profile allows a single laser to be used for both high and low-power applications such as welding, drilling and cutting, a previously unheard of capability. The high brightness allows the use of long focal length processing lenses for vastly improved depth of field and minimal damage to optical components. The units can be supplied with fiber lengths up to 100 meters, different fiber diameters and variety of multi-port beam switches, beam couplers, termination optics and scanners. The options determine the laser part number and informs cabinet size.





### YLS-CUT

The Ultimate Industrial Fiber Laser for the Most Demanding 24/7 Cutting Applications

**NEW!** Now up to 20 kW!

1-8, 10, 12, 14, 15 and 20 kW  
Perfectly suited for applications that cannot tolerate downtime or service intervention.

The YLS-CUT Series is developed specifically for demanding 24/7 laser cutting applications. The CUT Series features a super compact design with the laser housed in an hermetically sealed cabinet containing an internal dryer, enabling the laser to be used in the harshest of production environments. The YLS-CUT incorporates the latest IPG technical innovations in design of diode modules, fiber block, digital power supplies and digital control electronics, resulting in unparalleled reliability and increased control flexibility, stability and precision. The new control system allows integrated control of both laser and process subsystem. The YLS-CUT Series also features the IPG industry leading >40% wall plug efficiency that delivers significant power savings to manufacturers. Hot redundancy ensures 100% up time with no change in power, ensuring record reliability and maintenance-free operation. The CUT series is available from 1-20 kW with a wide variety of fiber delivery options, starting at 50 µm core diameter.

### YLS-SM

Single-mode Industrial Fiber Lasers  
1-10 kW

The YLS-SM Single-mode Ytterbium fiber laser system range up to 10 kW, operating in CW or modulated modes up to 5 kHz. YLS single-mode systems are used in advanced materials processing requiring extremely high power and brightness, as well as in directed energy applications.



### YLS-CL

The Fiber Laser for Cladding, Welding, Hardening and Surface Treatment  
4, 6, 8 and 10 kW

The YLS-CL Cladding Series of fiber lasers specifically targets cladding, welding, hardening and surface treatment applications. The YLS-CL offers a wide range of output powers, chiller option, different interface configurations and plug-and-play fiber delivery with interchangeable process fibers available in either square or round diameters up to 1 mm.



**NEW!**

### YLS-BR

The Fiber Laser Specifically Developed for Trifocal Brazing and Welding Applications  
5, 6 and 8 kW

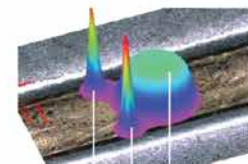


#### Features and Benefits

- ▶ Cleaning & Joining in One Step
- ▶ Reduction of Manual Cleaning Effort
- ▶ Enables Process Automation
- ▶ Improved Reproducibility
- ▶ Minimized Heat Effects on the Assembly

To obtain high-quality brazed joints, the base metals must be clean and free of oxides. Contamination can cause poor wetting of brazed parts impeding flow of the filler material, compromising the strength and visual appearance of the joint. To address these problems, IPG has introduced a new application based YLS-BR Trifocal Brazing Fiber Laser, available with 5, 6 or 8 kW average output power.

The YLS-BR features a specially designed three-core process fiber and a trifocal laser spot. In trifocal laser brazing the main laser spot is accompanied by two smaller ablation spots that are offset laterally and precede the main spot in the brazing direction. The localized heating of ablation spots allows cleaning of the base metal parts improving filler material flow, resulting in a reproducible brazed joint with an increased strength. This specialized brazing laser allows for both cleaning and joining in one step with improved joint appearance: straight seam borders, smooth surface, no spatter and control of brazing temperature. Through reduction of manual cleaning efforts, utilizing the YLS-BR enables process automation at a fractional cost.



LASER SPOTS

### YLS-HPP

High Peak Power Delivers 2X Peak Power Mode in the Latest Releases of YLR and YLS Lasers.



#### Features and Benefits

- ▶ Faster & Cleaner Piercing
- ▶ Improved Quality
- ▶ Repeatability
- ▶ Less Waste

#### Cleaner and Faster Piercing

REDUCED SPATTER



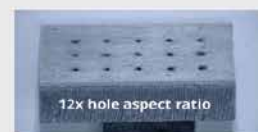
Regular Laser



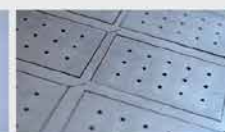
HPP Option

#### Improved Drilling Quality

FAST REPEATABLE AND CONSISTENT DRILLING



12x hole aspect ratio



0.5 mm holes 6 mm Aluminum

#### Denser Part Nesting in Thick Materials

SHORTER LEAD-INS REDUCE MATERIAL WASTE



#### Improved Fine Feature Quality

HIGH QUALITY CUTS OF INTRICATE PARTS & HEAT SENSITIVE MATERIALS





# CUTTING HEAD

Precitec ProCutter

Adjustment Of Focal Length:  
Can be done manually or  
motorized via machine control



Focusing Lens:  
High-quality optics  
X/Y adjustment  
No repositioning after changing necessary  
Additional protective glass below  
focusing lens



Protective Glass Cartridge :  
To protect the optics against dirt and fumes  
Monitoring of attendance and contamination  
Tool-less, easy to change



LED Bar:  
For immediate display of the  
current system state  
(pressure, temperature, drive, contamination)



Distance Measurement:  
Fast, exact, drift-free distance measurement  
at any operating temperature, even at high  
acceleration



External Interface:  
 Output of all sensor data as an analog value  
 Readout the values via Bluetooth®  
 Set of thresholds

Protective Glass Of Collimation Unit:  
 At straight configuration

CutMonitor: (Optional)  
 Monitoring of piercing process and detection of cut interruption  
 Integration into angled collimation

Mounting of the head:  
 Easy accessibility from the front



## PROCUTTER APPS

More reliability thanks to new sensors and modern interfaces.

Different sensors are installed in the processing head to detect faults at an early stage and prevent possible damage. Temperature and scattered light sensors provide information about the condition of the entire head and of individual components like the collimation and focusing optics, the protective window and the sensor insert. The cutting gas pressure and the interior are also monitored by means of suitably-mounted pressure sensors.



Thanks to the Bluetooth® interface, you also have the option of monitoring the current system status on your smartphone or tablet PC. Sensor information is thus visualized individually, showing the status of all monitored components in the head. The displays include the temperatures of focal and collimator lenses, the pressures of the cutting gas and the purging air and information about the optics, such as the current configuration or target and actual focal positions. User rights determine whether only sensor values can be displayed or thresholds can also be set. This enables monitoring and initial fault diagnosis to be carried out remotely.





## ROBUST FRAME CONSTRUCTION

A heavier frame means less vibration and better accuracy. The machine frames are reinforced to minimize twists and deformation while the robust frame of the machine is joined to the chassis by steel bars.

The machine frame goes through a heat treatment process for welding stress relief. Our RMT KYSON frames are machined with 5 Axis CNC machining centers with single reference fixing. This keeps all axis parallel and the surfaces of the machine precise which provides great accuracy and longevity to the machine.



## HIGH PRECISION DRIVE SYSTEM

The Wittenstein high precision helical gear rack and pinion system uses precision planetary and servo-worm reducers. Our special design eliminates any noticeable backlash variance. The rack used in these systems is also hardened & precision ground.



## CUTTING TABLE

The dual cutting table system is designed for increasing your workflow and reducing time spent on placing and removing materials. Four hydraulic cylinders raise and lower the cutting table to position the material while loading and unloading the machine. Cutting table exchange speed can be adjusted according to thickness of materials.



## DUST-COLLECTION FUNCTION

An automatic flap opens and closes according to the movement of the processing head, offering on-the-spot dust collection during processing. It also allows for acid smells or fumes created during cutting to be removed from your shop environment. Automatic Zoned fume extraction is standard on all RMT Fiber Lasers.



## CONVEYOR SYSTEM

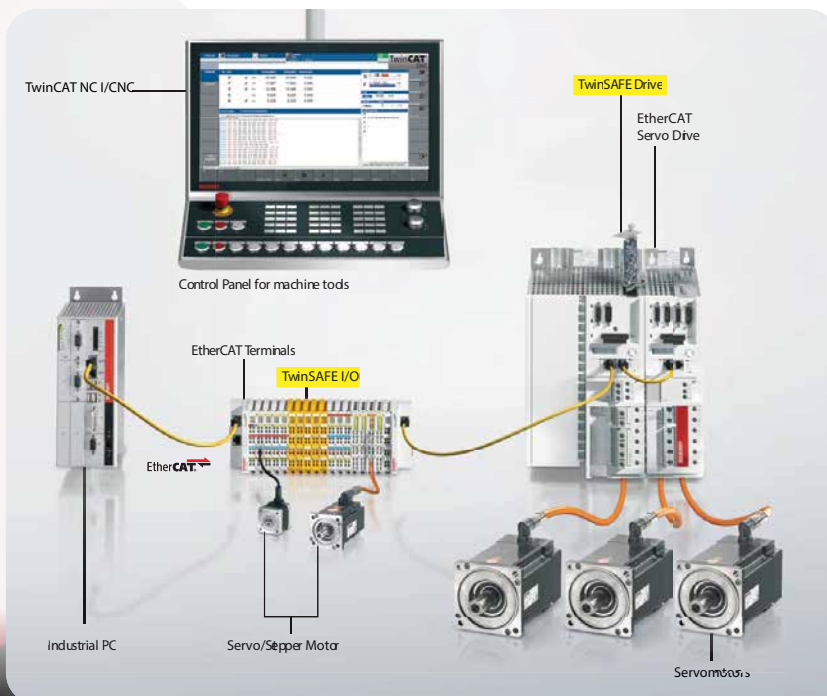
A special hard steel construction conveyor system, standard on our machines, is located under the workspace. The conveyor removes slag and small parts during the cutting process. The operator can choose the movement direction of the conveyor.





## CONTROL & SOFTWARE

The RMT KYSON Fiber Laser is controlled with a Beckhoff CNC control unit which provides unprecedented control of the cutting process. The control panel features an alphanumeric keyboard, PLC keys on the sides, touch screen keyboard and USB ports. The memory and storage can be increased based on manufacturing demands while the open CNC program, with a Windows based operating system, makes data sharing easy with other computers. A 15" TFT LCD screen ensures that even in poor lighting you have optimal addressability and contrast.



The CP6242 Panel PCs are available with a choice of Intel® processors. The CP6242 Panel PCs can be equipped with a CFast card and a 2½-inch hard disk or SSD. Units containing the more powerful Intel® Core™ i3/i5/i7 processors feature a fan cartridge with speed-controlled fans supported by dual ball bearings. In front of the fan cartridge a 2 cm space is required for ventilation. In each configuration the Panel PCs of this series are approved for ambient temperatures between 32 and 131 °F. Due to its two independent Ethernet interfaces the CP6242 is ideally suited as a compact central processing unit for an EtherCAT control system. A free Mini PCI slot enables different fieldbus cards or a third, independent Ethernet interface to be used. NOVRAM for fail-safe data storage can also be plugged into the Mini PCI slot.

- **Job List**

Used for continuing automatically to the next program even for different material types and thicknesses by automatic parameter selecting.

- **Manual Remnant**

A cutting function used for removing the part from the scrap plate after cutting the material.

