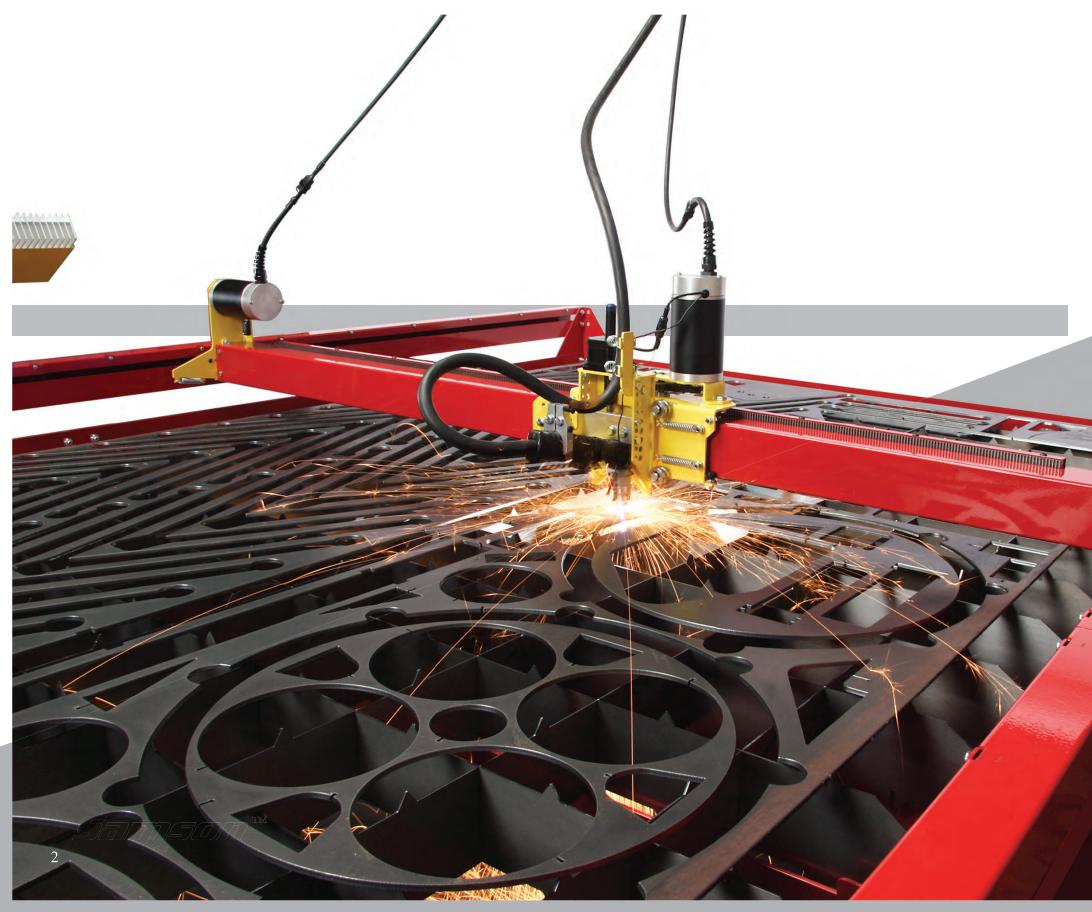
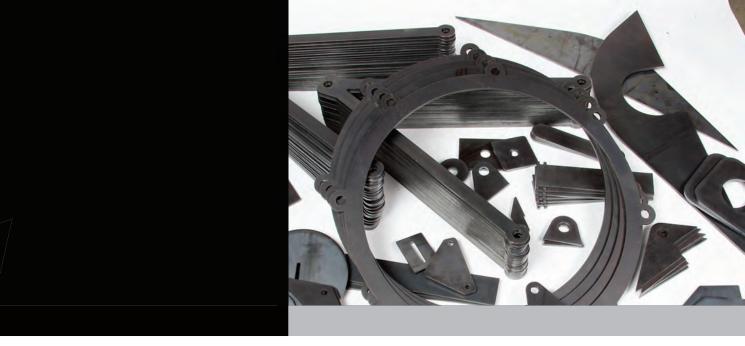
# Large-scale plasma cutting is now easy to use and affordable.



