


# BEAMCUT



The robotic plasma cutting system that combines  
**technology, performance and flexibility**



  
**Machitech**  
AUTOMATION

# BEAMCUT

**MACHITECH**, a Canadian robotics and automation specialist, has been designing and manufacturing high-performance solutions for over 10 years. Its multi-disciplinary team offers customized equipment that combines productivity with profitability to suit your individual needs. Machitech proudly serves manufacturing companies of all sizes whose objective is to improve their industry competitiveness.

## A WIDE RANGE OF APPLICATIONS

The BeamCut has been designed to suit a wide range of applications, transforming various shapes such as: H- and I-beams, tubes, channels, flatbars, angles and C-channel.



**MARKING AND CUTTING ON 4 FACES**

**CUTTING PIPE**



## CUSTOM SOLUTIONS

The BeamCut offers visual positioning, automatic in-line input and output as well as the versatility to incorporate other cutting-edge equipment offered by Machitech, including servo-assisted in/out conveyors for increased speed and accuracy when it comes to material positioning. The system works on both sides of the conveyor, holding material in place during operation. Mechanical safety barriers, optical safeguards and advanced controls facilitate the manufacturing process and make for an extremely safe working environment.

## AVAILABLE OPTIONS :

- Assisted servo motorized conveyor at entry and end ensures an accurate and fast material positioning
- Motorized conveyor that can also handle pipes and beams without flat base
- Fume extraction system
- Safety barriers and light curtains can be added for an extremely safe working environment.
- Conventional cutting table can be added to the plasma 3D cutting station
- Pipe cutting
- 4 face cutting and marking

### CHARACTERISTICS:

- Visual positioning is faster than touch sensing. A single digital camera mounted on the tip of the robot arm is ideal to mark and cut plasma plus it facilitates positioning for traditional drilling and welding techniques.
- A single operation reduces multiple set-ups, related errors and manufacturing time.
- Detailed toolpath simulations reduce the risk of collisions and the delays they cause.
- Compatible with SDS/2 and X-Steel software.
- The robust construction of the BeamCut 360 is ideally suited to the steel industry.
- Simplified HMI provides a user-friendly operating system. Pre-programmed functions are included, making subsequent programming easier and quicker.
- The plasma tip cleaning unit that extends useability is available as an option.
- The beam area cut zone is confined by an automated fume-extraction cabin.

### THE BEAMCUT OFFERS MANY BENEFITS:

- Quick return on investment.
- Improved manufacturing processes.
- Before each cut, the BeamCut 360 measures the piece to cut and takes its dimensional variance into account
- Increases level of part complexity attainable over standard methods.
- Tangible gains in productivity.
- Easy operation.
- Compatible with most leading 3D-software.
- Unparalleled cut quality.
- Reduced labour costs.



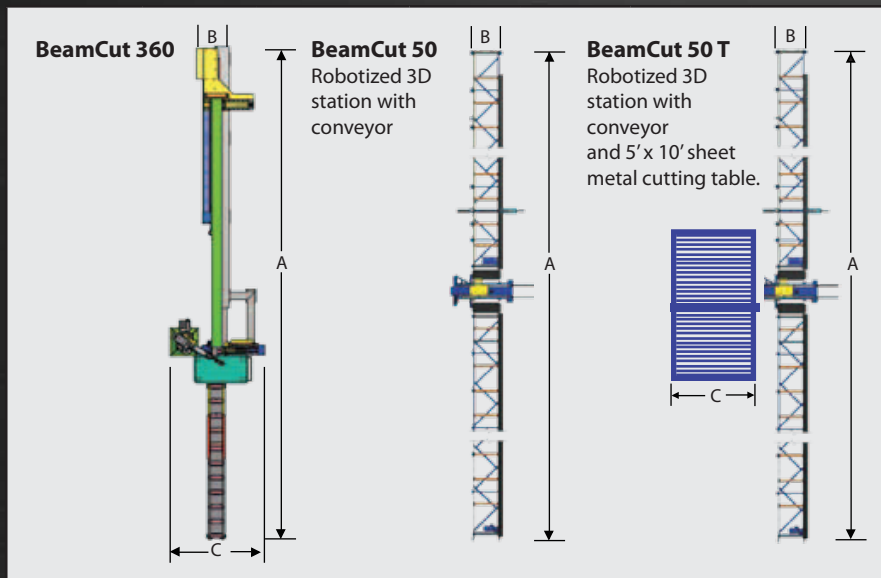
Machitech offers a wide range of application possibilities depending on your specific needs.

## TECHNICAL DATA

		BeamCut 360	BeamCut 50	BeamCut 50 T
Cutting Capacity	Plate	N/A	N/A	5' X 10'
	I - beam	10" X 10"	40" X 16"	
	Square	10"	16"	
	Angle	7" X 7"	8" X 8"	
	Channel	10" X 4,325"	36" X 4"	
Max Length		24'	60'	
# of faces		4		
Thickness		1,25" (Edge: 1.5")	1,75" (Edge: 2.5")	
Robot Axis		Motoman 6 axis		
Plasma		HPR130	HPR260	
Positioning		Laser Sensor	Camera System	
Interface		PC and Robot interface		
Nesting		S/O	Included	
Welding preparation bevel		45°		
Scribing		Yes		

# Hypertherm®

Hypertherm Plasma Source (HyDefinition) HPR 260xd and HPR 400xd provides high-definition cuts up to 2" thick and edges up to 3.2". HPRxd plasma sources are compatible with True Hole technology to cut holes in steel up to 1" thick.



## SYSTEM DIMENSIONS

	A	B	C
BeamCut 360	40'	31"	12'4"
BeamCut 50	120'	46"	S/O
BeamCut 50 T	120'	46"	20'

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