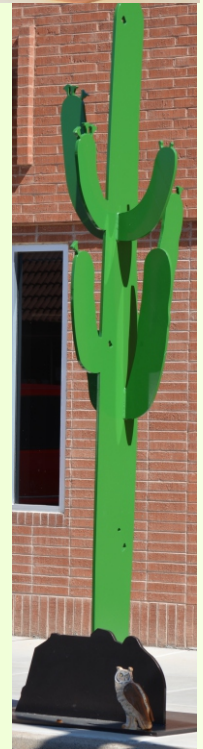




**CNC ROUTERS  
CNC PLASMA CUTTERS  
CNC MILLS & CNC LATHES  
WATERJET  
CAD/CAM SOFTWARE  
REPAIRS & UPGRADES OF ALL CNC**



**Computerized Tools  
For Transforming  
Ideas Into Reality**



**DIGITAL FABLAB PRODUCTS FOR STEM, CAREER, & TECHNICAL EDUCATION**

# Forest Scientific Competitive Advantages

The more research you do, the more convinced that although Forest Scientific Corporation may not always be the lowest price, it is the best quality, value, and best choice for your school.

1. **Made bi-coastally in the USA** at our world headquarters in Tionesta, PA and in Phoenix, AZ.
2. **Single Source, On-Site, Parts & Labor 36 month warranty** on all new CNC machines made by Forest Scientific Corporation. Most of our competitors warranties are 1 year and parts only. This means that you will save the \$3,000.00- \$7,500.00 that others charge to have someone come on-site per visit from the factory if a problem occurs during the warranty.  
**Do not assume other manufacturers will come to your school for free. They won't.**
3. **On-site training** is available for you and your students to ensure a successful start. It is more effective for initial training to be on your own equipment than to go to a training site. With your approval, students are trained to assist and help train other students. **Written & video tutorials** and curriculum are available to show your students while teaching classes. Additional training is available on-site, at one of our training centers, and over the internet.
4. **Free phone and internet support is available nearly 24/7.** Versus being charged by the minute during restricted office hours to get help. You can talk to someone in the evening and on weekends so you are not limited to office hours. Even our CEO freely gives out his cell number to call or text.
5. Unless otherwise specified, **all FSC machines come fully assembled.** Most of our competitors erector set kits will require 40-80+ hours of your time to assemble. Our machines are often running within an hour of arrival if the electricity & airline are ready. Buy a machine, not a box of parts.
6. **Our CNC controls connect to the computer via USB** or Cat 5, not outdated parallel port, serial port, ISA ports, or other port that require a DOS or other outdated computer. **Do not assume that the technology is current.** Most of the companies that you get the most mail from are very out of date.
7. Hardened, profiled, made in Ohio, **Precision THK linear ways and bearings not just wheels on plate steel or angle iron.** These machines cannot be bumped out of place like most of the machines in the same price range. The grease fitting on each linear bearing ensure a dependable life.
8. **All our CNC machines use industry standard Fanuc style G&M codes,** not a proprietary language. Thus you are teaching marketable skills, not just playing with a dead end *toybot*. You can **use any CAD/CAM software producing industry standard G-Codes** such as Mastercam, Surfcam, Edgecam, Enroute, Vcarve, Fusion 360, SolidWorksCam, Rhinocam, Inventor with HSM, and more.
9. We use more powerful stepper & servo motors on our machines to be more reliable.
10. **Welded steel frames,** and structural aluminum hold up better in the long term than bent sheet metal and bolted angles because they will not work loose or get out of alignment over time.
11. FSC machines have an Emergency Stop and safety reminders for users to operate the machine safely.
12. Forest Scientific Corporation machines and upgrades are designed to be updated at a low cost when technology changes.
13. **Our local dealers are caring professionals providing on-site support second to none.**

**If you have any questions or need clarification call John at 1-800-956-4056 X1001.**



Dear Educators:

Thank you for reviewing this years catalog. I have decided to showcase some of the Plasma cutter work by students from Buckeye High School in Arizona on the front cover of this years catalog. Their work can be found throughout Historic Buckeye.

You may have noticed our new logo above on the left. Our logo had the old look for the last 30 years and it was due to be updated with a new high tech look for modern times. It is what many customers have called our equipment for a long time. I often hear clients say "I have a Forest CNC."

We manufacture everything in the United States in Tionesta, PA and Phoenix, AZ. We provide training on-site at the time of delivery, webinars and individualized refresher training via the internet, and in our training centers. We also have Project Based Learning curriculum and tutorials with written and video modalities for teachers and students.

Forest Scientific Corporation provides a 36 month on-site parts & labor warranty on all new machines we manufacture unless otherwise noted and 18 month on-site warranty on all upgrades and used machines. Invest with confidence knowing that you will be well supported. If you own any older CNC machines, no matter who built it, we can update it and make it better than when it was new. When you have any questions or need creative strategies to finance your order, please do not hesitate to call me any time at 1-800-956-4056 X 1001 or call or text my cell +1-412-726-0574.

Sincerely,

John E. Martincic  
President, CEO  
johnm@forestcnc.com



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A+



**Call for more information on Lasers and 3D printers**

*All pricing & specifications subject to change without notice  
This Catalog pricing effective 9/1/2019*

*All Trademarks belong to their respective owners*

# FabBot Series Routers and Plasma Cutters

*This series was created for home shops and schools on a very limited budget*

**These machines come with a 3 year limited warranty, personalized online training, and control computer, unlimited phone and on line tech support.**



## **FabBot Desktop Series CNC Router Models**

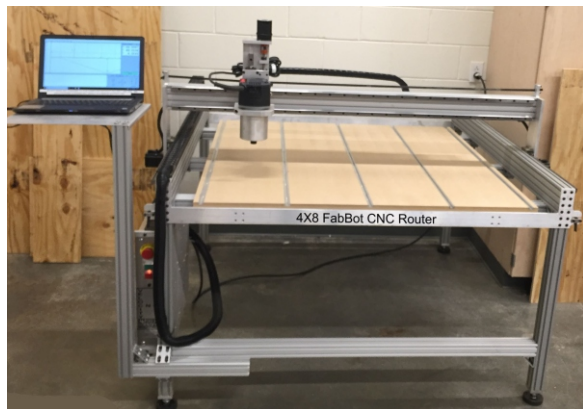
Include: Aluminum T Slot table, Hold Downs, 1-3/4HP router, wrenches, CAD/CAM, training tutorials, and starter set of bits. Operates on 110V 15A

FabBot 15" x 11" x 6"  
Optional Full enclosure

FabBot 24" x 18" x 6"  
Optional enclosure w/stand for 24"X18"  
Optional removable Vac Table Sys2418

FabBot 24" x 24" x 6"  
Optional enclosure w/stand for 24"X24"  
Optional removable Vac Table Sys 2424

FabBot 36" x 24" x 6"  
Optional enclosure w/ stand for 36"X24"  
Optional removable Vac Table Sys3624



## **FabBot Platform Series CNC Router Models**

Include: standard MDF table, 1-3/4HP router, wrenches, aluminum frame construction with integrated stand, dust hood, CAD/CAM, training tutorials, and starter set of bits can operate on 110V 20A 6" Z Travel The floor space is about 2' larger than the work area.

