PLASMA, WATER JET, LASER, ROBOTICS
and metal working equipment
Machitech manufactures and distributes industrial equipment for all metal markets. The company offers cutting-edge quality systems at affordable prices to improve its customer’s productivity. Machitech also provides a complete installation and training package that is tailored to the customer’s experience. With our extensive knowledge in CNC solutions, you can tell us what you need and we will make it happen.

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WHY MACHITECH:
< From entry level to custom applications
< Plasma, water jet, laser and robotic
< High definition plasma, full Hypertherm integration
< Flexibility, versatility of products
< Unlimited technical support
< After sales service second to none (best on the market)
< Components stocked locally
< Complete installation and custom tailored training programs
< Turn key systems

PARTNERS:

Hypertherm

Hypertherm’s unrelenting focus has been on metal cutting technology. With a continuous stream of innovations to improve cut quality and service life, enhance productivity, and lower operating costs, Hypertherm products have set the standard in the thermal cutting market. Hypertherm is an industry leader in CAM nesting software for CNC sheet and plate cutting applications, including plasma, laser, waterjet, oxyfuel, combination punch, drill/tap/spindle, and turret punch.

KMT

KMT Waterjet Systems is the leading global manufacturer of waterjet cutting systems, Ultra High Pressure pumps and components for water jet systems.

THERMAL DYNAMICS

Thermal Dynamics has been in operation for over five decades and is as a pioneer in plasma cutting systems. Thermal Dynamic is setting the standard in flexibility, value and performance for advanced high precision cutting equipment.

IPG PHOTONICS

IPG Photonics is the world’s leading provider of high power fiber lasers and fiber amplifiers that are revolutionizing performance and utility in a remarkable array of materials processing.
Entry level price, industrial quality.
The most affordable industrial cutting machine on the market.
Ideal for small to medium fabrication and HVAC shops.

**FEATURES**
- 5’ wide x 10’ long
- Unitized Design
- Material support choices:
  - Downdraft, with drawers for easy and slag removal
  - Waterbed
- 6 in x 6 in extruded aluminium gantry
- Cables and hoses are protected in flexible power track
- Motors on X1, X2 and Y axis, with direct drive, fully synchronized.
- Two asymmetric 20 mm linear ways and bearings, one in front the other on top of the bridge, evenly balancing the weight of the various tools.
- Side rails 20 mm linear ways and a precise rack and pinion dual drive system, protected against dust and impact.
- CNC designed for conventional plasma, air cooled with air/air or nitrogen/nitrogen process delivering between 20 to 100 amps, piercing up to ¾” mild steel.
- Machitech CNC Controller, PC based, LCD monitor, keyboard, mouse in an industrial housing, integrated in front of the machine on a swivel arm.
- 1 year warranty

**OPTIONS**
- Oxy/Fuel
- Scriber

PC based CNC controller
Drawers for slag removal
Easy Cut
Gold Cut

For customers specializing in structural steel, plate work and heavy production. This machine is equipped with True Hole technology and Full Suite is available.

FEATURES
< Many configurations: 5 to 12 feet wide.
< 10 to 40 feet long
< Modular Design
< Material support choices:
   • Zoned downdraft, with drawers for easy and slag removal
   • Waterbed, with raise/lower system (optional)
< 6 in x 8 in machined heavy duty steel bridge
< 8 in clearance
< Dual side drive on rail axis
< AC 750 watt servo drive motors
< Pneumatic engagement system
< 3 identical motors and gearboxes
< 20: 1 High precision helical planetary gearboxes
< Heavy duty Agma 10 rack and pinion
< 2 in diameter Pinion gears
< Linear bearings on the gantry 20 mm.
< Vee-bearings on the rail. Self-cleaning
< Pedestal rail design
< Pedestal or gantry CNC
< Automatic Height control
< Edge Pro CNC
< 1 year warranty
< True Hole Technology

CUSTOMIZE YOUR CUTTING TABLE!
Refer to pages 13 and 14 for the complete available options list.
State of the art!
Custom configuration (10’ wide x 5’ deep) to grow as your needs grow.