- **Job repeat and sheet angle detection**

Starting point and sheet angle detection are all features of the RMT KYSON.

- **Pierce feature**

Achieve high-quality cuts while cutting thick sheets.

- **Online parameter changes**

Operator can make changes to the parameters during the cutting process.

- **Graphical chase with NC Graphic**

Watching the real time cutting process graphically with NC Graphics.

- **Practical solutions**

Axis moves to the start point with the touch of a button.

- **Film Burning**

You can use various film burning options.

- **Work reports in PDF format**

You can save detailed PDF work reports of the cutting process.

- **Wireless connection and service**

You can connect to the machine remotely with an Internet connection provided by wireless modem, USB type adapter or 3G modem for servicing and software upgrades.

- **Test run**

Axis movement simulation without cutting.

- **One Shot via HMI**

You can easily make laser focal adjustment with the one shot feature.

- **Piercing assist**

Controlled airflow during piercing to blow away particles



- **Failure & warning messages**

Laser light source, chiller, cutting head, shuttle table, extraction unit and programming failures are monitored on CNC screen.

- **Running LaserNET from HMI**

LaserNET program provides information to the laser unit and can also be run via HMI.

- **Focus tests**

Focus optimization can be done manually via HMI. Easier access to technical service, one-shot focus etc.

- **Real-time I/O informing**

The digital-analog I/O information can be viewed in Real-time via HMI.

- **Record all errors**

All errors and warnings are recorded by the machine.

- **Feedrate changing during the cut**

You can reduce or increase the speed during the cutting process.

- **Inch-Meter conversion**

KYSON fiber lasers can work in both imperial and metric systems.

- **Languages**

Standard settings include English, Russian, Italian, Spanish and Polish. Other languages are available upon request.

- **Check part**

This feature will allow you to check the parameters and cutting quality.

- **Gas control with PID**

Faster, better and more precise gas control with PID.

- **Jog Functions:** .1, .01, .001, .0001. Inches and continuous and inch increments of 1.0, 0.1, 0.01, and 0.001 mm continuous

## CLEAN CUTTING

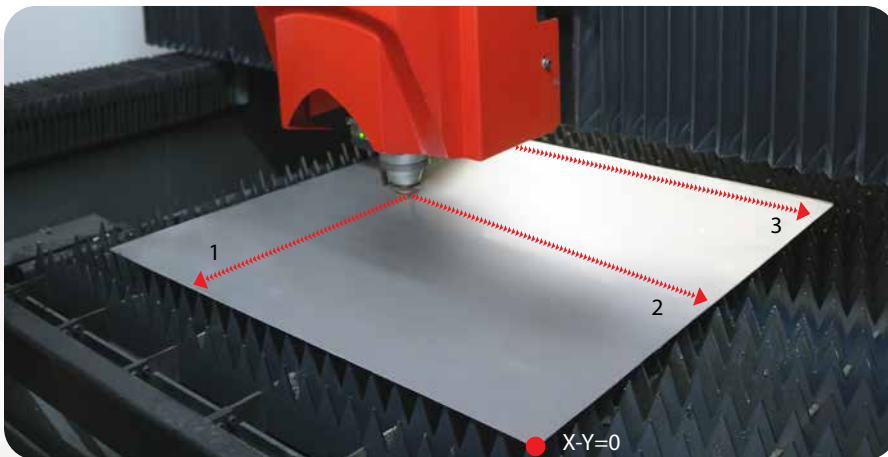
Think of how much more productive can you be when your cut parts don't require clean up. A clean cutting machine exponentially improves your output!





## AUTOMATIC SHEET DETECTION AND FLY CUTTING

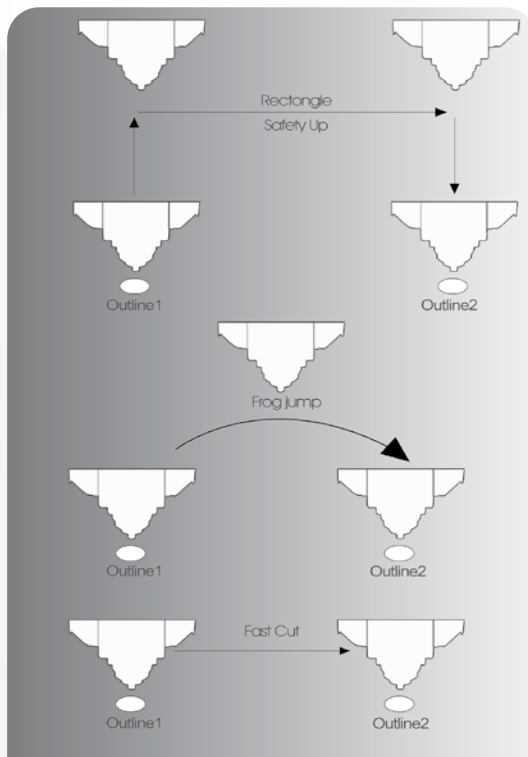
The angle of the sheet and its corner are found automatically by using 3-point detection method on the sheet. Fly cutting allows for extreme cutting speeds on thinner materials that don't require piercing.



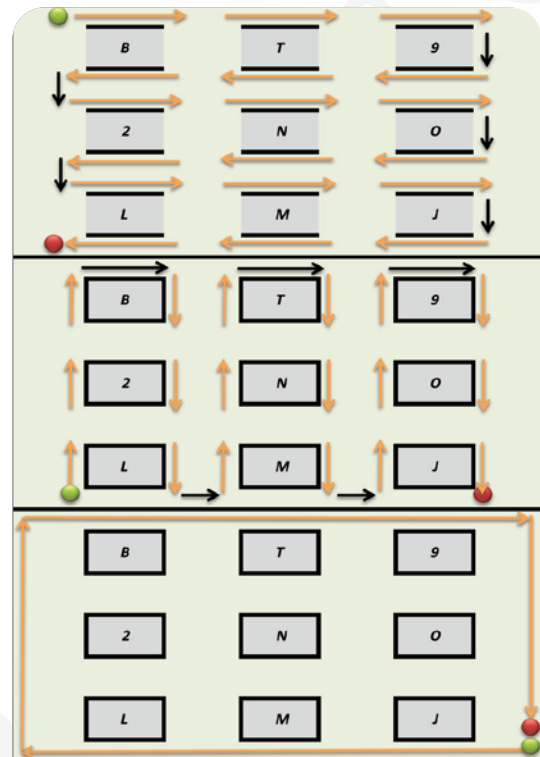
Hexagonal Flycut Sample

## RETRACTION METHOD

Minimize processing time and achieve better stability by selecting the optimal retraction method which can be set according to the material and plate thickness.



Cutting head movement depends on cad/cam, drawing, material and thickness. As you see on the tables, cutting time can be decreased by these options.

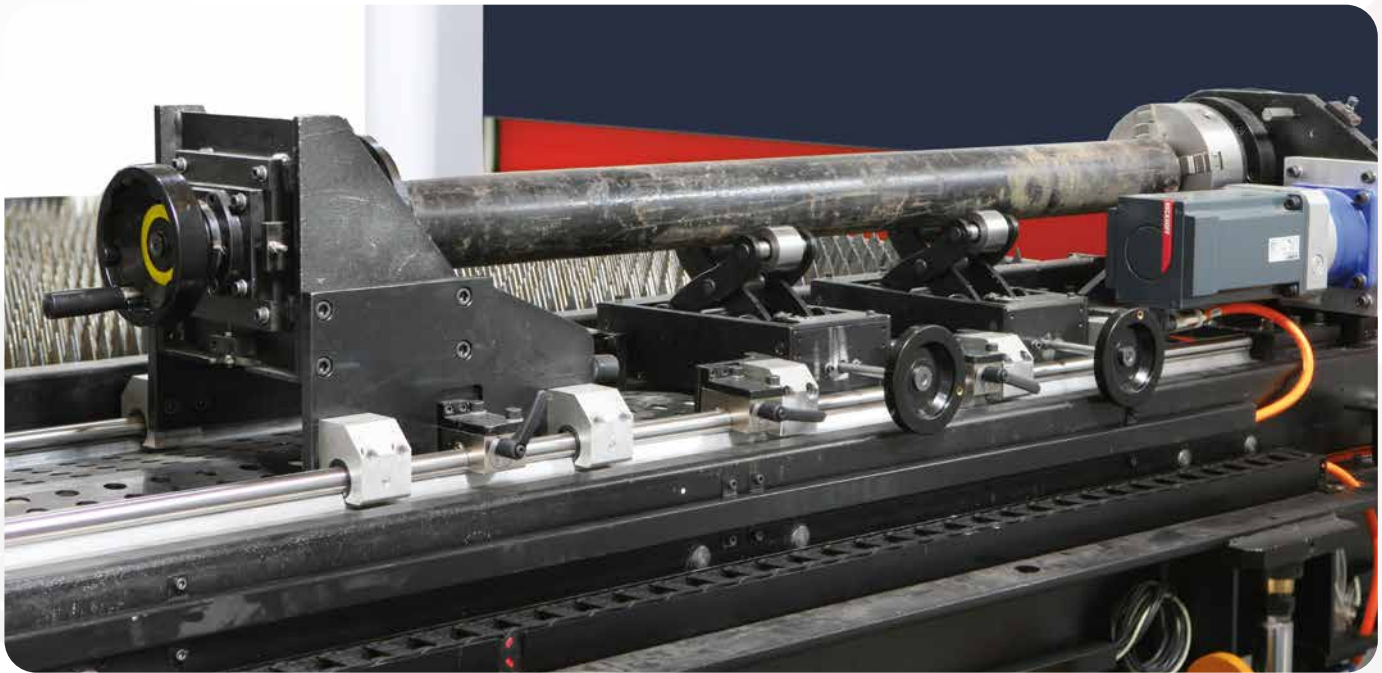


Flycut is a special option of RMT KYSON Fiber Laser. Flycut depends on material, thickness, CAD/CAM and symmetry. Flycut spends less cutting time based on thickness and symmetry of CAD/CAM program.



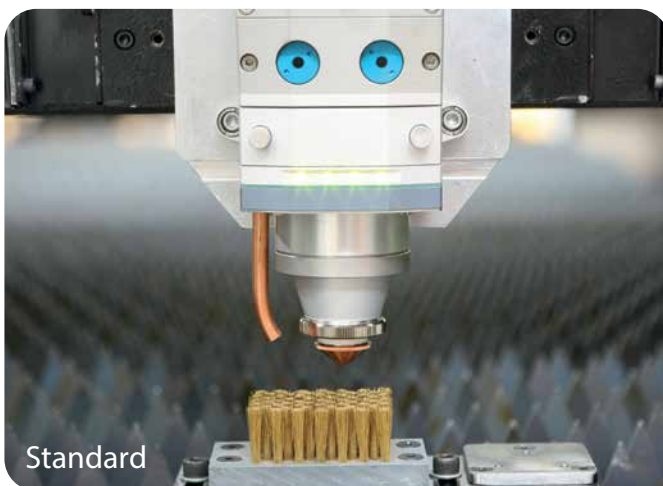
## TUBE AND PIPE CUTTING

The KYSON series offers unparalleled versatility. Our optional tube and pipe cutting system has the capability to precisely cut pipe/tube and makes it a necessity for anyone who needs precision parts made from various materials, sizes, and thicknesses.