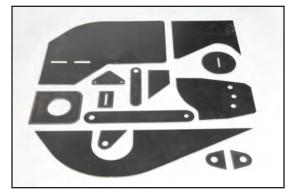












The new Samson<sup>™</sup> plasma cutting table manufactures precise metal shapes from sheetmetal or heavy plate. This rugged, industrial-sized machine cuts 5ft x 10ft material more than 1 inch thick. Powerful servo motors provide cutting speeds up to 1000 inches per minute. Never before has a system with such advanced capabilities been so easy to use and affordable!

The Samson<sup>™</sup> cutting system is specially engineered for large fabrication and mass production. With Samson<sup>™</sup>, you can efficiently make:

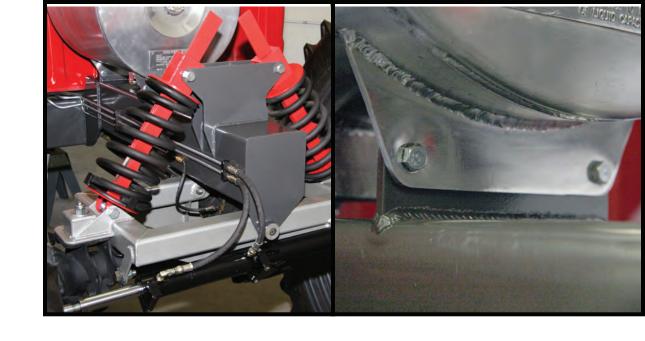
- Accurate geometric parts
- Detailed metal art
- HVAC fittings and ducts

The included CAD/CAM software and control system makes it easy to design, layout, and cut various pieces. You can bring in and duplicate almost any shape from scanned images to computer fonts to common drawing programs.

Revolutionize your metalworking business with Samson<sup>™</sup>!

# *Samson Helps Build Giant Snow Truck*

Master fabricator Rex Bailey used the Samson<sup>™</sup> machine to build the "Yeti" (the abominable snowman), a monster truck that drives through snow more than 3 feet deep. The 76-inch tractor tires, Unimog portal axles, and modified Dodge 3500 Cummins diesel truck are all joined together by custom-designed plates that Rex made with the machine.





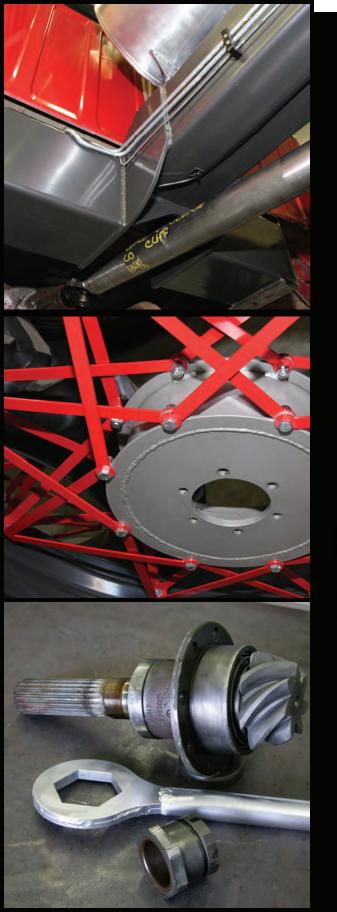
"In every shop where I've worked, you start out with an idea, trace it onto a piece of metal, and cut it out by hand. You use a saw or torch and then drill the holes you need. It takes a lot of time, and there's a lot of grinding, filing and beating. If you need several of the same part, you have to repeat this process each time.

"Now that I've used the Samson<sup>™</sup> machine, I'll never go back to the old way. I can draw and cut perfect parts in much less time. Once I design a part, I can cut as many as I want. It's also nice to be able to put a full sheet into the machine and get a lot of parts out of it.

"I can't believe that every metal shop doesn't have one of these machines when you see how much time is wasted making parts the other way. You don't realize the difference until you use one – it's very eye opening. A shop can really up its production and cater to more customers. It frees you up to do more things. Instead of 5 people waiting in line for you to make their projects, you can be cutting all the parts you need at once.