FEATURES
< Many configurations: 6 to 12 feet wide.
< 5 to 60 feet long
< Unitized Design
< Material support choices:
  • Zoned downdraft, with drawers for easy and slag removal
  • Waterbed, with raise/lower system (optional)
< 6 in x 8 in machined heavy duty steel bridge
< 8 in clearance
< Dual side drive on rail axis
< AC 750 watt servo drive motors
< Pneumatic engagement system
< 3 identical motors and gearboxes
< 20: 1 High precision helical planetary gearboxes
< 2’’ diameter pinion gears
< Linear bearings 25 mm.
< Inverse Helical AGMA 10 rack and pinions on X axis, protected against dust and material impact
< Pedestal controller
< Automatic Height control
< Edge Pro CNC
< 1 year warranty
< True Hole Technology

CUSTOMIZE YOUR CUTTING TABLE!
Refer to pages 13 and 14 for the complete available options list.
Machitech’s PlatinumCut is perfect for the structural, naval and metallurgy industries. Its design combines heavy duty construction, rigidity, accuracy and smoothness.

**FEATURES**
- Many configurations: 10, 15 and 20 feet wide.
- Up to 100 feet long
- Modular design
- Material support choices:
  - Zoned downdraft, with drawers for easy and slag removal
  - Waterbed, with raise/lower system (optional)
- 12 in x 12 in machined heavy duty steel bridge
- Dual side drive on rail axis
- AC 1500 watts servo drive motors
- Pneumatic engagement system
- 3 identical motors and gearboxes
- Heavy duty rack and pinion
- 4.5 in diameter pinion gears
- Linear bearings on the gantry, 25 mm.
- Precision machined rail on X axis
- Leveling system on the floor
- Controller on the bridge or pedestal
- Up to 4 carriages
- Automatic height control
- Edge Pro CNC
- 1 year warranty
- True Hole Technology

CUSTOMIZE YOUR CUTTING TABLE!
Refer to pages 13 and 14 for the complete available options list.
A Robotic Fabrication System for Structural Steel Fabricators

BeamCut’s Positioning at the Speed of Light, Boosts your Productivity in the Shop.

The Beam Cut increases your production with automatic optical positioning and precise motorized conveyors feed the plasma cell in and out. The BeamCut gives the flexibility to add a drilling station to the plasma cell, drilling holes during processing is invaluable for bridge and power transmission fabrication.

Powerful 3D software reads your 3D CAD drawings and creates various tool path to put the BeamCut to work: plasma marking, plasma cutting, conventional drilling, and robotic welding. The BeamCut is the next step; it brings you all the way to integrated robotic welding.

**ALSO AVAILABLE**
- 5’ x 10’ cutting table
- Pipe Cutting
- Fourth Face Cutting up to 36”
- In/out conveyor may adapt to round tubes and non-flat shapes

**A WIDE RANGE OF STRUCTURAL PROFILES**

The BeamCut is designed to transform various profiles such as:
- H-Beams
- I-Beams
- Tube
- Channel
- Flat bar
- Angle

The BeamCut also takes care of plate cutting such as base plates and connectors.
CUSTOM SOLUTIONS
< Servo assisted in/out conveyors for quick and accurate material positioning.
< Fume extraction adapted to your ventilation system.
< Security fences, optical curtains and advanced controls allow easy and secure operation.
< System works on both conveyor sides and keeps the material controlled during entire operation.

FEATURES AND BENEFITS
< Positioning and measuring with optical camera system is three times faster than touch-sensing system
< Pass-thru operation save time and manipulation
< No additional programming required between CAD drawings and robot language (CAM)
< Software automatically recognizes features such as coping's, holes, cuts, and marking.
< Powerfull integrated 3D software allowing fabricators to quickly simulate the cutting paths to avoid collisions.
< Compatible with SDS/2 and X-steel software
< Integrated nesting software for plate-material cutting
< Heavy duty construction adapted for the steel industry
< HMI simple and easy to operate
< Beam area cut zone protected by fume extraction cabin
A doubly robust gantry

The strength of the dual 12” x 12” heavy duty steel gantry allows wider gantries up to 20 foot wide. A 30 HP drilling station can also be added and still works with accuracy and stability, ensured by the strength of the doubly gantry.

FEATURES

- Many configurations: 10, 15 and 20 feet wide.
- Up to 100 feet long
- Modular design
- Waterbed or zoned downdraft
- Dual 12 in by 12 in heavy duty steel bridges
- Dual side drive on rail axis
- Bosch servo drive motors 3kw SERCOS III
- Pneumatic engagement system
- 3 identical motors and gearboxes
- 50:1 Reduction
- Heavy duty rack and pinion
- 4.5 in diameter pinion gears
- Linear bearings on the gantry, 25 mm
- Covered 45mm linear rails on X axis
- Leveling system on the floor
- Controller on the bridge or pedestal
- Up to 4 carriages
- Automatic height control
- Edge Pro CNC
- 1 year warranty
- True Hole Technology
- Drill up to 30HP
- Tool change (6)

CUSTOMIZE YOUR CUTTING TABLE!
Refer to pages 13 and 14 for the complete available options list.
Our waterjet cutting machine is built for high performance applications. Its heavy duty construction is designed for years of quality production. For customers who are looking for high accuracy.