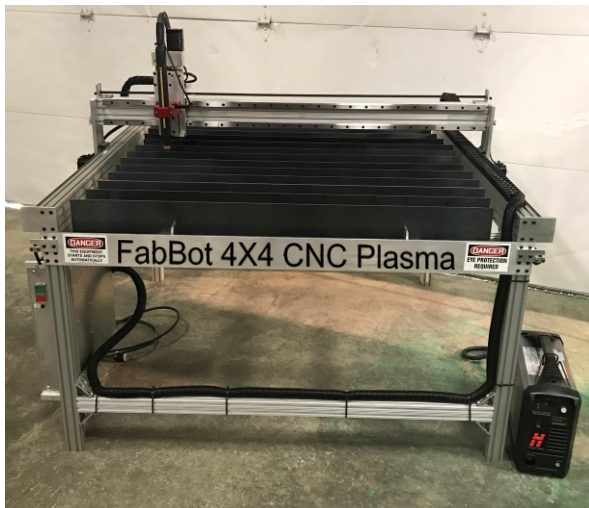
FabBot 48" x 20"(fits through 36" door)  
FabBot 48" x 48"  
FabBot 48" x 96"

Optional  
MDF w/Aluminum T Slot & Clamps 4x4  
MDF w/Aluminum T Slot & Clamps 4x8  
Upgrade to 3-1/4 HP Router  
Upgrade to 1HP 110V High Freq spindle  
Upgrade to closed loop Servo version

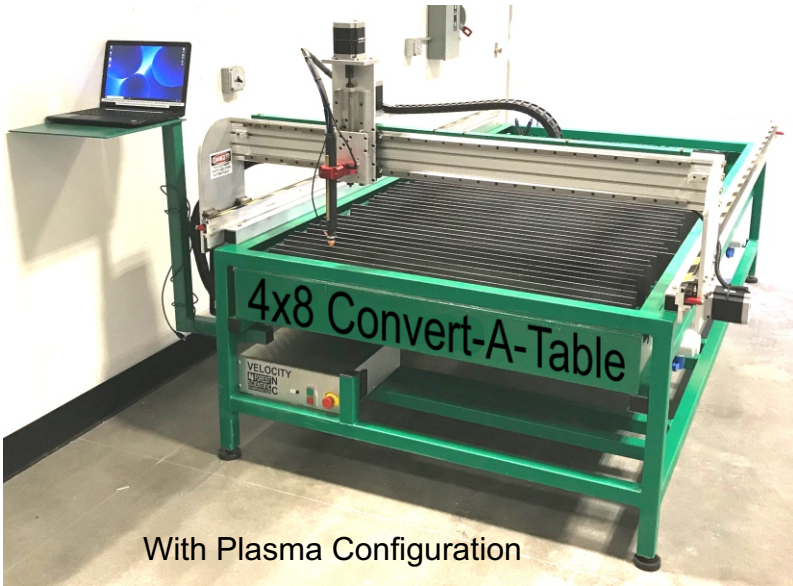
## **FabBot Platform Series Plasma Models**

Each of the CNC Plasma cutters below include CAD/CAM software, Auto Torch Height, Hypertherm 45 Plasma system, and training tutorials. 110V 20 A machine  
240 V 50A plasma cutter  
The floor space is about 2' larger than the work area.

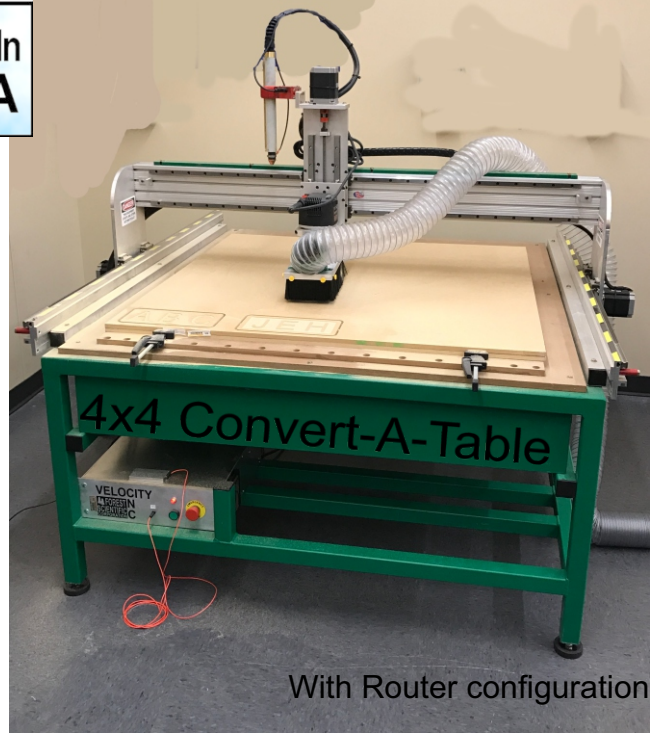
FabBot 48" x 20"(fits through 36" door)  
FabBot 48" x 48"  
FabBot 48" x 96"



# Convert-A-Table PLASMA CUTTER / ROUTER



With Plasma Configuration



With Router configuration

## Convert-A-Table CNC Router / Plasma Models

- CAT 24" x 20" (fits through 36" door)
- CAT 48" x 20" (fits through 36" door)
- CAT 48" x 48"
- CAT 48" x 96"
- CAT 60" x 120"

Includes: Plasma water table, router clamping table, 3-1/4HP router, Powermax 45, Automatic Torch height, Break-a-way system, welded steel stand, dust hood, CAD/CAM, Control computer, computer arm, and starter set of bits and deluxe clamp set. Powermax 45 requires 240V50A, the rest of the machine Operates on 110V 30A 8." Z Travel Floor space 2' greater than work area.