"The machine opens up new possibilities for what you can build, how you can build it, and how quickly and accurately. I needed to take the pinion nut off of the Unimog differential to clean the bearings. They wanted \$200 for a wrench out of Germany. With the software, I drew and cut my own wrench in a few minutes, and it worked great.

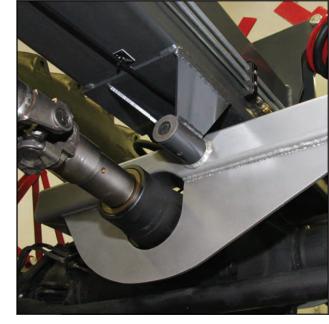




"You can make stuff with intricate detail that is not even possible by hand. I don't care how skilled you are with a plasma cutter, you'd be there forever. I thought it was just a cool machine until I used it.

Now I can't believe that I did things the other way for so long. It's simple to use. If I can learn how to use it, anyone can."

- Rex Bailey, fabricator









The machine is more accurate than a plasma torch. This drawing (1/10th the size of the plasma cut part) was made by the machine holding a pen. With plasma, the machine can achieve part accuracies as high as  $\pm 0.005$  inch, depending on setup conditions.

This sign was drawn and cut from a 5ft by 14ft by 1/4in steel plate in one piece.

NUFACTI

The software lets you quickly design custom signs and add lettering to your designs using computer fonts. Any geometric shape can be accurately drawn right in the software.

The most important advantage Samson<sup>™</sup> gives you over conventional CNC machines is it's unique CAD/CAM software and control system. Developed specifically for plasma cutting, the software quickly creates impressive designs and cuts them on the machine. This eliminates the traditional steps of having to create and process cumbersome machine programs for everything you cut. Samson<sup>™</sup> gives you an easy, visual interface where you work directly with the images you want to cut.

The machine plasma cuts precise and intricate flat shapes. Any thickness from 30 gauge through 1¼ inch can be cut, depending on your plasma cutter. Virtually any metal can be plasma cut including steel, stainless steel, aluminum, brass, copper, galvanized, etc.

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You can mount other tools in the machine like routers, vinyl cutters, mig welders, markers, etc. This gives you the freedom to experiment with other applications and cut other materials like wood or plastic.

This lighthouse scene was drawn in Adobe Illustrator™, brought into the software, and cut on the machine.

# Detailed Metal Art Projects



Because the Samson<sup>™</sup> machine is so fast and accurate, you can manufacture metal art projects with incredible detail. The software makes it easy to move your ideas and designs right into production.

In less than 1 hour, this game birds scene was scanned from hand-drawn artwork, prepared for cutting by the software, and cut from 10 gauge steel.



The new Digital Height Control<sup>™</sup> (DHC<sup>2</sup>) helps the machine run autonomously by consistently setting and maintaining the torch at the right cutting height, and by detecting and avoiding collisions. All this means unprecedented levels of production and economics for your manufacturing operation.

This 3ft diameter spinning wind ornament was drawn in the software and combined with a horse from clipart.

