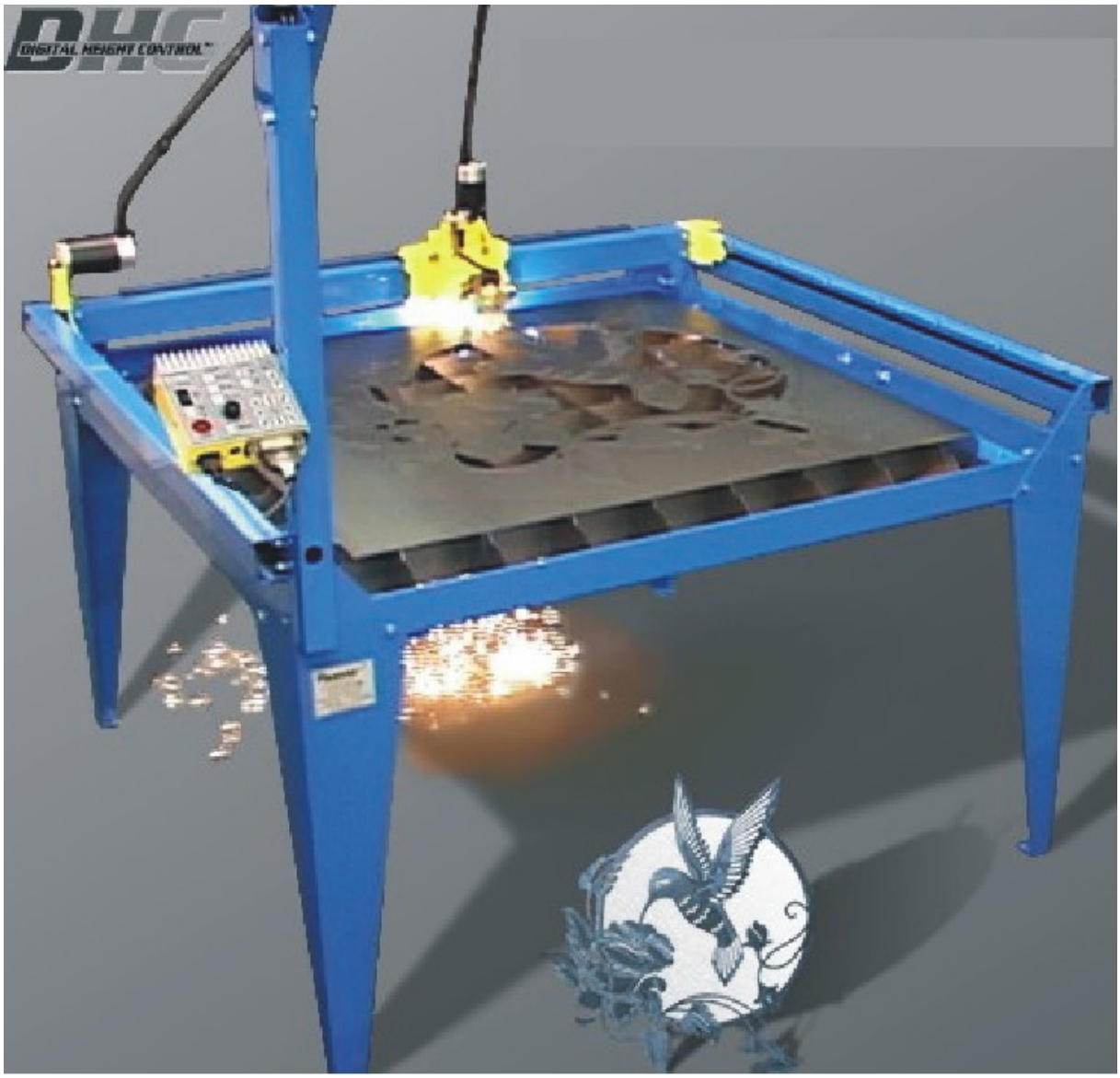
Rapid Welding and Industrial Supplies Ltd.
Welcome to the Rapid Experience

PlasmaCAM DHC 2 ™ CNC Plasma Profiling System



Rapid are an officially appointed UK Sales and Service Agent For PlasmaCam. Complete systems built by us and ready to earn you money. UK Training also available.

Why PlasmaCAM

PlasmaCam is a low cost CNC Plasma Profiler that allows Profiling at home or in a light fabrication workshop. The unit uses a hand held plasma to create quality profiled parts.
Runs on Single Phase.
The software is simple to use with a standard PC.