Convert-A-Table easily changes from a CNC Router to a CNC Plasma cutter. This is a great option if you have very limited space and only need one function at a time. The disadvantages are that you only have one machine instead of 2 and these machines can not have a vacuum table system due to the conversion between router and plasma. The 48"X20" machine makes it possible to fit through a standard 36" door. With this heavy duty frame that can plow through wood with the robust 3-1/4HP router while the water table is sealed off. Remove the router table and you have the water table for plasma cutting. No other machine is designed to correctly do both Routing and Plasma cutting well. Conversion between the 2 functions takes less than 10 minutes.

## Popular CNC Plasma and CNC Router Accessories



For Plasma & ATC Routers

5 Stage Desiccant Drying System

Dust Control Computer Security Cabinet



Dust Collector Package Includes  
dust collector  
100' hose  
4 clamps



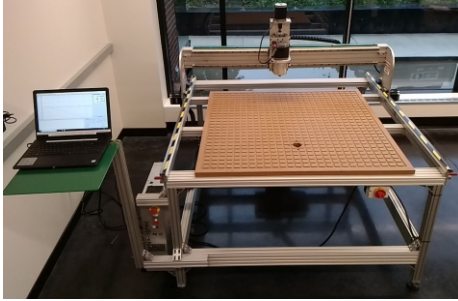
# Most popular CNC Routers *The most common models used in education*

Each of the CNC Routers below are fully assembled, include control computer with arm, clamping kit, CAD/CAM, MDF Table top with T slot clamping kit, tool Touch Off, and tooling kit.

## Titan Series CNC Router Models

The Titan Routers are cost effective heavy duty machines made of structural aluminum. Include: standard MDF table, 3-1/4HP router, wrenches, Aluminum frame, dust hood, and starter set of bits can operate on 110V 20A 8.5" Z Travel The floor space is about 2' larger than the work area. This is a great model for upstairs and other installations requiring special handling since they are lighter weight than steel.

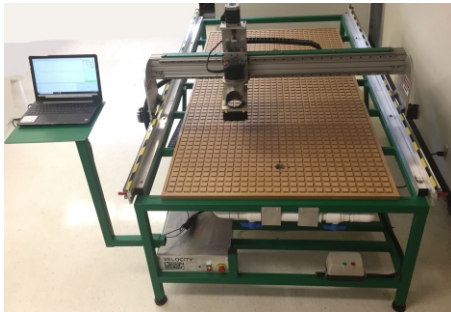
- TitanR 24" x 20"(fits through 36" door)
- TitanR 48" x 20"(fits through 36" door)
- TitanR 48" x 48"
- TitanR 48" x 96"
- TitanR 60" x 120"



## Maker-Fab Series Router Models

Include: standard MDF table, 3-1/4HP router, wrenches, welded steel frame, dust hood, and starter set of bits can operate on 110V 20A 8.5" Z Travel The floor space is about 2' larger than the work area.

- RMF 24" x 20"(fits through 36" door)
- RMF 48" x 20"(fits through 36" door)
- RMF 48" x 48"
- RMF 48" x 96"
- RMF 60" x 120"



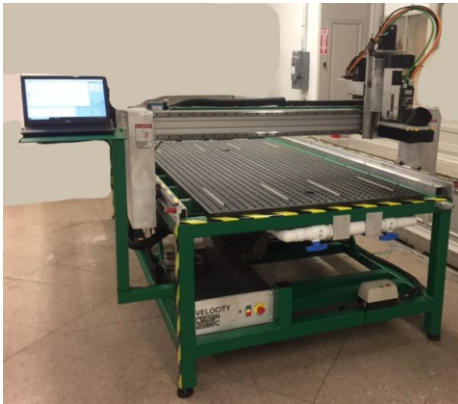
## HS Series Router Models

### Standard model for education and small shop

Include: standard MDF table, 3-1/4HP router, wrenches, welded steel stand, dust hood, and starter set of bits can operate on 110V 20A The floor space is about 2' larger than the work area. HS Series routers feature Closed Loop Hybrid Servo Technology for reliable rapid speeds in excess of 500 IPM. 10.5" Z Clearance

**Ideal for a serious cabinet making program.**

- HS 24" x 24"
- HS 48" x 24"
- HS 48" x 48"
- HS 48" x 96"
- HS 60" x 120"
- HSFV-ATC 4' x 4' with 5HP & 8 position ATC
- HSFV-ATC 4' x 8' with 5HP & 8 position ATC
- HSFV-ATC 5' x 10' with 5HP & 8 position ATC



## Optional Upgrades:

### Vacuum Table systems includes pump & Table

- 24X24 Vac System upgrade 110V
- 48X24 Vac System upgrade 110V
- 48X48 Vac System upgrade 220V3PH
- 48X48 Vac System upgrade 110V
- 48X96 Vac System upgrade 220V3PH
- 48X96 Vac System upgrade 110V
- 60X120 Vac System upgrade
- If Vac Table Sys added later add

- 6" Fourth Axis
- Jog Pendant

### Aluminum T-Slot Table

- 48X20 or 24 T-Slot Table upg.
- 48X48 T-Slot Table upgrade
- 48X96 T-Slot Table upgrade
- 60X120 T-Slot Table Upgrade

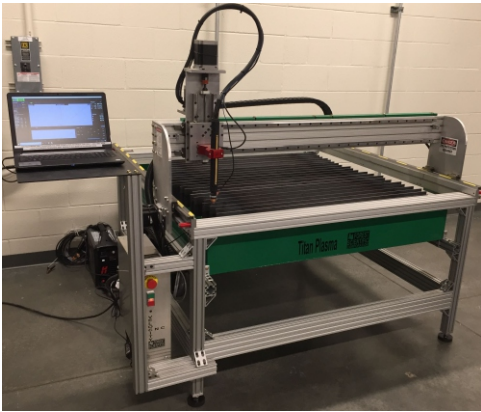
*Note: High Frequency spindles are quieter and ideal if you plan to cut metals.*

### Spindle upgrades

- 2.2HP 1PH High Freq. spindle
- 5HP 3 PH High Freq. spindle
- 10HP 3 PH High Freq. spindle
- 5HP Manual quick change Spindle

# Most popular CNC Plasmas *The most common models used in education*

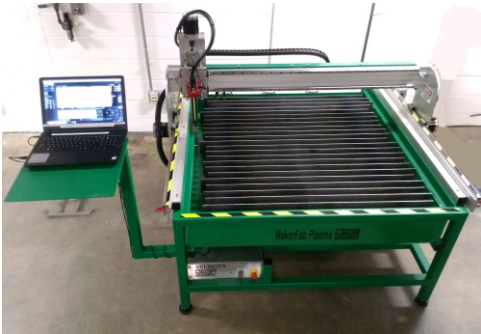
Each of the CNC Plasma cutters below include a Torch Break Away system, Automatic Torch Height, integrated water table, CAD/CAM software, Hypertherm 45 Plasma system, and control computer with arm for a Turn-Key package just plug into your electric.