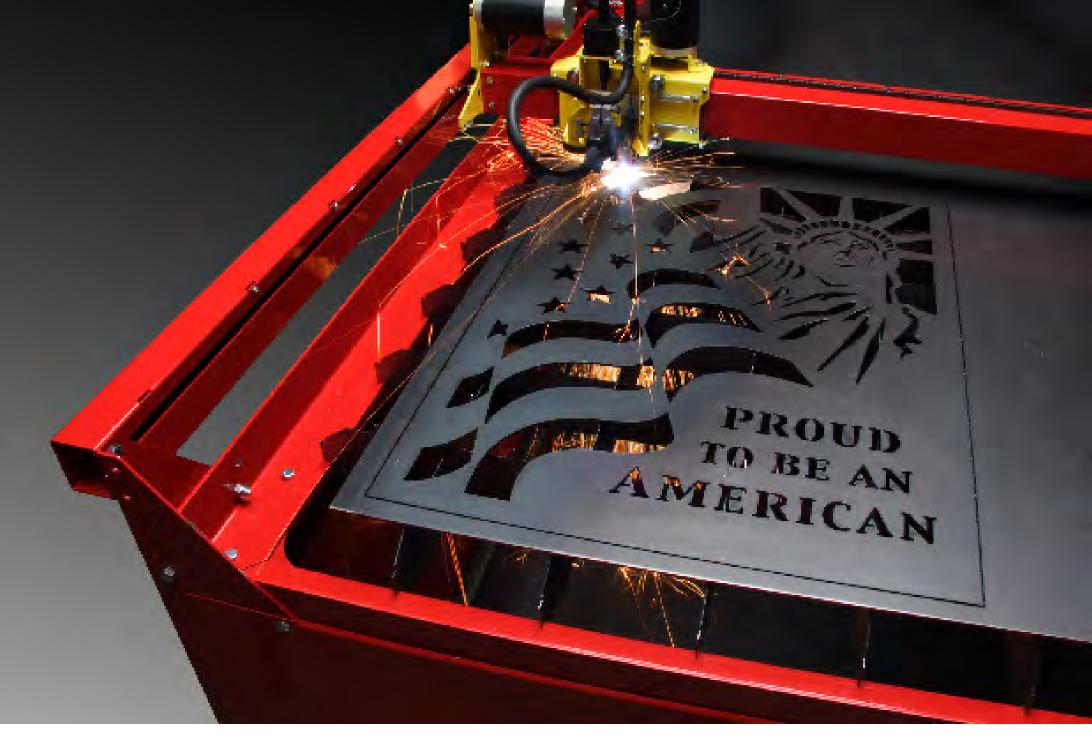






Several professional art disks are also available with intricate, high-quality silhouette shapes specially designed for plasma cutting. The files are ready to cut on the machine, allowing you to immediately make hundreds of impressive metal art projects.





You can edit the files to resize and combine images or pieces with your own customized designs. Many of the samples shown were made using images from these art disks.

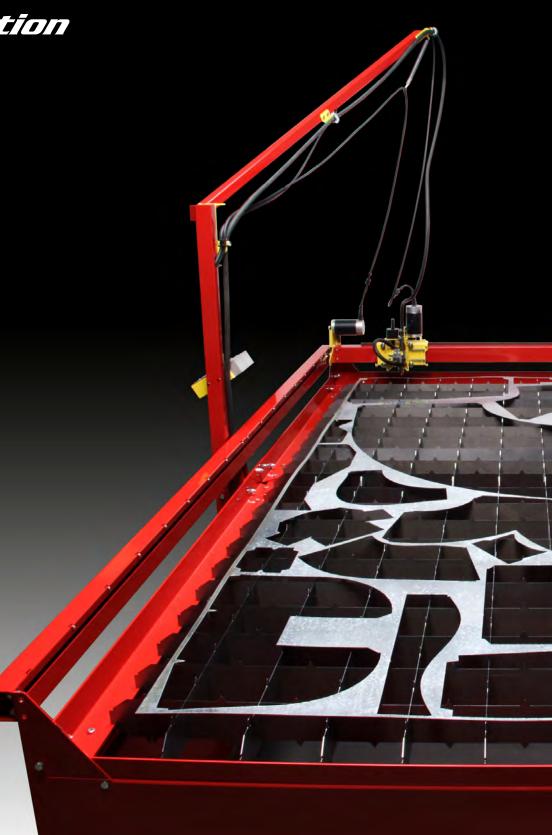
Samson<sup>™</sup> makes even the complicated seem simple.

# HVAC Sheetmetal Fabrication

With the Samson<sup>™</sup> machine, you can make high-quality, custom ducts and fittings for mechanical jobs. The optional software shown automatically designs 3-dimensional custom HVAC parts based on your dimensions, materials and other preferences.