**FEATURES**

- Many configurations: 10 or 12 feet wide.
- 5 to 40 feet long
- Modular design
- Waterbed
- 6 in x 8 in machined heavy duty steel bridge
- Dual side drive on rail axis
- AC 750 watt servo drive motors
- Pneumatic pinion engagement
- 3 identical motors and gearboxes
- Heavy duty helical rack and pinion
- 2 in diameter pinion gears
- Linear bearing on the gantry, 20 mm
- Bridge and Rail protected by a bellows
- Pedestal rail system
- Pedestal controller
- Motorized Z axis with anti collision system
- 1 year warranty

**OPTIONS**

- Nesting software
- Multiple Cutting Heads
- Abrasive recycling system
- Water recirculation system
Machitech’s Fiber laser machine is a revolution in the laser industry. The combination of the CNC, high power fiber laser generator and linear drive motors will give you the quality and speed that you are looking for.

**FEATURES**
- Fiber laser power source (From 1000 watt up to 5kW)
- High pressure assist gas N2, Ar or O2
- Able to cut highly reflective materials
- Dual Pallet Changer
- Class 1 closed protection system

**POSSIBILITIES AND ADVANTAGES**
- Latest generation of Ytterbium laser with power up to 5000 watts
- No optical alignment required
- No commissioning of laser system required
- Smallest HAZ (Heated Affected Zone)
- Lowest operating cost in the laser market
- Easiest installation for fast start-up
- Low energy consumption
- No spare parts required for the laser
- No maintenance on focus beam
- Low maintenance Dual Pallet Changer
- Diode life time approximative: 100 000 hours
- Rapid traverse speed, 7900 in per minute
- High efficiency on reflective material
Our division MetFab can provide you:

- CNC Press Brakes
- Shears
- Plate rolls
- Tooling

**ASK US FOR MORE DETAILS!**

**FEATURES:**
- Strength
- Reliability
- Speed
- Precision
Machitech Automation has in-house expertise and resources to offer equipment that perfectly fits your needs. Among these resources, we have a team of engineers and designers ready to adapt our equipment tailored to your specific needs. Our 1500 sq. ft. showroom allows for customer demos, testing and product development.

**Options available**

_to customize your cutting table tailored to your needs_

5-axis cutting head
Allows your plasma cutter to perform complex bevels for weld prep. K V Y and variable bev-els are easily programmed. Our 5 axis head uses parts readily available in North America.

Drilling station
_(5hp, 7hp or 10hp)_
These 3 drilling stations can be added to our Diamondcut cutting table. For drilling holes up to 3/4” diameter and drill material up to 3/4” thick.

Drilling station (30hp)
Installed in the middle of the Titanium double gantry for maximum rigidity and stability. Can drill and tap holes up to 1 1/2”.

Tool changer
6 position automatic tool changer allows more flex-ibility for drilling and tapping various size holes.

Camera
Remote camera at CNC, used for part and plate alignment for far away workpieces. 7” screen mounted at operator station. Camera works in real time and can be used to monitor cutting process.
**Oxyfuel**
For processing of thicker steel. Magnetic quick change system for easy switching from plasma to oxy/fuel cutting using the same height control.

**Triple Oxyfuel**
For multi bevel cutting in one step using oxy/fuel process.

**True hole technology**
True Hole technology can create bolt ready holes without operator intervention. Hole to material thickness ratio of up to 1:1 is achievable.

**Ink Jet or Dot Peen marker**
Marker on slide mechanism, located on main carriage. Includes integration into machine software.

**Pneumatic scriber**
Fast and economical way to mark a plate. Can run up to 250 ipm. A pneumatic cylinder moves up the scriber up and down. Include the integration in the controller software.

**Source Caption**
Source capture nozzle fixed directly to the cutting torch, which requires less suction than ordinary downdraft.

**Fume Extraction**
Machitech can provide your fume extraction and filtration system if you choose to have a downdraft table design. Can be mounted inside or outside.

**Security**
Machitech can help you develop machine security systems tailored to your specific needs.

**Security**
Machitech can help you develop machine security systems tailored to your specific needs.