## Titan Series Plasma Models

The Titan Plasma cutters are cost effective heavy duty machines made of structural aluminum and come standard with a water table. The floor space is about 2' larger than the work area. This is a great model for upstairs and other installations requiring special handling since they are lighter weight than steel.

- TitanP 24" x 20"(fits through 36" door)
- TitanP 48" x 20"(fits through 36" door)
- TitanP 48" x 48"
- TitanP 48" x 96"
- TitanP 60" x 120"



## Maker-Fab Series Plasma Models

The Maker-Fab Plasma cutters are cost effective heavy duty machines made of a welded steel frame with integrated Water Table. The extra rigidity is great for handling the abuse of students and will last for many years.

- PMF 24" x 20"(fits through 36" door)
- PMF 48" x 20"(fits through 36" door)
- PMF 48" x 48"
- PMF 48" x 96"
- PMF 60" x 120"



## HS Series Plasma Models

The HS-Series Plasma cutters are heavier duty machines made with a larger tubular welded steel frame with integrated Water Table. The extra rigidity is great for handling the abuse of students and will stand the test of time with 24/7 commercial use. It's Closed loop Hybrid Servo control assures accuracy at the fastest speeds.

- HSPB 24" x 24"
- HSPB 48" x 24"
- HSPB 48" x 48"
- HSPB 48" x 96"
- HSPB 60" x 120"

Our plasma tables have replaceable leafs that you can easily make by shearing steel so you won't need to buy expensive table parts and pay to ship them across the country.

## Hypertherm Plasma Cutters Upgrades

- |              |  |                          |                                      |
|--------------|--|--------------------------|--------------------------------------|
| Powermax 45  | Pierce 1/2" steel and cut up to 7/8" cut   | Comes standard           | <b>-Best option for most schools</b> |
| Powermax 65  | Pierce 5/8" steel and cut up to 1" cut     | upgrade                  | <i>Require 10 SCFM</i>               |
| Powermax 85  | Pierce 3/4" steel and cut up to 1-1/2" cut | upgrade                  | <i>@ 90 PSI compressed Air</i>       |
| Powermax 105 | Pierce 7/8" steel and cut up to 2" cut     | upgrade (Requires 480V ) |                                      |

### Options:

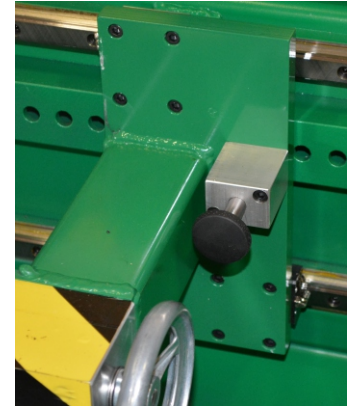
- 8" pipe Cutter 4th Axis with Advanced pipe Cutting Software      Plate Marker \$
- HVAC CAD/CAM EDU stand alone License      Optional

# CNC WOOD LATHE



## WL4000

- \* Cut up to a 40" X 10" Part
- \* Hardened Profiled Rails
- \* Spindle #2MT int Taper
- \* Tailstock #2MT int Taper
- \* Ball Drive Screws
- \* Anti Backlash Nuts
- \* 1 or 5 HP Spindle Motor
- \* Ready for dust collector
- \* Compatible with CAD/CAM
- \* Uses G&M Codes
- \* 36 Month On-Site warranty



WL4000 Positive Locking Tail Stock

## Machines:

- WL4000 Standard Stepper 120V 20A
- WL4000HY Hybrid Servo 120V 20A
- WL4000PRO (faster & 5HP 3PH) 220V 30A 3PH

Used machines \$\$ CALL

# Precision CNC Bed Mill



Enclosed  
or  
Open



## Materials:

- Steel
- Aluminum
- Brass
- Titanium
- Wood
- Plastics
- Almost anything

## Competitive Advantages

1. Arrives fully assembled
2. Will fit through 36" Door
3. Runs on G-Codes
4. Much faster than others
5. Significantly stronger spindle options
6. Table large enough for a vice and rotary axis

## Rigid Fixed Gantry with moving bed available in the following sizes:

- 2'X20"-2.5 HP Spindle
- 2'X20"-5 HP Spindle
- 2'X20"-10 HP Spindle
- 2'X20"-5 HP ATC Spindle with 4 Position ATC

## Options:

- 6"-4th Rotary Axis
- 3D Rapid prototype CAD/CAM
- Enclosure

**Optional accessory kit** includes Collet Set  
Assortment of End Mills, 6" Vise, Hold Down Set



## 5- Axis CNC Router

With full 4x4 or 4x8 flat clamping table 2D/3D

3.25 Hp high frequency air cooled router

10"x (48"or96") 4th axis capacity (6" swing)