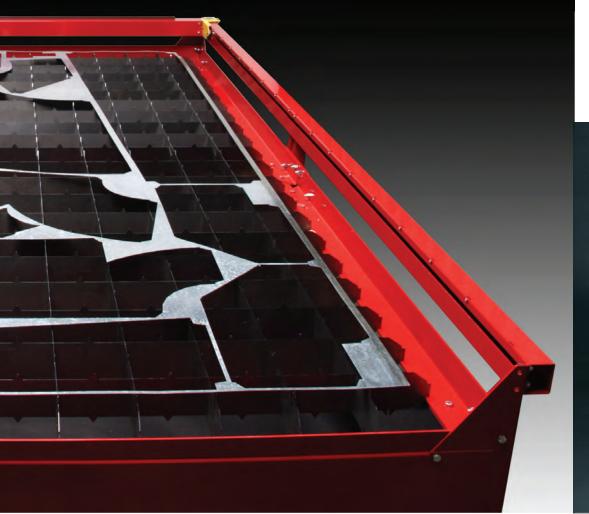
It's easy to nest and cut multiple fittings at once, making the most out of your 5ft by 10ft sheets of material. With Samson<sup>™</sup>, you'll make top-quality fittings in record time.

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### To create fittings in the software:

First you choose the type of fitting you want from the library of available styles. Next you enter the dimensions, seams, and other preferences.

The flat pattern is generated, laid out, and cut by the machine. Then you form and assemble the pieces to make the finished fitting.





# Samson™Advantage

# CAD/CAM Software

Software designed specifically for plasma cutting is included with the machine. This complete CAD/CAM program not only creates designs, it also runs the machine (no other software is needed). The program is Windows-based and very easy to use. Jobs that used to take all day can now be done in just minutes.

The software lets you work directly with the images you want to cut, eliminating any need for machine programs, layout drawings, or metal patterns. The software automatically prepares complex drawings for cutting. You simply place parts on the screen where you want them cut from the metal.



You can read and convert scanned pictures and hand-drawn artwork, CAD files, and many other formats. You can add custom lettering to your designs using TrueType fonts. You can draw precise geometric shapes and modify designs with ease.



Video-based instruction manual makes learning the system easy.

# Plasma Cutting Table

- 5ft by 10ft cutting area.
- Servo motors provide accurate, high-speed motion.
- Enhanced digital height control for optimum performance. With DHC<sup>2</sup>, the torch:
  - Hovers a precise distance over the metal during cutting.
  - Raises and lowers between cuts, sensing the material to set the exact pierce height before each cut.
  - Detects and avoids collisions.
- Unique torch/tool holder:
  - Clamps hand torch securely from the top for easy consumable changes.
  - Easily accommodates machine torch with optional bracket. (Hand torch is preferred for best performance and economics.)
  - ° Other tools can be quickly mounted in tool holder.
- Wide plasma torch compatibility.
- 3 year limited warranty and free technical support.

The complete Samson<sup>™</sup> cutting system includes the machine (table with cutting grate, motors, and electronics) plus the design & control software. You supply the plasma cutter (call for pricing), personal computer, and smoke/dust control. A common setup is the downdraft table, consisting of panels attached to 3 sides of the machine plus a fan at the back to pull air outside or through a filtering system. Another approach is to place a water tray underneath the cutting grate. The system does not include the side panels shown, a fan, a water tray, or any other dust control components, since each installation is configured differently. Drawings of side panels that you can cut using your machine are included with the software.







#### *Power Required* 115/230 VAC, 50/60hz, 10 A Can power off same circuit as PC.

## Weight

700 pounds, packaged Ships in a single crate.

## Dimensions

133" wide by 82" deep by 97" high Table surface is 33" high.

### **Cutting Capacity**

Material thickness	1¼ inch max
Material weight	
Cutting area is	$60\frac{1}{2}$ by $120\frac{1}{2}$

### Speeds (inches per minute)

Cutting/rapid (X/Y)	0.1 to 1,000 ipm
Raise/lower (Z)	4 to 104 ipm

#### Resolution

X/Y axes 0.000	5 inch
Z axis 0.00	2 inch

#### Make custom HVAC fittings



Make detailed metal art project<del>s</del>



Make accurate mechanical parts