Personal Computer Requirements

Pentium 4, 3.0 GHz or equivalent/faster PC. (Laptops are not recommended due to their common port problems.)
Windows 98, ME, 2000, XP, Vista or 7 installed.
DVD ROM drive and 10 GB free hard disk space.
Standard bi-directional EPP or PS/2 mode (5V preferred) parallel port—dedicated strictly for controlling the PlasmaCAM cutting table. A true physical parallel port is required (not a USB to parallel converter, for example).
IEEE 1284 compliant parallel port cable (optimum length is 6').
A 3-button mouse is recommended (or mouse with wheel configured as middle button when pressed).
A scanner with software that can export Windows Bitmap (.BMP) files is useful for artistic applications.

Plasma Cutter Requirements

Hand torch configuration with 25' cord is recommended (minimum is 15'). (Expensive “machine torch” is not
needed—hand torch cuts with the same parts just as well.) An angled handle (like 70°) is preferred over a straight 90° handle, although either style will work well.
“Contact” arc starting mechanism (not to be confused with dragable tips; contact start is also called “solenoid” start).
Cutters with “high voltage/high frequency” or “capacitive” mechanisms may work but are not recommended. Most
Hypertherm, Miller, Hobart, Lincoln, Century, HTP and some Thermal Dynamics models have contact arc starting.
Cutting capacity (amperage) is based on your application. You need about 25 amps for every ¼" of steel thickness you want to cut. (Aluminum and copper require much more power.)
Bevel and kerf width should be considered. Smaller plasma torches with smaller cutting orifices produce smaller kerfs, cutting finer detail in thin material. Larger plasma torches with larger cutting orifices produce larger kerfs,
cutting thick material with less bevel. Some torches provide the best of both cases by accepting different sizes of consumables for use at different power levels.
Consumable cost and life should be considered. Consumable life is greatly extended by completely removing water from the air supply, keeping a gap between the cutting tip and the material being cut (handled by DHC 2 ™), and not cutting in mid-air.
iolated “ohmic” shield and electrical connector for machine cutting are needed. These consumable parts are not normally included with new plasma systems. The instruction manual shows how to adapt your torch for use with the machine if these parts are not available.
Please check with us to see if your machine is suitable.

We Recommend Hypertherm Cutting Systems

- **<u>Machine Specifications</u>**
- **Unique Digital Height Control™ reliably controls the height of the torch.**
- **Precision servo motors utilize optical encoder feedback for closed-loop operation.**
- **Closed-loop servo controller achieves superior accuracy, speed and acceleration even in demanding**
- **conditions.**
- **All speeds are adjustable during operation.**
- **Automated Cutting Machine can automatically slow down when cutting around corners and holes.**