8" of travel on the 5th axis 5" capacity

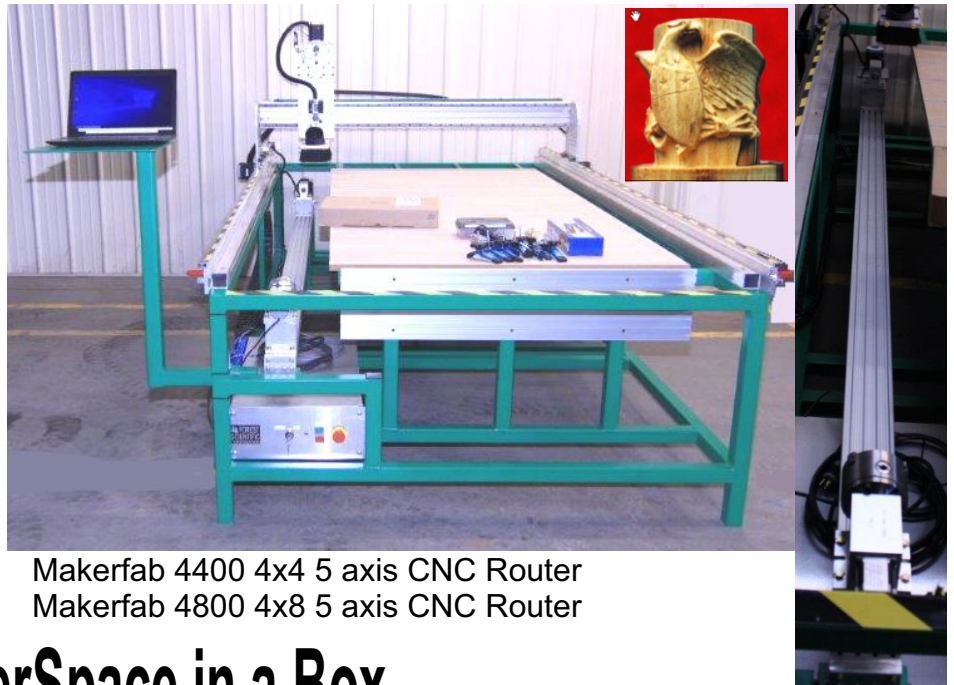
Vertical joinery table for holding stock vertically for End machining

Intercon Conversational programming

Automatic Z length tool sensing

Control computer with preconfigured software

Tooling package



Makerfab 4400 4x4 5 axis CNC Router

Makerfab 4800 4x8 5 axis CNC Router

## Turnkey FabLab or MakerSpace in a Box

A complete portable, Turn-key Fab-Lab or MakerSpace on carts ideal for mutli-use areas such as within a library, elementary, or middle school classroom. Modules may be purchased A la cart or as a complete lab to meet recommendations from the Fab Foundation. On-site training and tutorials assure success with this convenient lab.

Module 1 Laser Engraving/Cutter station

Module 2 3D Printer Station

Module 3 CNC Router Station

Module 4 Manual Tools Station

Module 5 Electronics Station

Call for detailed information

*Many that attempt to put a lab together just buying components fail because they purchase cheap, inferior equipment and never learn how to use it. This package assures instant success and help when needed*

On site Setup and training for success from day 1

Each unit can be rolled out individually or all together

Video Tutorials for lab participants to teach themselves

3 Year on site parts and labor warranty

Start with everything you need to start making



## HyPrecision Predictive WaterJet



HyPrecision Predictive WaterJet MiteyJet 48X20

Call for other options and sizes

# The Michelangelo 3D Modeler

Innovative CNC router designed for classroom use  
*TECH ED, DRAFTING, WOODWORKING, ART*



**Maximum Fully Enclosed size  
to fit through a 36" Door**

TRAVEL  
X=35" Y=13.5" Z=8.5"  
Z Clearance 6.5"



**Includes Vacuum table system & Dust collection system**

## TOOLING

Router Wrenches.....1 Set  
Collets.....1/4", 1/2"  
Starter bit set and vacuum table gasketing

## ELECTRICAL

Main Power..... 110V 20A  
Spindle Motor.....3 1/4 HP 10K-21K RPM

**Michelangelo Stepper Version X=35" Y=13.5" Z=8.5"**

**Michelangelo Servo Version X=35" Y=13.5" Z=8.5"**

**Michelangelo Pro X=35" Y=20" Z=8.5"**

**includes 2.2HP High Freq Spindle and greater Y travel  
will not fit through 36" door**



## Guitar Making CNC Router



<http://www.guitarbuilding.org/>



The LuthierMax Series of CNC routers was designed for guitar making in collaboration with engineers from Fender® Guitars (who are using this model) and [www.guitarbuilding.org](http://www.guitarbuilding.org) to make this machine student friendly and robust. Fixtures built into the table make it easy to machine your own guitar necks and bodies for both standard size and longer base guitars in your classroom. This is the largest fully assembled CNC router that fits through a standard 36" classroom door. Travels X49" Y20" Z8.5"

Floor space approximately 76' X 34". All models (except ATC model) use 110V normal wall outlet electric. *Servo & ATC models have a larger footprint that will not fit through the 36" door opening. Call for more info.*

### LuthierMax CNC Router Models:

LuthierMax CNC Router 110V,20A

### LuthierMax Options:

Vacuum Table System  
Guitar Making Class Start up kit  
Guitar Making CNC Bit Kit

# MITHEY SERIES

*Machines for educational training, prototyping, design, and industrial production worldwide*

## MITHEY MILL

X - Travel 9" (23cm)  
Y - Travel 5" (13cm)  
Z - Travel 6.25" (15.88cm)  
Table 2.75" X 13"  
(7 X 33 cm)  
110V 20A



MMSV Stepper Standard Version  
MMHY Hybrid Servo Standard Version

### Mitey Mill Options:

4" Vise  
4" 4th Axis  
10K RPM Spindle

## MITHEY LATHE

X - Travel 4.25" (10.8cm)  
Center Distance 8" (20cm)  
Swing over bed 3.5" (8cm)  
Swing over carriage 1.88"  
(4.78cm)  
110V 20A



MLSV Stepper Standard Version  
MLHY Hybrid Servo Standard Version

### Mitey Lathe Options:

Deluxe QC tooling package  
Threading capability  
Knurling tooling

## MITHEY WOOD LATHE

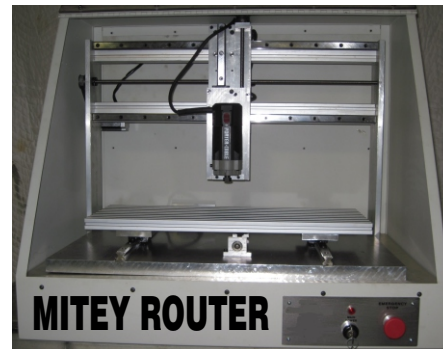
18"X 4" Capacity  
(45 X 10 cm)  
110V 20A