## NOZZLE CLEANER

Keeping your machine cutting quickly and cleanly is important. Our nozzle cleaner helps improve the life of your nozzles so your cuts stay consistent, longer.



## OPTIONAL NOZZLE CHANGER

Our optional automatic nozzle changer allows you to adjust for different materials and thicknesses on the fly without the need for manual nozzle changing. When you need to make production deadlines, every minute matters.



## CAD-CAM SYSTEM

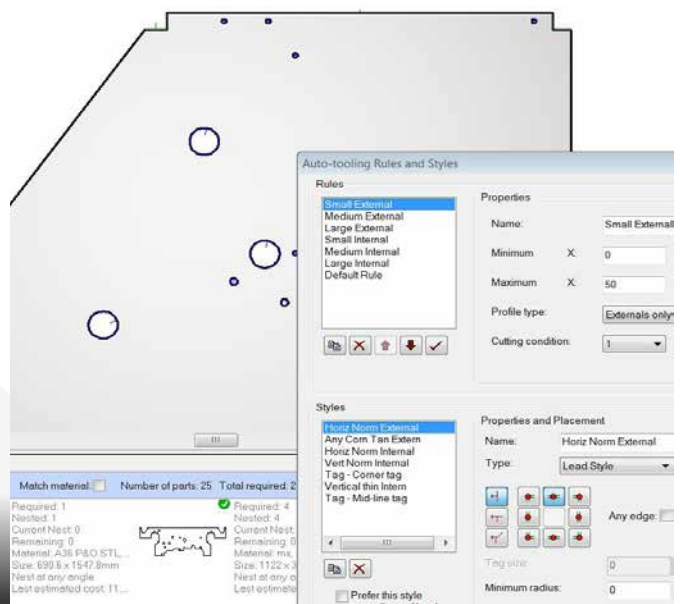
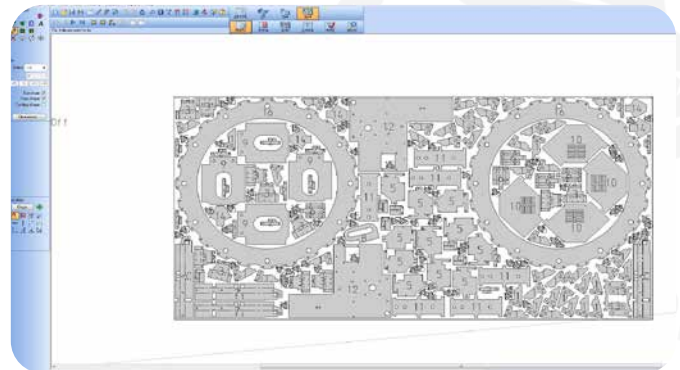
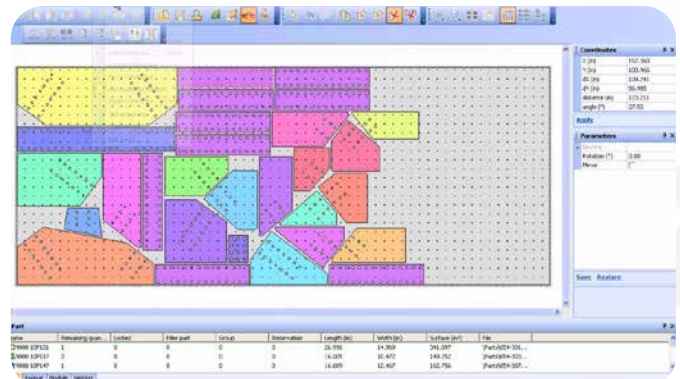
RMT Fiber Laser using software Radprofile Cut Cad / Cam with its own postprocessor.

Features like auto nesting and machining, calculating the time, micro-joint, total cut and more allow ease of cutting.

All data for cutting is installed in the technological Radan charts. This program is designed for nesting and machining and is installed directly on the CNC, without any adjustment to the cutting parameters.

Radan is a fast, modern programming application designed to assist in transferring data from CAD to NC code. If Radan is unable to cut a hole smaller than (0.5mm by the thickness of the material), it will be marked automatically.

- Preparing a normal cut
- Cutting with pre-piercing
- Sheet metal clearances
- Clearances between parts
- Preparing common cut
- Edit cutting speeds
- Adding new material to the list
- Using remnant option (saving excess parts of the sheet)
- Marking
- Giving radius at the corners
- Modifying corners to 90 degrees
- Defining cutting technology (cut1, cut2)
- Giving micro joint for nested parts
- Changing the length of the entrance properties
- Reporting writings with marking property
- Change cutting direction
- Scale dimensioning
- Combining the intermittent lines
- Film burning for covered stainless steel
- Cut 1, cut 2, cut 3, cut 4 and small hole property changing
- Edge clearances of the unit sheet
- Editing the automatic machining option
- Marking speed
- Defining cutting direction while doing automatic contour
- Adjusting of sheet remnant
- No cutting
- Change radius



Lantek Expert Cut is a CAD/CAM nesting software specially designed to automate the CNC programming of sheet metal cutting machines (oxy-cut, plasma, laser, water jet). It is the result of more than 25 year of experience of close collaboration with both manufacturers and machine operators. It perfectly combines machine technology with customers' programming and management requirements.

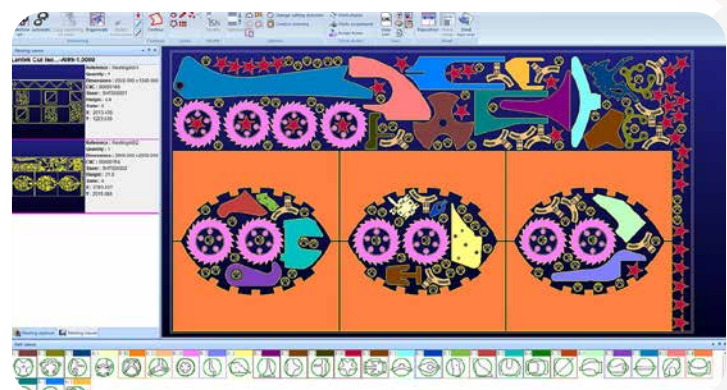
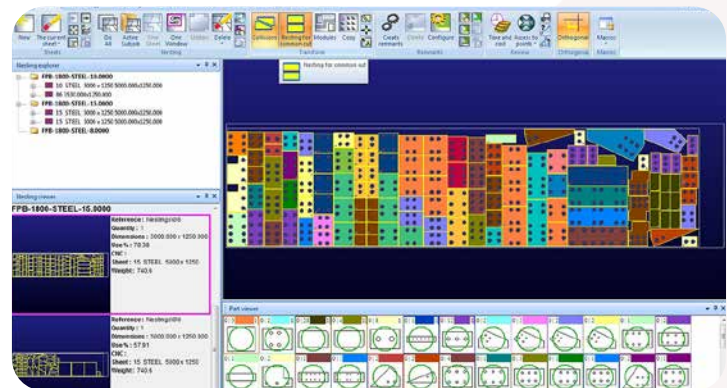
All of the Lantek Expert Cut options are integrated into one program. Lantek Expert is fully integrated with Lantek Integra, an ERP which offers different CAD/CAM/MES/ERP solutions for the sheet metal and fabrication sector. Additionally, Lantek Expert is designed to connect to an external ERP.

Other features of Lantek Expert are:

- Teamwork - This system can work autonomously or be installed as a part of a network. By using the floating license option, multiple users can access the system.
- Time and True Cost Calculations – Lantek Expert manages all the technology of the machine and calculates time and cost by piece and by sheet.
- Parametric Parts Library - The Lantek Expert solution has a wide library of parametric parts.
- Open Database – This database is open and enables the user to access it to find parts, manufacturing orders, plates, etc. by using criteria such as: material, thickness, client, date, etc.
- 2D Design - Lantek Expert Cut has a highly efficient 2D CAD module especially created to design 2D plate parts.
- Intelligent Import/Export - Lantek Expert Cut may be linked to the major CAD systems on the market (DXF, DWG, IGES, DSTV, etc.) and may also use graphic files (jpeg, bmp, tif, gif, pcx, etc.).
- Integration – Lantek Expert works with mainstream 3D design systems (SolidWorks®, Autodesk Inventor®, Solid Edge®, Catia®, and more.)

### Nesting:

This system provides a perfect combination of automatic, semi-automatic, and manual nesting, which provides great flexibility and optimum performance. Automatic nesting, along with manual nesting functions like copy, moving, and rotating, will allow you to create a very powerful tool.



Reference	Material	Thickness (mm)	Dimensions (mm)	Qt
98300023-3	Inox	4.0000	3000.000x1200.000	98
AA128-8	Inox	2.0000	2000.000x1000.000	99
AA161-3	Inox	1.2700	2000.000x1050.000	88
IN0X300015008	Inox	8.0000	3000.000x1500.000	0
4	ST-32	2.0000	2000.000x1000.000	99
0GE	ST-47	1.5000	150.500x159.000	1
15B	ST-47	8.0000	2860.000x1005.000	0
15D	ST-47	4.0000	3000.000x1200.000	5
76111022-8	ST-47	12.7000	155.000x111.000	99
77040486-8	ST-47	1.5000	2650.000x1000.000	64
77040494-0	ST-47	7.9400	2000.000x1200.000	97
98010017-0	ST-47	4.2500	2495.000x1200.000	49
00000000-0	ST-47	2.0000	2440.000x1200.000	00



# NEED A WORKHORSE?

The RMT Kyson Fiber Laser can be manufactured in any size, up to 80' in length. Easy to use, operator friendly, automatic focus cutting head. Laser Light source has an optional modular structure that allows you to upgrade your laser power.