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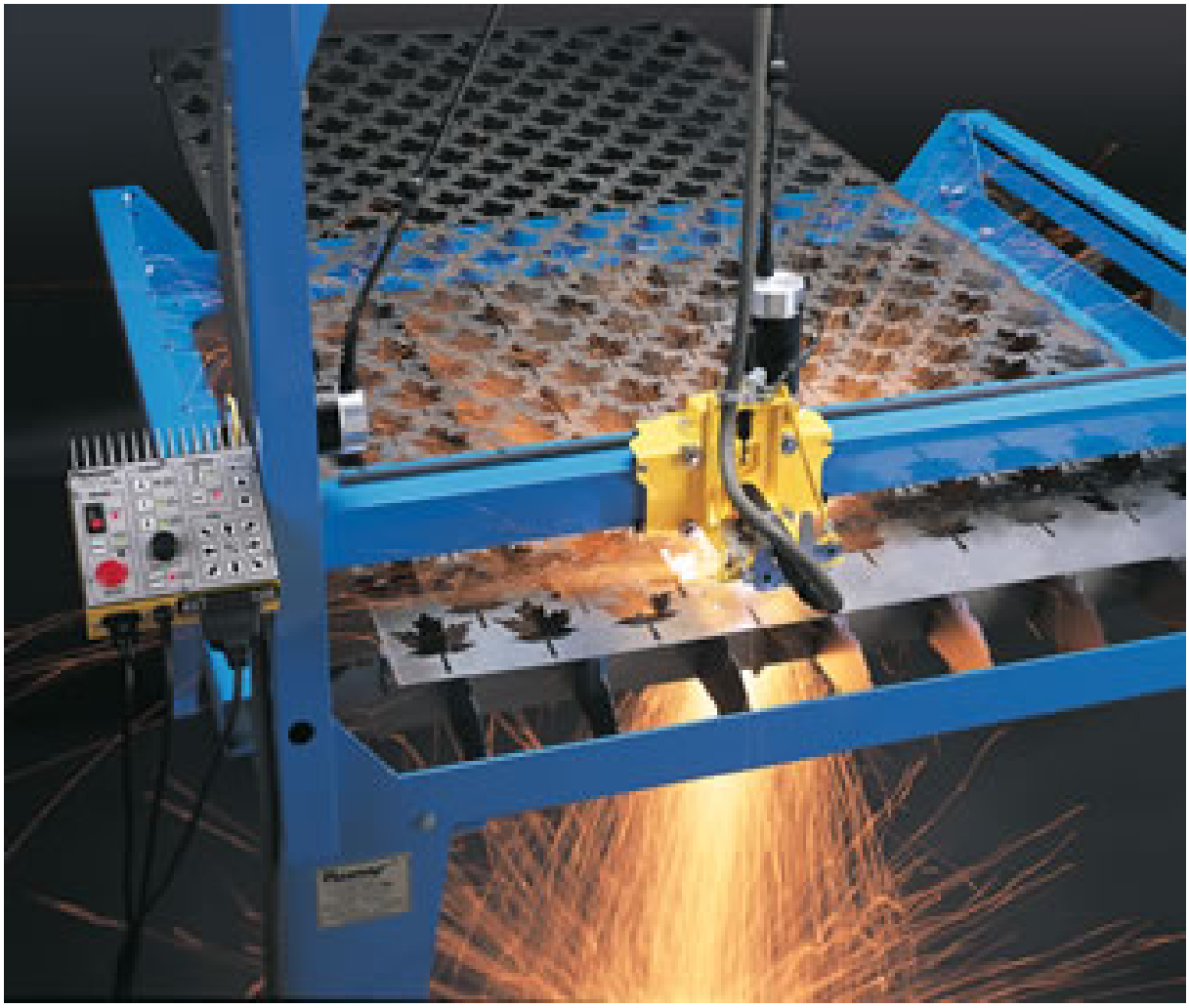


Moving parts are rigid, without excessive weight. This enhances performance providing fine, detailed cutting and high productivity through fast cut speeds.

Rugged CNC plasma cutting machine with strong drive train is built to perform in heavy production. Drive train and electronics are protected from plasma dust, and guide rollers move unobstructed.

Durable steel frame with integral cutting grate. (We loaded up a machine with over 10,000 pounds of metal and couldn't make it collapse!)

Cutting grate precisely aligns to the frame, with stops that perfectly Position material for indexing and utilizing sheet edges in long parts.

Wide plasma cutting torch compatibility with a simple, easy-to-install interface. Works with common hand torch (machine torch not needed).

Includes specialized PlasmaCAM design and control software.

Video-based instruction manual is easy to navigate and guides you with live-action illustrations.

Specifications

Power Required115/230 VAC, 50/60Hz, 10 A

Dimensions 1750mm W x 1650mm D x 2300mm high.

Table Service is 840mm High

Weight 175 kg

Cutting Capacity Dependent on Power Source

Max Material weight .....900 kgs

Size of pieces cut ....4ft x 20ft max

Cutting Speed,,,,,,,,,, 0.5 to 25m / min

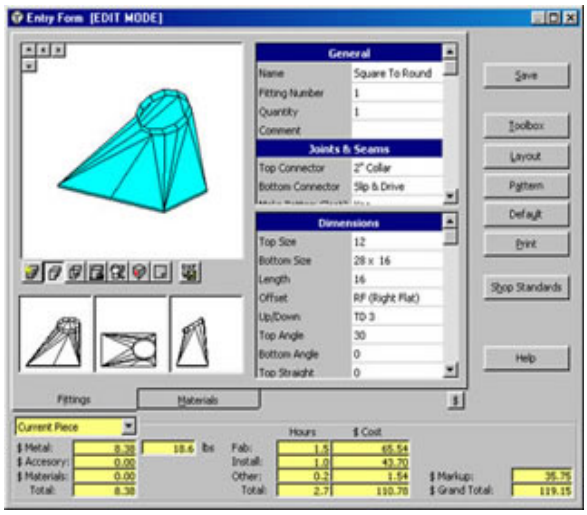
Software Specifications

CNC Software Designed to Work With the PlasmaCAM Machine

The PlasmaCAM™ design & control software is the most crucial part of the system. Ease of use means your ideas quickly turn into production. You'll be amazed by how easily you can make outstanding products.