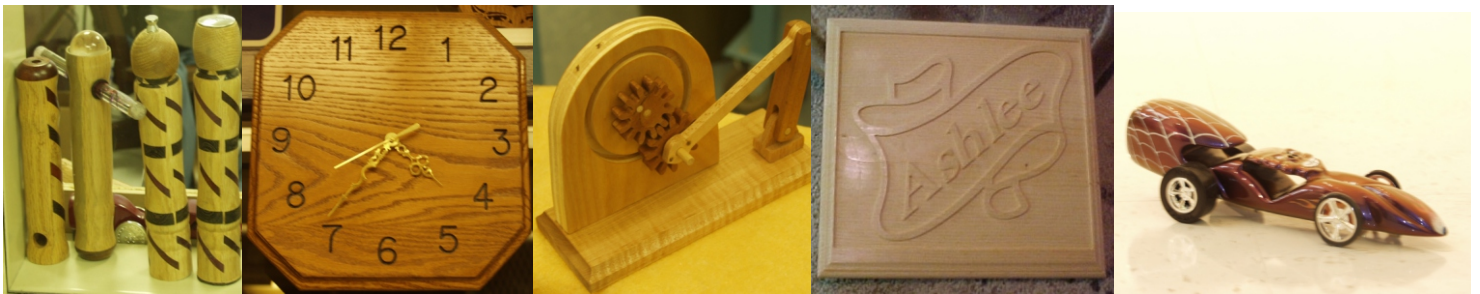
MWLS Stepper Version  
MWLHS Hybrid Servo

## MITHEY ROUTER

Travels  
18"X x 9"Y x 6.5"Z  
(45X x 23Y x 16Z cm)  
110V 20A



MRLS Stepper Version  
MRLHS Hybrid Servo  
Upgrade to HF Spindle  
4th Axis  
3D Digitizing probe



# For a fraction of replacement cost, update old DOS machines to Windows



All Phoenix/ Magnum/  
Paxton Wood Lathes  
VC-PMPPL  
Upgrade \$



All Phoenix/ Magnum/  
Paxton Routers VC-PMPPR  
Upgrade \$6,999.00  
Vac pump \$



All Paxton Lathes VC-PPL  
Upgrade \$

All Paxton Mills VC-PPM  
Upgrade \$



D&M 3 or 4 & Lab Volt 5400 Mills  
VC-DMM34 Upgrade \$

D&M 3, 4, or Lab Volt 5300 Lathe  
VC-DML34 Upgrade \$



D&M 5 or Lab Volt 5500  
VC-DML5  
Upgrade \$



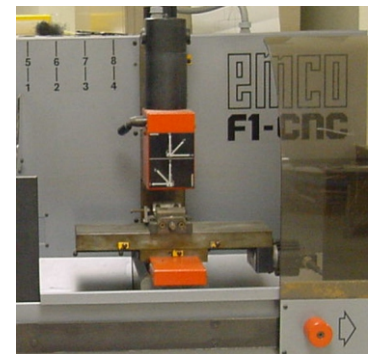
D&M 5, 6 or Lab Volt 5600  
VC-DMM5  
Upgrade \$



All Emco Compact 5 Lathes  
VC-CP5L  
Upgrade \$



Emco Compact 5 Lathes  
If it has a Tool Turret  
Add VC-CPTT \$



ALL Emco F1 Mills  
VC-EF1M  
Upgrade \$



All Denford Routers  
VC-DFMR  
Upgrade \$



All Denford MicroMills,  
Scantek, LabVolt, B&G,  
& Midwest  
VC-DFMM  
Upgrade \$

All Denford MicroLathes,  
Scantek, LabVolt, B&G,  
& Midwest  
VC-DFML  
Upgrade \$

# GET OLD MACHINES OUT OF THE JUNK PILE

## We Service all brands

## Stretch your budget

Unlike new equipment, upgrades usually do not come out of your own budget. Most upgrades are financed through other budgets including: district repair budgets; technology funds since we are changing the computer in the machine; or through special needs funds. Once these machines are upgraded, they will be much easier for a special needs student to be successful. Upgrades often make it possible for the vocational-technical supervisor to tap into funds that otherwise would not be available. Equipment purchased under Perkins can often be repaired under Perkins. Also, it is often much easier to get school boards to approve repairs on existing equipment than purchasing new equipment. Depending on the machine, most upgrades range from 1/2 to 1/20th of the replacement cost of a machine and will usually allow it to operate better than new.

**CNC Upgrade Price:** Includes everything needed - software, electronics, install, 18 month warranty, and training. Add CAM software (see page 13) and a modern PC computer with 2 USB 2.0 Ports.

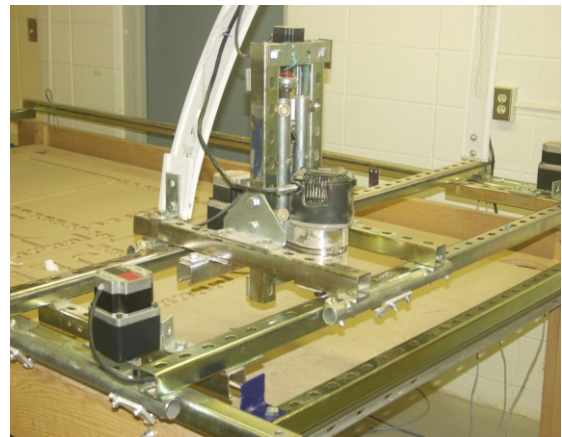
Upgrade Older Forest Scientific Velocity based Controls \$  
 Upgrade Older Forest Scientific Centroid based controls \$



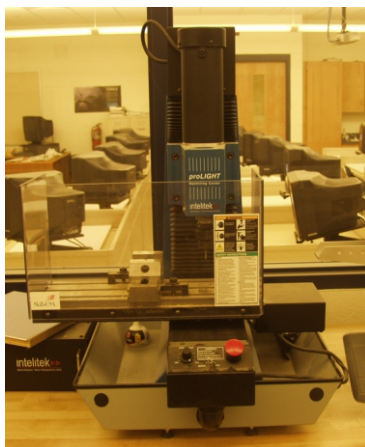
Light Machines  
 CNC Router  
 VC-LMCR  
 Upgrade \$



Light Machines  
 Spectralight Mill  
 or Spectralight Lathe  
 Upgrade \$



All Shopbot Routers  
 VC-SHOPB Upgrade \$  
 OR  
 VC-SHOPBCL \$7,999.00 for Closed loop version



Light Machines  
 Pro Light Lathe or Mill  
 VC-PL  
 Upgrade \$  
 ProLight with ATC \$



All Techno Routers  
 Gantry style & Davince  
 Under 2'X2'  
 VC-Techno  
 Upgrade \$  
 Servo \$

Techno LC Servo Routers \$  
 Techno Plasma cutters \$  
 XYZ Millenium Routers \$  
 XYZ 4x4 & 4x8 Routers w/o ATC \$  
 XYZ 4x4 & 4x8 Routers with ATC \$