Order your machine with our Upgrade Plan for future power increases. For example you can upgrade a 3Kw laser to a 4kW. Excellent cutting integrity is maintained over the cutting area because the laser beam is transmitted to the cutting head via a flexible fiber optic cable with low energy consumption, this machine is environmentally friendly. On average the total energy consumption of a 2kW laser is only 11 kW! Mechanically robust and rigid frame (high yield plate construction). Built-in conveyor system discharges slag and material. Automatic dual pallet exchange work table. ISO-9001 TSE quality documents



# KYSON FIBER LASER



## STANDARD

- Stress relieved laser machine frame
- Auto-changing dual pallet system
- IPG Light source
- IPG Chiller
- Radan or Lantek CAD/CAM system
- Precision Rack & Pinion Drive System (Made in Germany)
- 3 lower protective lenses
- 5 Nozzles each of the Following: (1.0mm, 1.2mm, 1.5mm, 2.0mm , 2.5mm , 3.0mm)
- 3 Ceramic Nozzle Adapters
- Auto-calibrated nozzle system
- Lens with 5.9" Focus Length
- Smart Slag Collection System/ Chip Conveyor
- Fiber Beam Transmission System (Fiber Cable)
- Operates with both N2, O2 and shop air (cutting gases)
- Home Position Alignment System
- Auxiliary Gas Selector
- Auxiliary Gas Pressure NC function
- Auto Reflection Warning
- Ergonomic, height adjustable control panel
- Working Lights
- Light safety barrier
- Warning Indicator Lamps
- Lens Cleaning Kit
- Removal and Adjustment Tools
- Ground Plates
- User Manuals in English

## OPTIONAL

- Dust Collection Unit
- Additional Operator Glasses
- Lens with 7.874" Focus Length
- Sheet loading & unloading systems
- Automation & storage systems
- Automatic Nozzle Changer
- Custom table sizes
- Up to 15 kW laser light sources
- Air conditioner for electrical panel
- Sigma Nest, Metalix, Almacam, and many more CAD/CAM software
- LCM (laser cut monitor) sensor for pierce detection and cut loss control
- Ball transfer systems for table loading
- Mezzanine systems to better utilize space
- Posts for any Cad/Cam system
- nLight, Light Source (No extra cost)
- Nitrogen Generator Systems
- High Pressure Shop Air Systems
- Automatic cutting heads with beam changing features, zoom - others
- Mirror design (control on the opposite side of the machine)
- Pipe and profile cutting with 3rd pallet

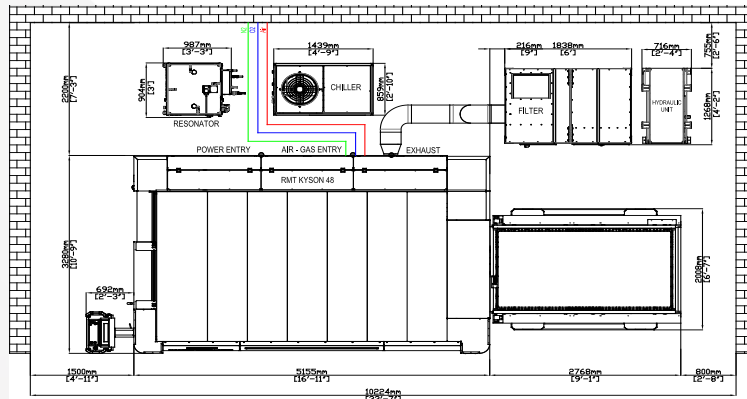




# KYSON 48

Readily available up to 15 kW

Size		4' x 8'		
Model Number		Kyson 48-0.5	Kyson 48-1	Kyson 48-2
Laser Light Source		500 W	1 kW	2 kW
Conservative Production Cutting Capacity **	Mild Steel Oxygen	.197"	.375"	.625"
	Mild Steel Nitrogen	.075"	.125"	.250"
	Stainless Steel	.125"	.187"	.375"
	Aluminum	.075"	.125"	.312"
	Brass	.035"	.081"	.187"
	Copper	.035"	.075"	.187"
Laser Fiber Diameter *		.002" (50 µm)	.002" (50 µm)	.004" (100 µm)
Pulse Peak Power		500 W	1 kW	2 kW
Average Power Consumption (220v/460v 3ph ± 10%)		15 kW	17 kW	21 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%		
Power Stability		± 0.5 % (power monitor)	± 1-3% (power monitor)	± 1-2% (power monitor)
Beam Mode		Direct		
Protection of Laser Beam		Industrial Fiber Cable		
Laser Gas Composition		N/A		
Cooling Water Flow Rate		1.58 gpm (6 l/m)	2.11 gpm (8 l/m)	2.64 gpm (10 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card		
Axis Movement		High Speed 4 Axes Servo Motor System		
Positioning System		Rack and Pinion		
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)		
Acceleration		3G		
Control Input Resolution		0.0001 inch		
Repeatability		± .0004" (± 0.01mm)		
Positioning Accuracy		± .0012" (± 0.03mm)		
Axis	Y AXIS	4' 2" (1270mm)		
	X,U AXIS	8' 4" (2550mm)		
	Z AXIS	5.9" (150 mm)		
Sheet Dimensions		4' 1" x 8' 2" (1250x2500mm)		
Maximum Load Capacity		1,322 lbs (600 kg)		
Shuttle Table Change Time		Double pallet system. Exchange time 30 sec with max sheet weight		
Z - Axis Distance Control		Non-Contact		
ASSIST GAS	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)		
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)		
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)		
Cutting Head		Precitec Light Cutter		Precitec Procutter (Auto Focus)
CAD/CAM Software		RADAN CAD / CAM		
Machine Dimensions (L x W x H)		340" x 130" x 85" (8615x3280x2155mm)		
Machine Weight		22,928 lbs (10,400 kg)		



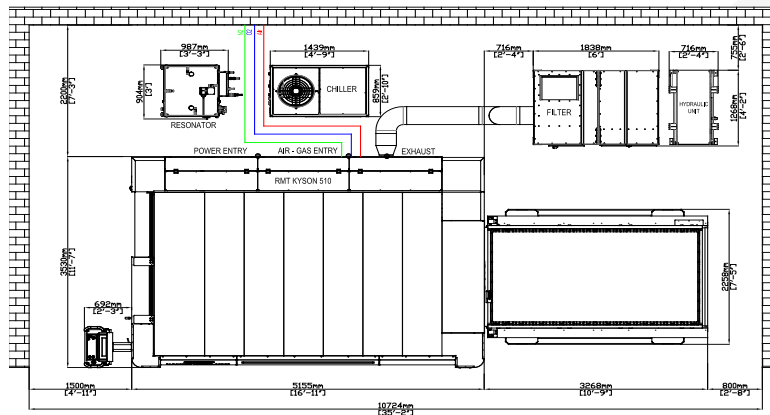
\* Different diameter fiber cables are available.  
 \* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions  
 \* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.  
 \*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

# KYSON 510

Readily available up to 15 kW



Size		5' x 10' (5' x 12' also readily available)			
Model Number		Kyson 510-2	Kyson 510-3	Kyson 510-4	Kyson 510-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Conservative Production Cutting Capacity **	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 μm)	.004" (100 μm)	.004" (100 μm)	.004" (100 μm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack and Pinion			
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)			
Acceleration		3G			
Control Input Resolution		0.0001 inch			
Repeatability		± .0004" (± 0.01mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y AXIS	5' 1" (1550mm)			
	X,U AXIS	10' (3050mm)			
	Z AXIS	5.9" (150 mm)			
Sheet Dimensions		5' x 10' (1530x3050mm)			
Maximum Load Capacity		3,307 lbs (1500 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 35 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
ASSIST GAS	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		359" x 139" x 85" (9115x3530x2155mm)			
Machine Weight		24,691 lbs (11,200 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

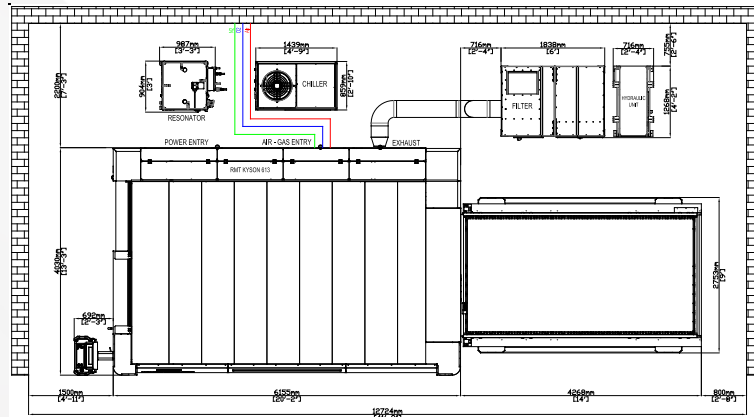
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.



# KYSON 613

Readily available up to 15 kW

Feature		6'6" x 13'1" (6'6" x 12' also readily available)			
Model Number		Kyson 613-2	Kyson 613-3	Kyson 613-4	Kyson 613-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 µm)	.004" (100 µm)	.004" (100 µm)	.004" (100 µm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)			
Acceleration		3G			
Control Input Resolution		0.0001 inch			
Repeatability		± .0004" (± 0.01mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y Axis	6'8" (2050mm)			
	X,U Axis	13'3" (4050mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		6'6" x 13'1" (2000x4000mm)			
Maximum Load Capacity		5,511 lbs (2,500 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 45 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		438" x 159" x 85" (11115x4030x2155mm)			
Machine Weight		34,833 lbs (15,800 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

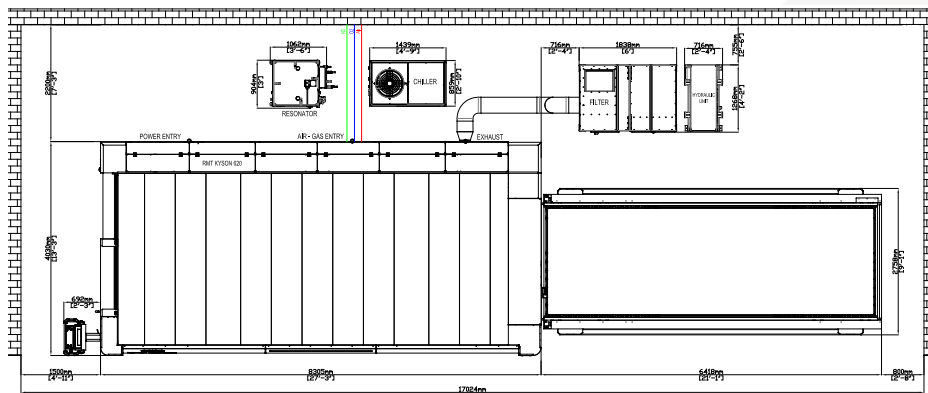


# KYSON 620

Readily available up to 15 kW



Feature		6'6" x 20'2"			
Model Number		Kyson 620-2	Kyson 620-3	Kyson 620-4	Kyson 620-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 µm)	.004" (100 µm)	.004" (100 µm)	.004" (100 µm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)			
Acceleration		3G			
Control Input Resolution		0.0001 inch			
Repeatability		± .0004" (± 0.01mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y Axis	6'7" (2050mm)			
	X,U Axis	13'3" (6200mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		6'6" x 20'2" (2000x6150mm)			
Maximum Load Capacity		8,818 lbs (4,000 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 65 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		607" x 159" x 85" (15415x4030x2155mm)			
Machine Weight		48,722 lbs (22,100 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

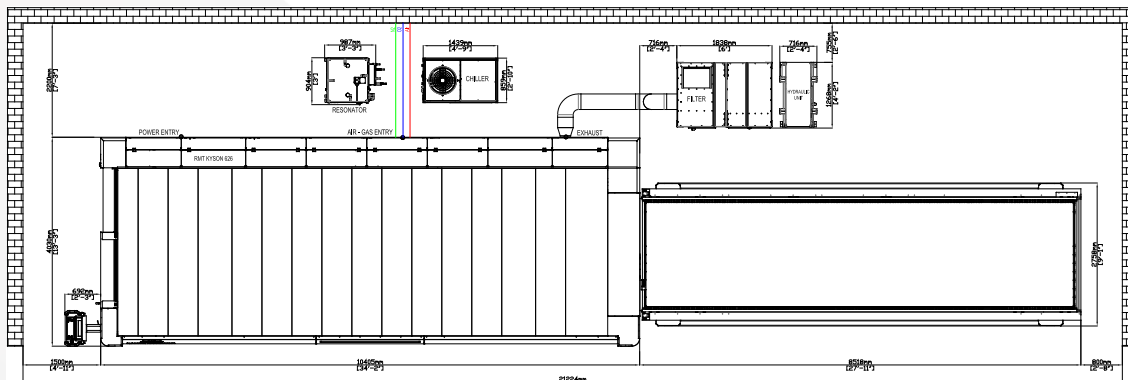
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.