The unique controller bridges the gap between the software and cutting table, enabling you to see on screen what the machine is doing in real time. This link allows flexibility, since parts are cut directly from drawings without the extra step of posting a program.

Designed specifically for plasma cutting, the PlasmaCAM™ software 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.



The above H&V software is not included

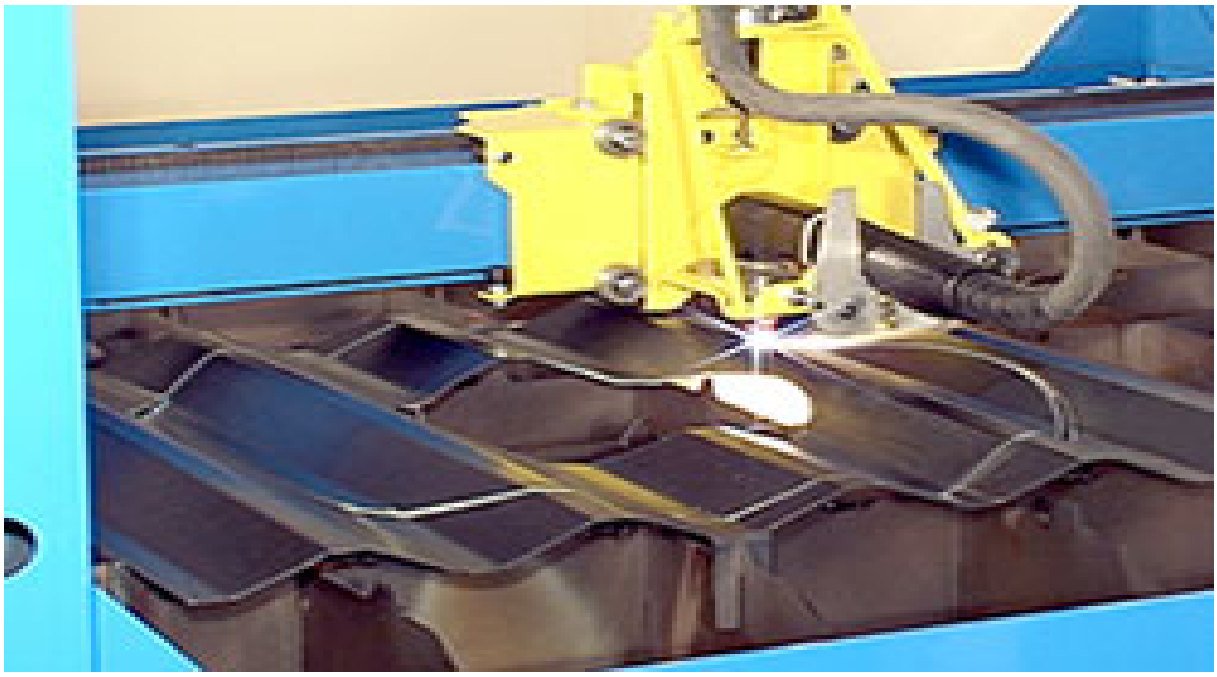
PlasmaCAM™ is the only CNC plasma cutting machine that lets you work directly with the images that you want to cut, eliminating any need for machine programs, layout drawings, or metal patterns. The software controls and tracks the machine in real time, providing a visual link between the designs on-screen and the shapes being cut. This makes laying out and cutting parts easier than ever!

Drawing & Editing Directly read and convert scanned pictures and hand-drawn artwork. PlasmaCAM's™ unique, automatic functions remove defects and turn images into paths (vectors) that can be cut by a machine.

Add artistic lettering to your designs using various True Type fonts for plasma cut art.
Transfer files to and from other programs in many file formats, allowing you to use designs from other sources.
Quickly and precisely draw geometric shapes and/or modify designs.
Measure part designs to see dimensions and how long parts will take to cut.
Zoom in for a close look at a particular area while you work.
Resize, rotate, make copies, nest parts and much more!

Digital Height Control

PlasmaCAM's™ popular CNC machine comes standard with state-of-the-art Digital Height Control™ and sports many other dramatic improvements over the original model.



DHC2™ achieves high quality plasma cuts by controlling the height of the torch with arc voltage feedback. The cutting tip hovers a precise distance above the metal, moving up and down to follow variations in the sheet.