EZROUTER, PlasmaCAM, & Torchmate upgrades  
 without ATH \$  
 with ATH if existing plasma is adequate \$  
 Complete with ATH & Powermax 45XP \$

Optional Preloaded Notebook computer \$

**IF YOU DO NOT SEE IT  
 HERE CALL FOR HELP**

# CAD/CAM SOFTWARE OPTIONS

**Note: Software purchased through Forest Scientific Corporation or an authorized dealer of Forest Scientific Corporation will have Free installation and support assistance. If software is purchased directly from the Vendor or online, we will offer support at a fee. Realize, the software from another vendor will need customization and configuration to work properly.**

## For Lathe, Mill, Router, Plasma **MasterCAM** *Educational License with a machine*

Single User with machine or upgrade purchase	\$	Additional Educational Lab Licenses	\$CALL
Upgrade from earlier version	\$ CALL	Mastercam University	\$CALL

## EnRoute, for Routers, Plasmas, & Mills

*Classroom License - Please specify how many up to stations*

### Classroom License of EnRoute 6

EnRoute Plus with kerf comp 2D	\$
EnRoute Pro with kerf comp 3D	\$

### Upgrade pricing from EnRoute 3, 4, or 5 to EnRoute 6

3, 4, or 5 Pro to EnRoute 6 Pro	\$
3, 4, or 5 Plus to EnRoute6 Plus	\$
3, 4, or 5 Plus 2D to EnRoute 6 Pro 3D	\$
Upgrade from EnRoute 6 Plus to 6 Pro	\$

## Vetric CAD/CAM for CNC Routers & Mills 40 educational seats in a single lab or classroom

### Full CAD/CAM Products

Cut2D Desktop for 2x2 or smaller work area	\$
VCarve Pro	\$
Aspire 3D	\$

### Specialty 3D Products

PhotoVCarve	\$
Cut3D	\$
Upgrades	CALL

## VECTOR ART - PREMADE ART 2D for LASERS, Mills, Routers & Plasma 3D for Routers & Mills only Instant Success for your students

### 2D Products

Vector Art 1 over 6K images	\$
Vector Art 2 over 5K images	\$
Vector Art 3 over 6K images	\$
PlasmaArt Collection	\$

### 3D Products

Vector Art 3D Animal Collection	\$
Vector Art 3D Flourishes and Ornaments	\$
Vector Art 3D Symbols & Icons	\$
Vector Art 3D Dasch's fine cuts	\$

### CorelDraw Academic Current Version

CorelDraw Single seat	\$
Corel Draw 100 Seat License	\$

### For Lasers

Corel Draw 50 Seat License	\$
Corel Draw 250 Seat License	\$

Have you ever wondered why the name Forest Scientific?

Forest Scientific Corp was founded and is headquartered in Tionesta, Forest County, Pennsylvania. Our name is from our county. visit <http://www.forestcounty.com>

The picture to the right is our 67,000 square foot factory located on the north edge of Tionesta along the Allegheny river. We are 3 hours from Pittsburgh, Cleveland, and Buffalo.



# CNC Accessories

Most common educational use excerpts from our tooling catalog

Part #	Cutting Dia	Shank Dia	Length	Price
<b>Straight bottom cutting Panel cutting bit</b>				
49-SST198 Str. 2 flute bit	1/8"	1/4"	2-1/2"	\$21.00
49-SST220 Str. 2 flute bit	1/4"	1/4"	2-1/2"	\$25.00
24-102-0885P Str. plunge bit	1/2"	1/2"	2-1/2"	\$39.00

<b>Economy Upspiral Flat bottom end mill</b>				
24-106-0202	1/8" Up	1/8"	1/4"	2" \$25.00
49-SRU118	1/4" Up	1/4"	1/4"	2-1/2" \$25.00
49-SRU153	1/2" Up	1/2"	1/2"	3" \$49.00

<b>Small Bits (BN=ball nose FN=flat nose)</b>				
31-VSC3dfn-500 2 flute	1/64"	1/8"	1-1/2"	\$34.00
31-VSC3dbn-500 2 flute	1/64"	1/8"	1-1/2"	\$38.00
31-VSC3dfn-503 2 flute	1/16"	1/8"	1-1/2"	\$20.00
31-VSC3dbn-503 2 flute	1/16"	1/8"	1-1/2"	\$22.00
31-VSC3dfn-501 2 flute	1/32"	1/8"	1-1/2"	\$23.00
31-VSC3dbn-501 2 flute	1/32"	1/8"	1-1/2"	\$24.00

<b>Down Spiral bits ( prevent chipping on top)</b>				
49-SRD203	1/8"	1/4"	2"	\$25.00
49-SRD218	1/4"	1/4"	2"	\$25.00
49-SRD253	1/2"	1/2"	3"	\$49.00

<b>Plungable round over bits</b>				
49-SE1568 1/8" radius	1/8"	1/4"	2"	\$19.00
49-SE1572 1/4" radius	1/4"	1/4"	2"	\$22.00
49-SE1580 3/8" radius	1/2"	1/2"	2-1/4"	\$26.00
49-SE1582 1/2"radius	1"	1/2"	2-1/4"	\$29.00

<b>Compression up/down spiral</b>				
Item #	A	B	Shank	\$
24-107-0402	1/4"	7/8"	1/4"	\$38.00
24-107-0815	1/2"	1-1/8"	1/2"	\$67.00

<b>Mitey Series Accessories</b>				
<b>Mill</b>				
41-7402	1/8	End Mill	3/8 shank	\$ 19.00
41-7403	3/16	End Mill	3/8 shank	\$ 19.00
41-7404	1/4	End Mill	3/8 shank	\$ 19.00
41-7406	3/8	End Mill	3/8 shank	\$ 19.00
41-7400	6 piece set 1/8, 5/32, 3/16, 1/4, 5/16, 3/8			\$ 99.00
41-3551	Milling Vise 2"			\$125.00
35-428-9020	Milling Vise 4"			\$250.00
41-3079	3/8 End Mill Holder			\$ 75.00
41-6079	1/4 End Mill Holder			\$ 75.00
41-6081	1/8 End Mill Holder			\$ 75.00
41-3020	5/32 Hex T-driver			\$ 10.00
41-3013	Step block hold down set			\$ 50.00
41-1072	1/4" drill Chuck, with access			\$ 65.00
41-32540	High-speed Belt mill or lathe			\$ 42.00
<b>Lathe</b>				
41-1191	Lathe Live Center			\$ 80.00
41-11940	60° Carbide tool bit			\$ 19.00
41-11950	Right Hand, HSS (1/4" SQ)			\$ 19.00
41-11960	Left Hand, HSS (1/4" SQ)			\$ 19.00
41-3086	Cut Of Tool Blade			\$ 24.00
41-3002	Cut-off Tool Holder & Tool			\$ 95.00
41-3003	1/4" Tool Post			\$ 75.00