# KYSON 626

Readily available up to 15 kW

Feature		6'6" x 26'6"			
Model Number		Kyson 626-2	Kyson 626-3	Kyson 626-4	Kyson 626-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 μm)	.004" (100 μm)	.004" (100 μm)	.004" (100 μm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)			
Acceleration		3G			
Control Input Resolution		0.0001 inch			
Repeatability		± .0004" (± 0.01mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y Axis	6'7" (2050mm)			
	X,U Axis	27'2" (8300mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		6'6" x 26'6" (2000x8100mm)			
Maximum Load Capacity		13,227 lbs (6,000 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 90 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		773" x 159" x 85" (19615x4030x2155mm)			
Machine Weight		63,934 lbs (29,000 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

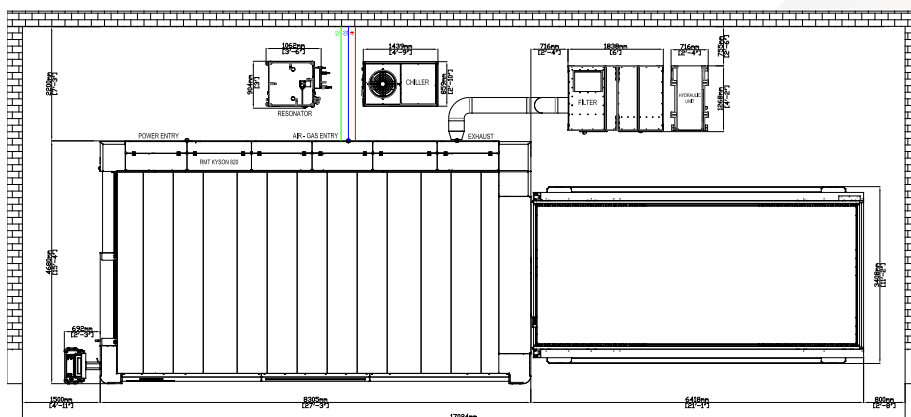
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

# KYSON 820

Readily available up to 15 kW



Feature		8'6" x 20'2"			
Model Number		Kyson 820-2	Kyson 820-3	Kyson 820-4	Kyson 820-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 µm)	.004" (100 µm)	.004" (100 µm)	.004" (100 µm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (400v 50 Hz 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		7,874 IPM (200 m/min)			
Acceleration		3G			
Repeatability		0.0001 inch			
Positioning Accuracy		± .0004" (± 0.01mm)			
Axis	Y Axis	8'10" (2700mm)			
	X,U Axis	20'4" (6200mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		6'6" x 20'2" (2600x6150mm)			
Maximum Load Capacity		11,464 lbs (5,200 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 65 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		607" x 185" x 85" (15415x4680x2155mm)			
Machine Weight		52,910 lbs (24,000 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

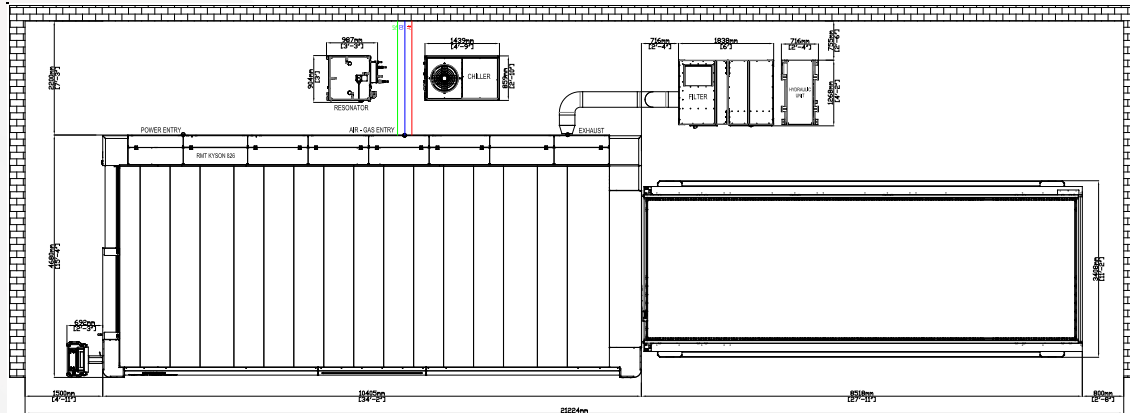
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.



# KYSON 826

Readily available up to 20 kW

Feature		8'6" x 26'6"			
Model Number		Kyson 826-2	Kyson 826-3	Kyson 826-4	Kyson 826-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 µm)	.004" (100 µm)	.004" (100 µm)	.004" (100 µm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		4,330 IPM (110 m/min)			
Acceleration		X,U= 1G ; Y= 1,5G ; Z= 2,5G			
Repeatability		± .0006" (± 0.015mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y, Axis	8'6" (2700mm)			
	X,U Axis	27'2" (8300mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		6'6" x 26'6" (2600x8100mm)			
Maximum Load Capacity		17,636 lbs (8,000 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 90 sec with max sheet weight			
Z - Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 - 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		773" x 185" x 85" (19615x4680x2155mm)			
Machine Weight		68,343 lbs (31,000 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

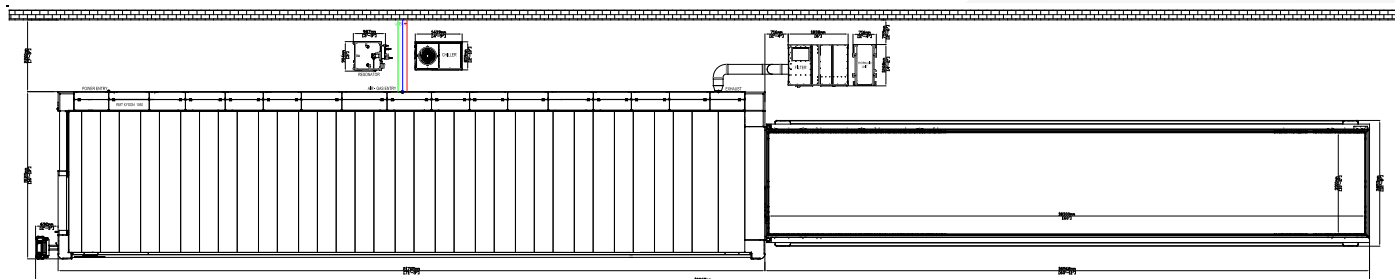
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

# KYSON 1060

Readily available up to 20 kW



Feature		10' x 60'			
Model Number		Kyson 1060-2	Kyson 1060-3	Kyson 1060-4	Kyson 1060-6
Laser Light Source		2 kW	3 kW	4 kW	6 kW
Production Cutting Capacity**	Mild Steel Oxygen	.625"	.750"	.875"	1.00"
	Mild Steel Nitrogen	.250"	.250"	.312"	.312"
	Stainless Steel	.375"	.500"	.625"	.750"
	Aluminum	.312"	.500"	.625"	.625"
	Brass	.187"	.250"	.375"	.500"
	Copper	.187"	.250"	.312"	.375"
Laser Fiber Diameter *		.004" (100 μm)	.004" (100 μm)	.004" (100 μm)	.004" (100 μm)
Pulse Peak Power		2 kW	3 kW	4 kW	6 kW
Average Power Consumption (220v/460v 3ph ± 10%)		21 kW	31 kW	34 kW	38 kW
Pulse Mode		Freq: 5 - 5000Hz Duty: 0 - 100%			
Power Stability		± 1-2% (power monitor)			
Beam Mode		Direct			
Protection of Laser Beam		Industrial Fiber Cable			
Laser Gas Composition		N/A			
Laser Gas Consumption		N/A			
Cooling Water Flow Rate		2.64 gpm (10 l/m)	5.28 gpm (20 l/m)	5.28 gpm (20 l/m)	10.56 gpm (40 l/m)
CNC Controller & Operator Panel		15" Touch Display, Ethernet Enabled, 6GB RAM with 8 GB Cfast Card			
Axis Movement		High Speed 4 Axes Servo Motor System			
Positioning System		Rack & Pinion			
Axis Speed (X,Y Traverse Speed)		4,330 IPM (110 m/min)			
Acceleration		X,U= 1G ; Y= 1.5G ; Z= 2.5G			
Repeatability		± .0006" (± 0.015mm)			
Positioning Accuracy		± .0012" (± 0.03mm)			
Axis	Y Axis	10'2" (3100mm)			
	X,U Axis	60' (18300mm)			
	Z Axis	5.9" (150mm)			
Sheet Dimensions		10' x 60' (3050x18300mm)			
Maximum Load Capacity		44092 lbs (20,000 kg)			
Shuttle Table Change Time		Double pallet system. Exchange time 200 sec with max sheet weight			
Z – Axis Distance Control		Non-Contact			
Assist Gas	Mild Steel	Oxygen 7.25 – 87 PSI (0.5-6 Bar)			
	Stainless Steel	Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
	Aluminum	Dry Air or Nitrogen 7.25 - 362 PSI (0.5-25 Bar)			
Cutting Head		Precitec Procutter (Auto Focus)			
CAD/CAM Software		RADAN CAD / CAM			
Machine Dimensions (L x W x H)		1612" x 202" x 87" (40965x5125x2200mm)			
Machine Weight		185,188 lbs (84000 kg)			



\* Different diameter fiber cables are available.

\* Due to ongoing product development, RMT reserves the right to modify any technical specifications and dimensions

\* Alternate Optic Configurations: Cutting Capacity may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

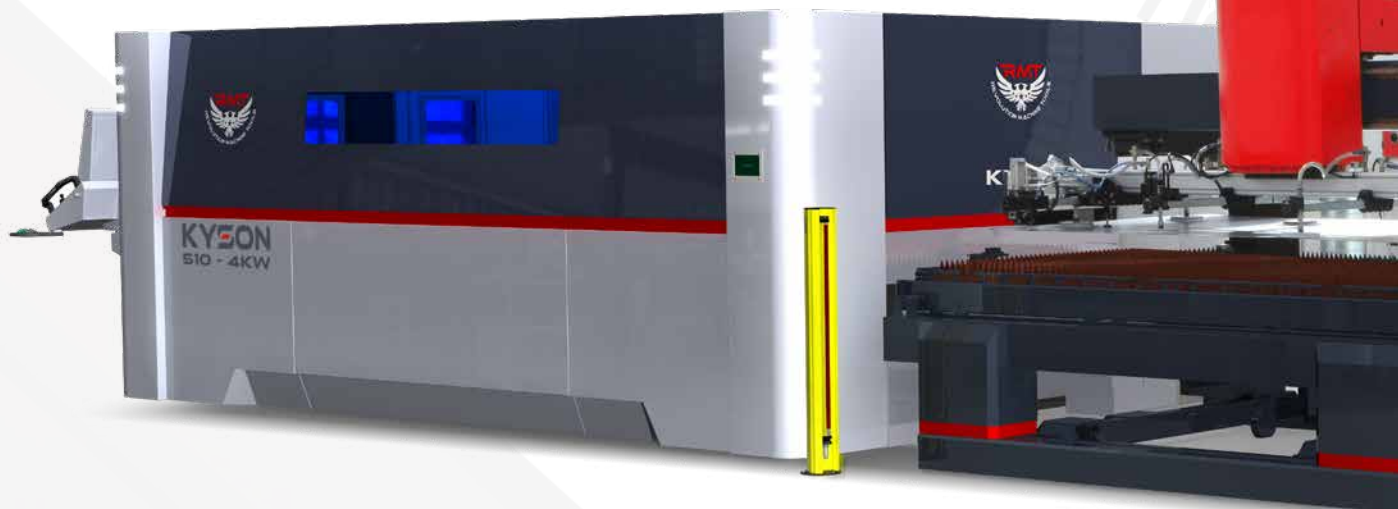
\*\* Conservative cutting capacities may vary depending on optic system settings. Working capacities may be higher or lower depending on the configuration.