Because DHC2™ maintains a gap between the cutting tip and the material, tip hangup is avoided. In addition, DHC2™ raises and lowers the torch between cuts to avoid obstacles.

At the start of each cut, DHC2™ waits until plasma cutting is detected before beginning motion (instead of just waiting for a set time delay). DHC2™ also stops motion if plasma cutting unexpectedly terminates. This means more consistent, automated cutting.

DHC2's™ careful control of the torch height greatly extends cutting tip life.

All DHC2™ functions are integrated and controlled by the PlasmaCAM™ software - providing automated operation that is easy to adjust.

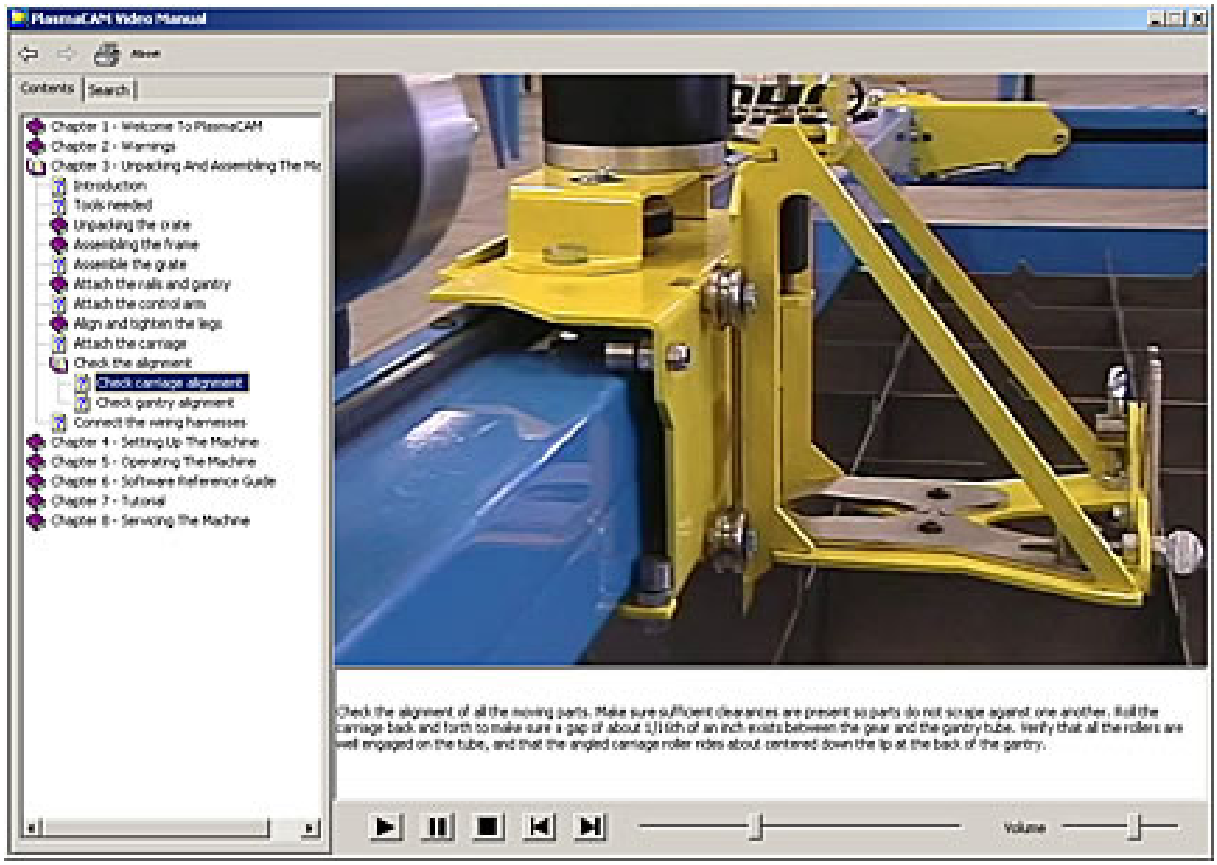
PlasmaCAM has numerous uses. These Include;

- **Development of Prototype Parts**
- **Architectural Metalwork**
- **Batch Production Parts**
- **Heating and Ventilation Products**
- **Vehicle Part Manufacture**
- **Artistic Design & Sculpture**
- **Blacksmith Shops**

What will you use yours for?

Video Manual

The PlasmaCAM system includes a video-based instruction manual that helps you with additional support if required.



For Additional Information or a comprehensive product video contact.

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