<b>Specialty Router Tooling</b>				
56-D2	Razor Cardboard cutter			\$495.00
57-Pen	Router Bit with pens 1/2" Shank			\$ 89.00
57-Replacement	Pen set			\$ 19.00
57-Diamond	Drag Engraving Bit 1/4" Shank			\$249.00
57-Diamond	Drag Engraving Bit 1/2" Shank			\$249.00
11-328	Vinyl Cutting head			\$599.00
VC-Jog	Velocity remote jog pendant			\$599.00

## Individual 3-D Router Bits

Part #	Cutting Dia	Shank Dia	Length	Price
49-SRU103 (Flatnose)	1/8"	1/4"	2"	\$39.00
49-SBNU125 (Ballnose)	1/8"	1/4"	2"	\$39.00
49-SRU123 (Flatnose)	1/4"	1/4"	3"	\$39.00
49-SBNU250 (Ballnose)	1/4"	1/4"	2-1/2"	\$39.00
31-SPCLE250(Ballnose/)	1/4"	1/4"	4"	\$79.00
49-SRU153 (Flatnose)	1/2"	1/2"	3"	\$49.00
49-SRU167 (Flatnose)	1/2"	1/2"	4"	\$69.00
49-SBNU500 (Ballnose)	1/2"	1/2"	3"	\$79.00
31-SPCLE500 (Ballnose)	1/2"	1/2"	4"	\$89.00

<b>HSD &amp; ATC Tool Holders &amp; Collets</b>		
52-A1741H0001	ISO30 ATC Tool Holder	\$175.00
52-7501A9300	ISO 30 tool forks	\$89.00
55-04232-1/8	ER32 Collet 1/8"	\$75.00
55-04232-1/4	ER32 Collet 1/4"	\$75.00
55-04232-1/2	ER32 Collet 1/2"	\$75.00
55-04232-05	ER32 Collet 5MM	\$75.00
55-04616	ER32 Wrench	\$40.00
55-04615	ER25 Wrench	\$40.00
55-04225-1/8	ER25 Collet 1/8"	\$75.00
55-04225-1/4	ER25 Collet 1/4"	\$75.00
55-04225-1/2	ER25 Collet 1/2"	\$75.00

<b>Lettering V-Groove bit</b>				
	CUT DIA	Shank		
49-SLIN062	10 Degree	1/16"	1/4"	\$35.00
24-132-9002	60/90 Double ended bit	1/4"		\$50.00
49-SCVG260	90 Degree	1/4"	1/4"	\$19.00
49-SCVG264	60 Degree	1/4"	1/4"	\$19.00
49-SE1502	90 Degree	1/2"	1/4"	\$23.00
49-SE1503	90 Degree	1/2"	1/2"	\$23.00
49-SE1560	60 Degree	1/2"	1/2"	\$23.00

<b>Spoil Board Bit</b>		
For resurfacing your MDF table or spoil boards		
49-spoil-25-2	spoil board bit	\$299.00
49-spoil-insert	inserts 10 pack	\$ 24.99
49-spoil-screw	replacement screw	\$ 3.25
49-spoil--wrench	replacement wrench	\$10.00

<b>Router Collets/ Accessories</b>		
1/2"Router Collet	34-42950	\$23.00
1/4"Router Collet	34-42999	\$23.00
3/8"Router Collet	34-42975	\$23.00
3HPPorter Cable Rout Wrench	34-42596	\$25.00
53-RB102	1/4" to 1/8" Collet reducer	\$23.00
49-SE6390	1/2" to 1/8" Collet reducer	\$17.00

<b>CNC Router/Wood Lathe Accessories</b>		
<b>Vacuum Table Gasketing / hold down supplies</b>		
Router Gasket (Forest Scientific Vac pump	11-800	\$99.00
Router Gasket (softer for Venturi Magnum routers)	11-801	\$99.00
1/16"X1/2"Adhesive router gasket	23-8694k11	\$35.00
1/8"X1/2"Adhesive router gasket	23-8694k16	\$39.00
3/16"X1/2"Adhesive router gasket	23-8694k17	\$45.00
1/4"X1/2"Adhesive router gasket	23-8694k12	\$49.00
Double sided Masking tape	23-76405A13	\$13.00

<b>CNC Wood Lathe tooling</b>		
FS Wood Lathe Tool	30-46-415	\$ 99.00
Universal Carbide Cutter (magnum)	28-700	\$125.00
HSS Cutter Big Lathe (magnum)	28-720	\$120.00
HSS Cutter Small Lathe (magnum)	28-735	\$120.00
Modify HSS holder for carbide	11-901	\$180.00

<b>Replacement parts for Magnum/Phoenix</b>		
Replacement Venturi	29-NZHI13BS-T01-T02	\$119.00
Replacement Flexi motor coupling	11-425	\$ 99.00
Phoenix EZM Belt	32-2L200	\$ 16.00
Limit Switches (magnum)	39-SW128-ND	\$ 15.00

# CRP Clean Room Metal Torch



Cut:  
Steel  
Aluminum  
Copper  
Brass

**Cost  
Effective  
Alternative  
to a  
\$600K Laser**

Fully Enclosed

Run in a Clean Room

**Cut Steel Faster than a WaterJet  
with Lower Operational Cost**

110 V or 240V operation requires compressed air  
Closed-Loop Hybrid Servo Control System  
Downdraft grid table and ports to exhaust fumes outside or to a filtration system  
Automatic torch height  
Automatic voltage detection, current set from computer  
Includes fine marking, and standard cutting consumables

Model	Travel	Price
CRP2418	24" X 18" Y	\$
CRP3618	36" X 18" Y	\$
CRP48X24	48" X 24" Y	\$
Optional in room filtration system		\$
Optional ultra quiet dry air compressor		\$
Converter to run 45 A Plasma on 110V		\$

Perfect for an Engineering Lab

Capabilities:

Near laser quality fine cutting up to 1/4" steel  
Able to cut up to 7/8" steel  
Low resolution metal marking



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**Success from day 1.**



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