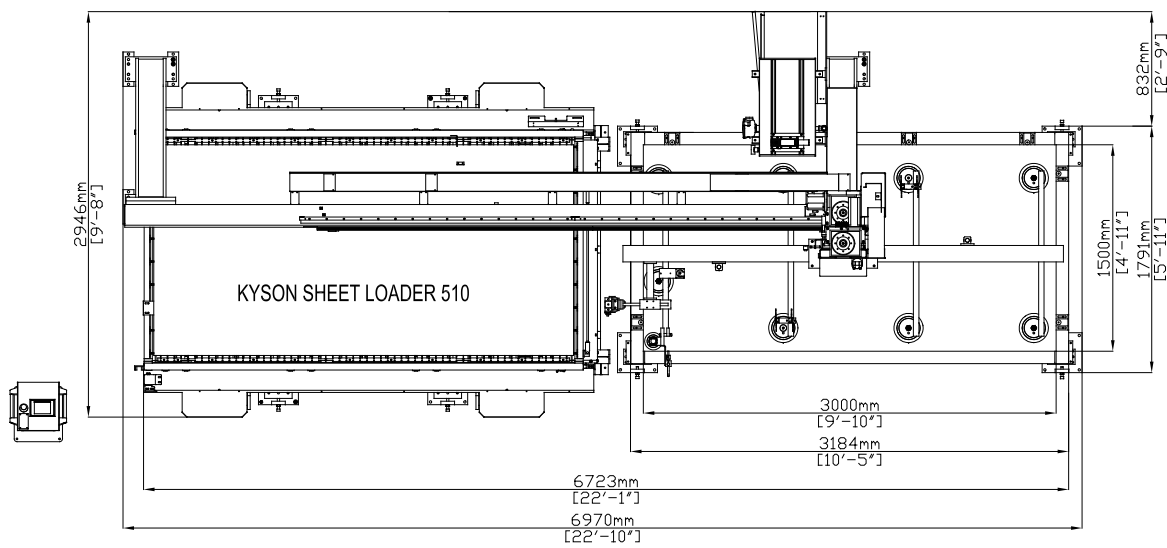
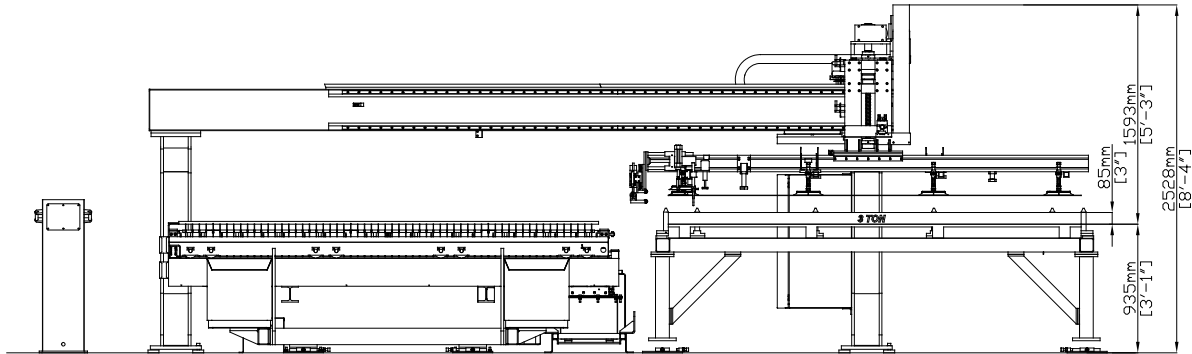


# SHEET LOADER

At RMT, we are always looking for ways to make you, your shop, and your team more efficient. Adding a sheet loader to your KYSON Fiber Laser allows you to minimize the load time (and manpower needed on thicker and heavier material) so the next sheet is always ready to cut. If you measure your cutting capacity in parts per hour, you will see a significant increase by adding the sheet loader.

Furthermore, a sheet loader allows for precise placement of the sheet on the table which keeps your parts generally scratch free which is just not possible with manual sheet positioning.







## COMPACT SERVER

The COMPACT SERVER produced by SPR is a system used for the unmanned loading/unloading management of metal sheets for 2D laser machine 1500x3000mm metal sheets. It was created from the familiarity of the loading/unloading system, and has been tested with the same materials and functionality to guarantee high level reliability, highly flexibility and ease of use.

COMPACT SERVER is composed of the following units:

- a) A structure to be placed over the pallet changing system with one loading pallet and one unloading pallet
- b) A suction cup axis for lifting raw metal sheet
- c) A comb device for loading/unloading the metal sheet
- d) A Z Axis for moving the comb device

The SPR system has been measured to be delivered without being dismantled. It is placed over the laser machine pallet changing system to reduce the footprint. The extremely compact structure is made of electro-welded steel. It is composed of two pallets with the upper pallet used for loading raw metal sheet and the lower pallet used to unload the metal sheet that has been processed. In the standard version the loading pallet is fixed at the structure and the unloading pallet is movable.

Suction cup device for lifting raw metal sheet

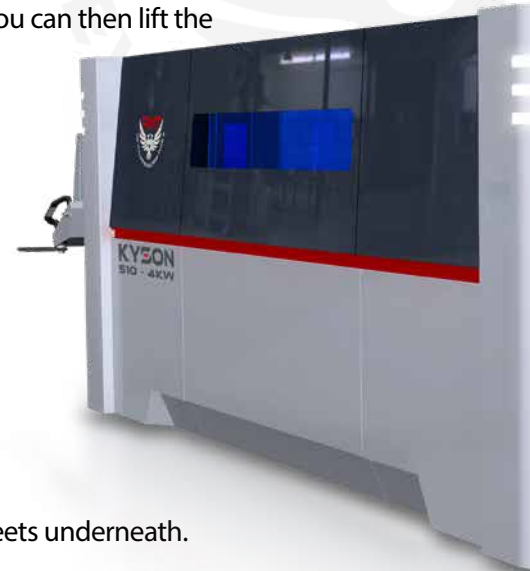
The arm is equipped with a suction cup device which is placed over the loading pallet. You can then lift the raw metal sheet and feed it into the comb device under the metal sheet lifter.

Comb device for loading/unloading metal sheet on to the pallet changing system

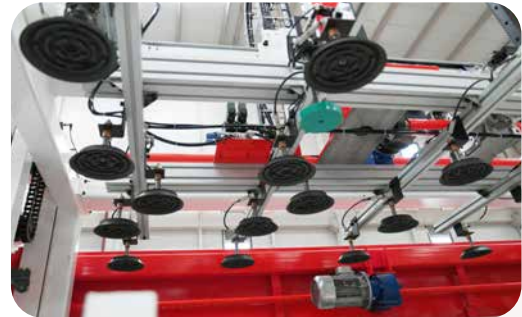
The comb device works in-between the fins of the bench of the changing pallet system and deposits raw metal sheet and collects the metal sheet that has been processed. The movements are operated by an asynchronous engine which lifts along the Z Axis and is operated by a CNC brush-less engine.

**The OPERATIONAL SEQUENCE of COMPACT SERVER operates as follow:**

- 1) The descent of the suction cup device onto the pile to collect the raw metal sheet
- 2) The lifting of raw metal sheet
- 3) The introduction of the comb between the lifted metal sheet and the pile of metal sheets underneath.
- 4) The descent of the grip and the release of the metal sheet on the comb
- 5) The exit of the comb with the metal sheet on board.
- 7) The positioning of the metal sheet on the changing pallet system
- 8) The return of the comb to the stand-by position
- 9) At the end of the working cycle the comb collects the metal sheet that has been processed
- 10) The entrance of the comb over the loading pallet
- 11) The lowering of the comb
- 12) The exit of the comb to unload the processed material with the help of the counter comb.









## MULTI SERVER

Full Automatic Sheet Loading & Unloading System equipped with devices such as:

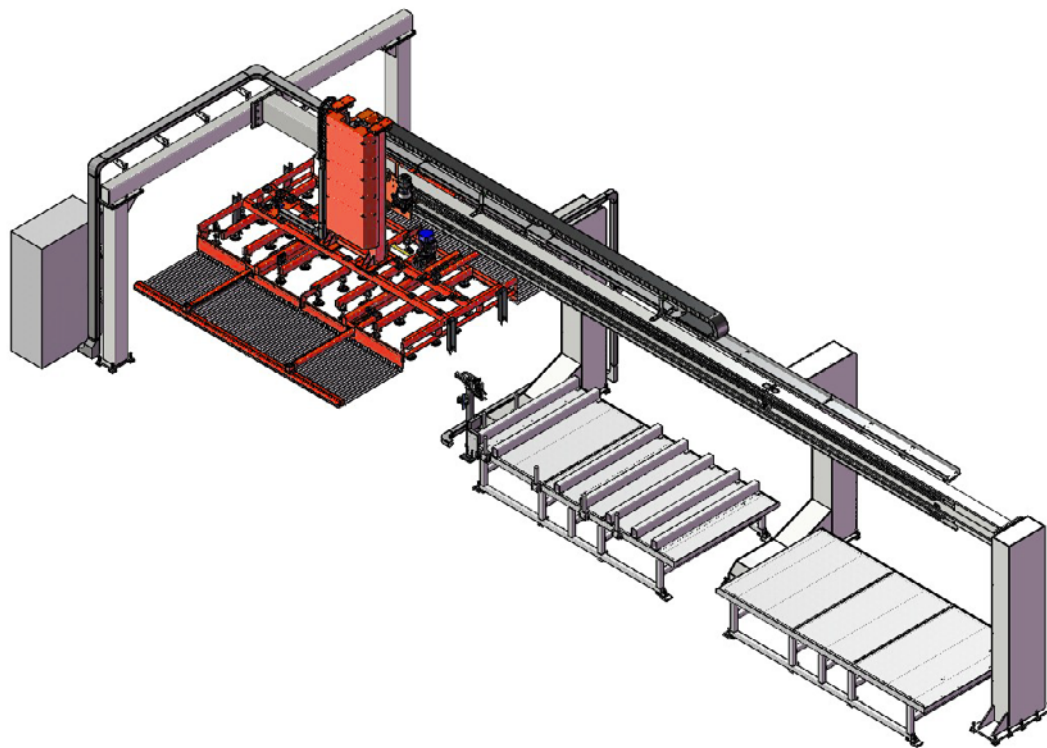
- An automatic separation of the metal sheet from the pile (heap). The sheets are carried by a magnet and suction cups.
- Thickness measuring control: Measure the thickness of the metal sheet before loading and ensures the reliability of the system during unmanned operation. If the thickness is not to the requirements of the laser machine cycle, the separation cycle is repeated.
- Verification of the height of the unloaded metal sheet to avoid unloading of processed metal sheets, onto the unloading pallet, when the maximum height allowed has been reached.
- Z Axis fall safety device: Avoid falls of the Z Axis (the one that has a comb). Pneumatic cylinders block the fall of the comb arm by entering into specific positioned areas every 7-9 inches.
- Fixed fencing system and photocell protection
- Magnetic Stripper: Supports the suction cups handler when separating metal sheets
- Air Jet Blower: Separates the metal sheet to prevent them from adhering together
- Sheets Pneumatic Stripper: Moves independently up and down to separate the metal sheets
- Siemens brand controller supports up to 28 material codes in the system
- Open system for the robot configuration
- 5-7 inch touch screen with keypad (system can be run with touch screen or keypad)
- Minimum of three pallets for the stock area and can be customized up to 15 pallets with each load holding 6610 pounds.





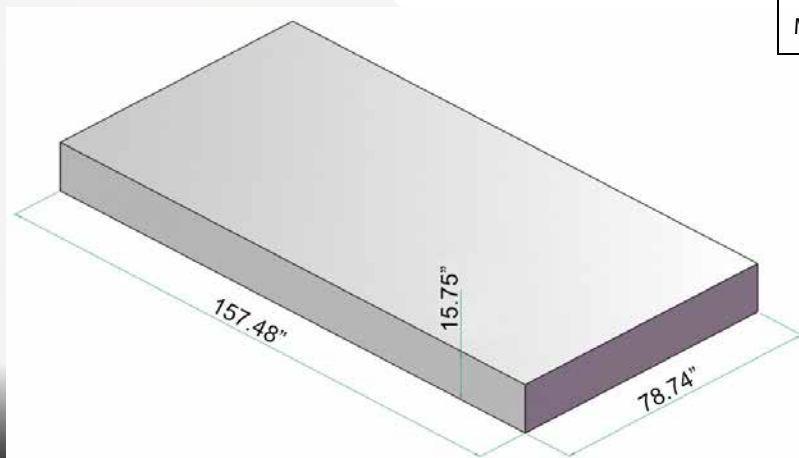


## SHEET LOADER 613 - 2 PALLETS



Description	Rated Value	Tolerance
Electric voltage	460 Volt 3-phase	10 %
Maximum current absorption	45 A	
Frequency	60 Hz	
Maximum power absorption	24 HP	10%
Short-circuit current		

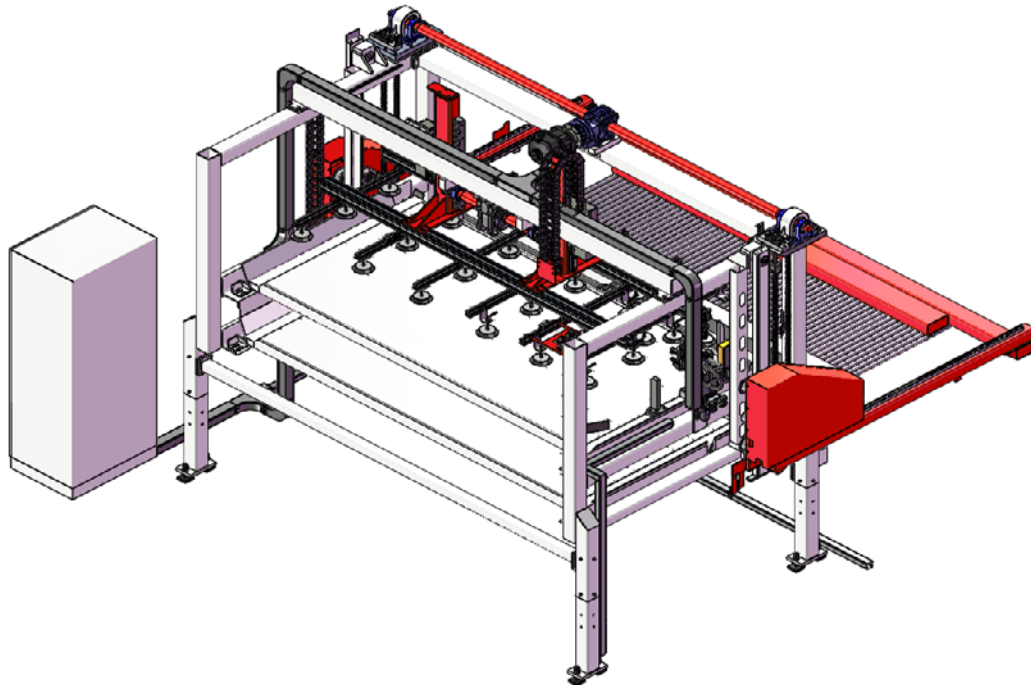
Description	Rated value
Total weight of the system	31416 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions	650" x 264" x 178" (H)
Max height of stack of sheet	15.75"
Max weight of stack	8818 LBS



**40" x 40 x .020" (min)**

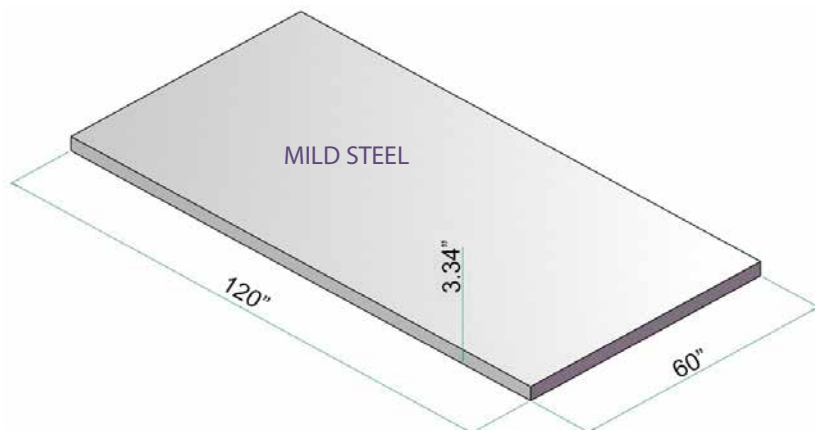
**157.48" x 78.74" x .75" (max)**

## COMPACT SERVER 510 - 2 PALLETS



Description	Rated value	Tolerance
Electric voltage	460 Volt 3-phase	10 %
Maximum current absorption	32 A	
Frequency	60 Hz	10 %
Electric power installed	21 HP	10 %
Short Circuit Current	10 kA	

Description	Rated value
Total weight of the system	10372 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions with safety fences	211" x 166" x 154"(H)
Max height of stack of sheet	4"
Max weight of stack	6613 LBS

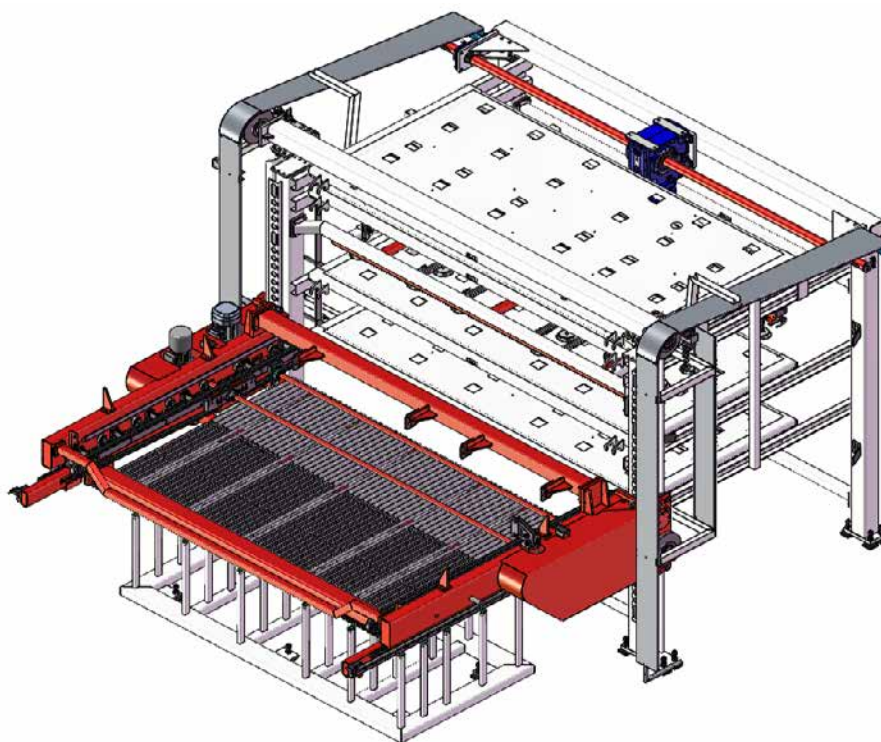


**40" x 40" x .020" (min)**

**120" x 60" x .75" (max)**

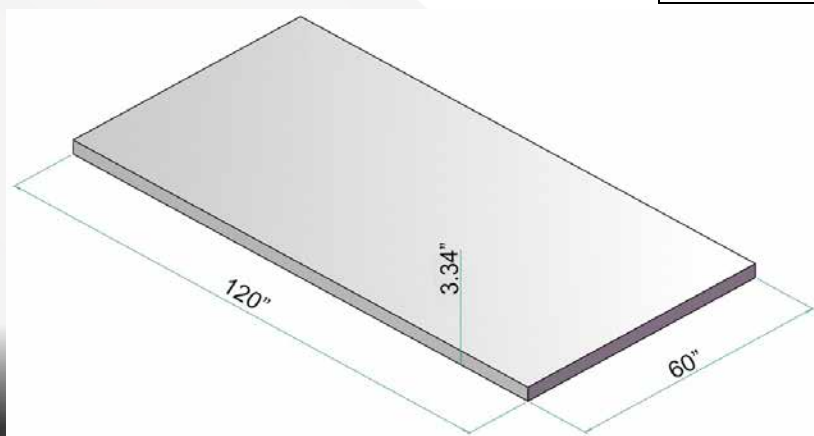


## MULTI SERVER 510 - 3 PALLETS



Description	Rated value	Tolerance
Electric voltage	460 Volt 3-phase	10 %
Maximum current absorption	30 A	
Frequency	60 Hz	10 %
Electric power installed	24 HP	10 %
Short Circuit Current	10 kA	

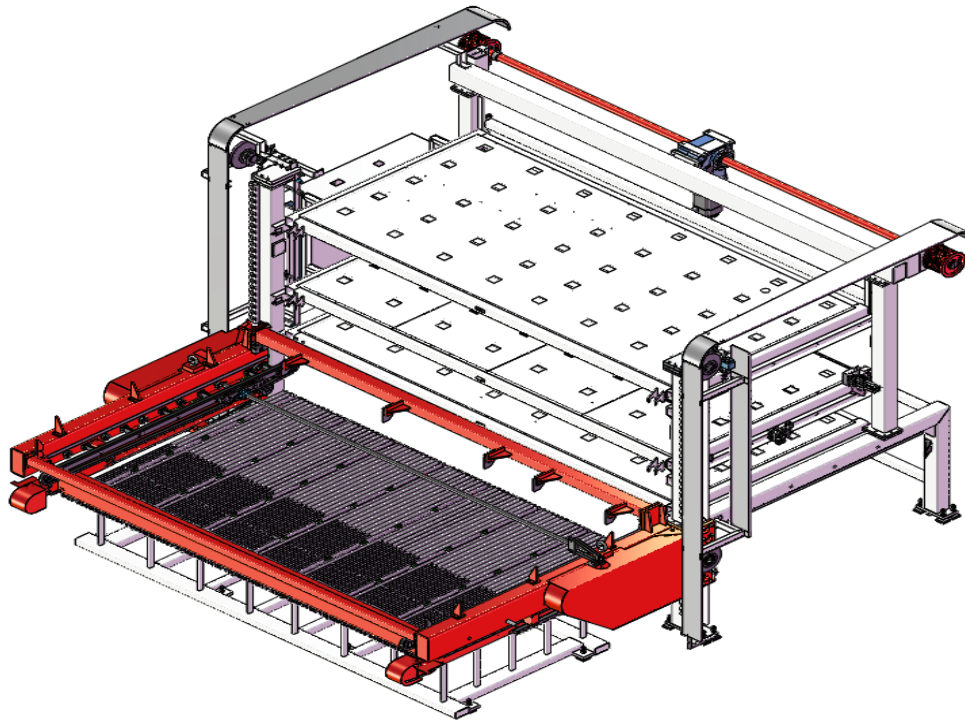
Description	Rated value
Total weight of the system	16534 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions without safety fences	259" x 232" x 131" (H)
Max height of stack of sheet	3.34"
Max weight of stack	6613 LBS



**40" x 40" x .020" (min)**

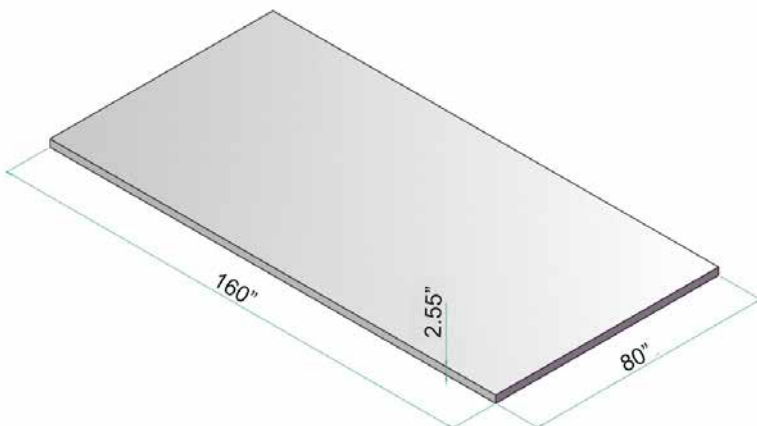
**120" x 60" x .75" (max)**

# MULTI SERVER 613 - 3 PALLETS



Description	Rated Value	Tolerance
Electric voltage	460 Volt 3-phase	10 %
Maximum current absorption	32 A	
Frequency	60 Hz	10 %
Maximum power absorption	24 HP	10 %
Short-circuit current	10 kA	

Description	Rated value
Total weight of the system	21248 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions	253" x 221" x 141" (H)
Max height of stack of sheet	2.55"
Max weight of stack	8818 LBS

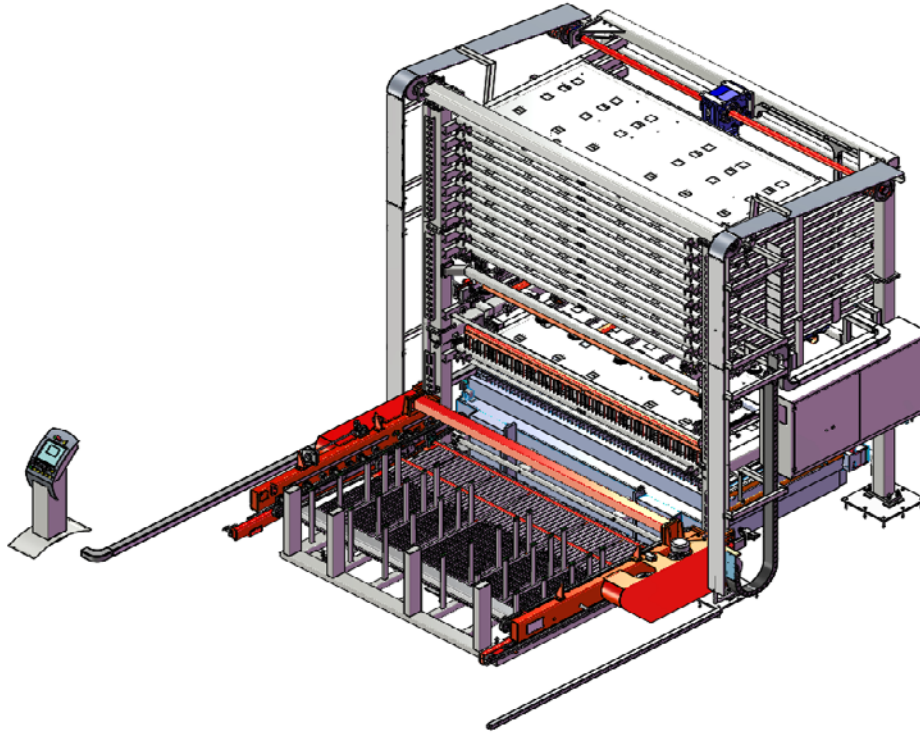


**40" x 40" x .020" (min)**

**160" x 80" x .75" (max)**

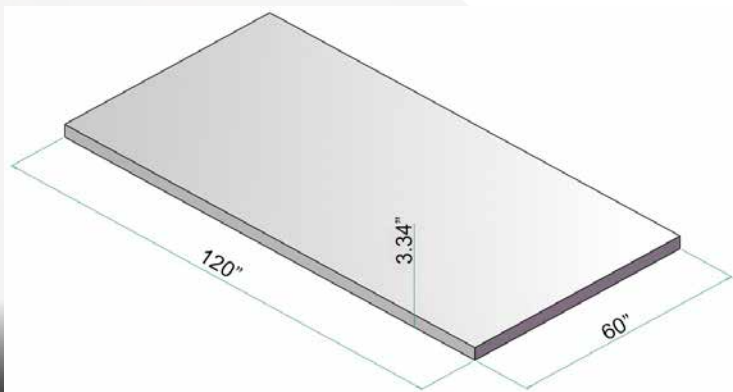


## MULTI SERVER 510 - 10 PALLETS



Description	Rated value	Tolerance
Electric voltage	460 Volt 3-phase	
Maximum current absorption	27 A	10 %
Frequency	60 Hz	
Electric power installed	24 HP	10 %
Short Circuit Current	10 kA	10 %

Description	Rated value
Total weight of the system	22939 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions	259" x 232" x 226 (H)
Max height of stack of sheet	3.34"
Max weight of stack	6613 LBS

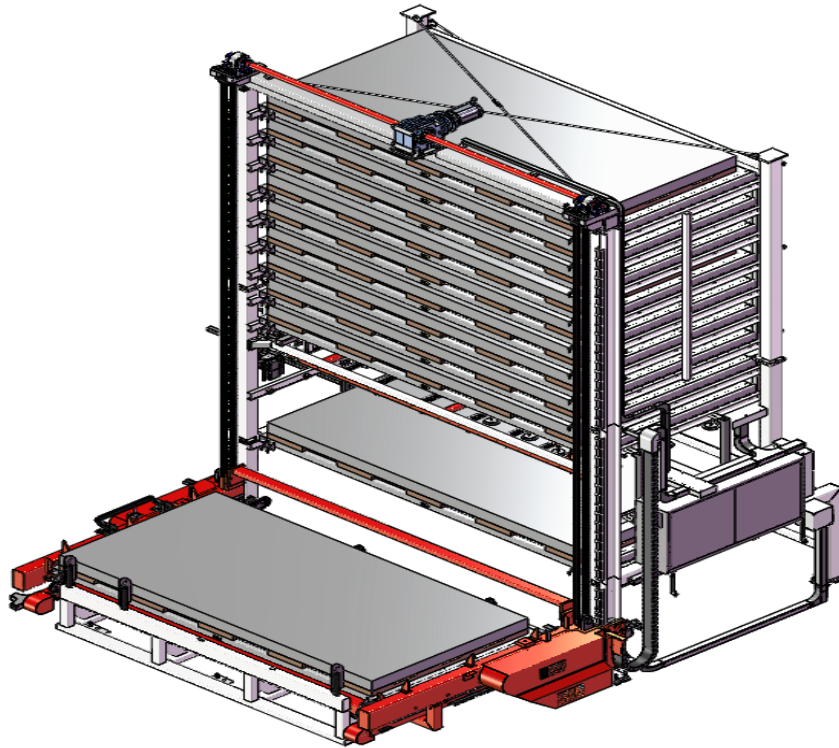


**40" x 40" x .020" (min)**

**120" x 60" x .75" (max)**

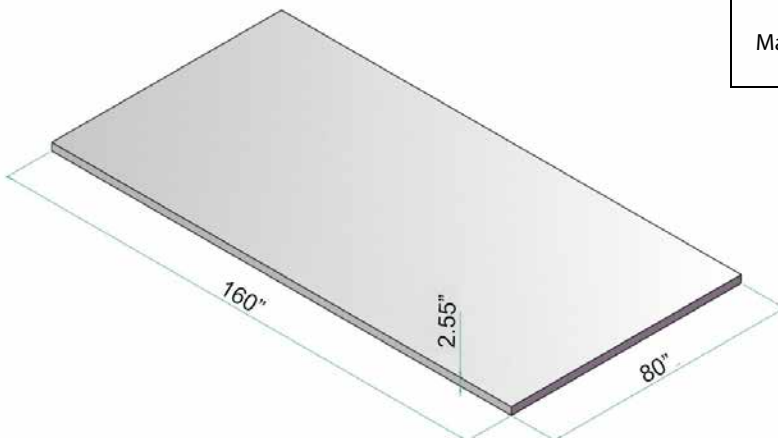


# MULTI SERVER 613 - 10 PALLETS



Description	Rated Value	Tolerance
Electric voltage	460 Volt 3-phase	10 %
Maximum current absorption	32 A	
Frequency	60 Hz	10 %
Maximum power absorption	24 HP	10 %
Short-circuit current	10 kA	

Description	Rated value
Total weight of the system	33583 LBS * the warehouse is considered exhaust of metal sheets
SIEMENS numerical control	
Overall dimensions	253" x 221" x 204" (H)
Max height of stack of sheet	2.55"
Max weight of stack	8818 LBS



**40" x 40" x .020" (min)**

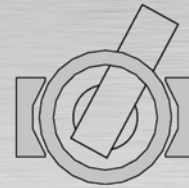
**160" x 80" x .75" (max)**



*Hydraulic Presses*



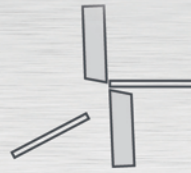
*Fiber Lasers*



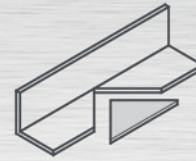
*PSM Pipe Lathe*



*Press Brakes*



*Shears*



*Ironworkers*



*Plate Rolls*



*Angle Rolls*



*Bandsaws*



*Dishing Presses*



*Flanging Machines*



*Drilling Machines*

*"If you need a machine and don't buy it, you'll find that you have paid for it anyway, but don't have it."*

*Henry Ford*

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