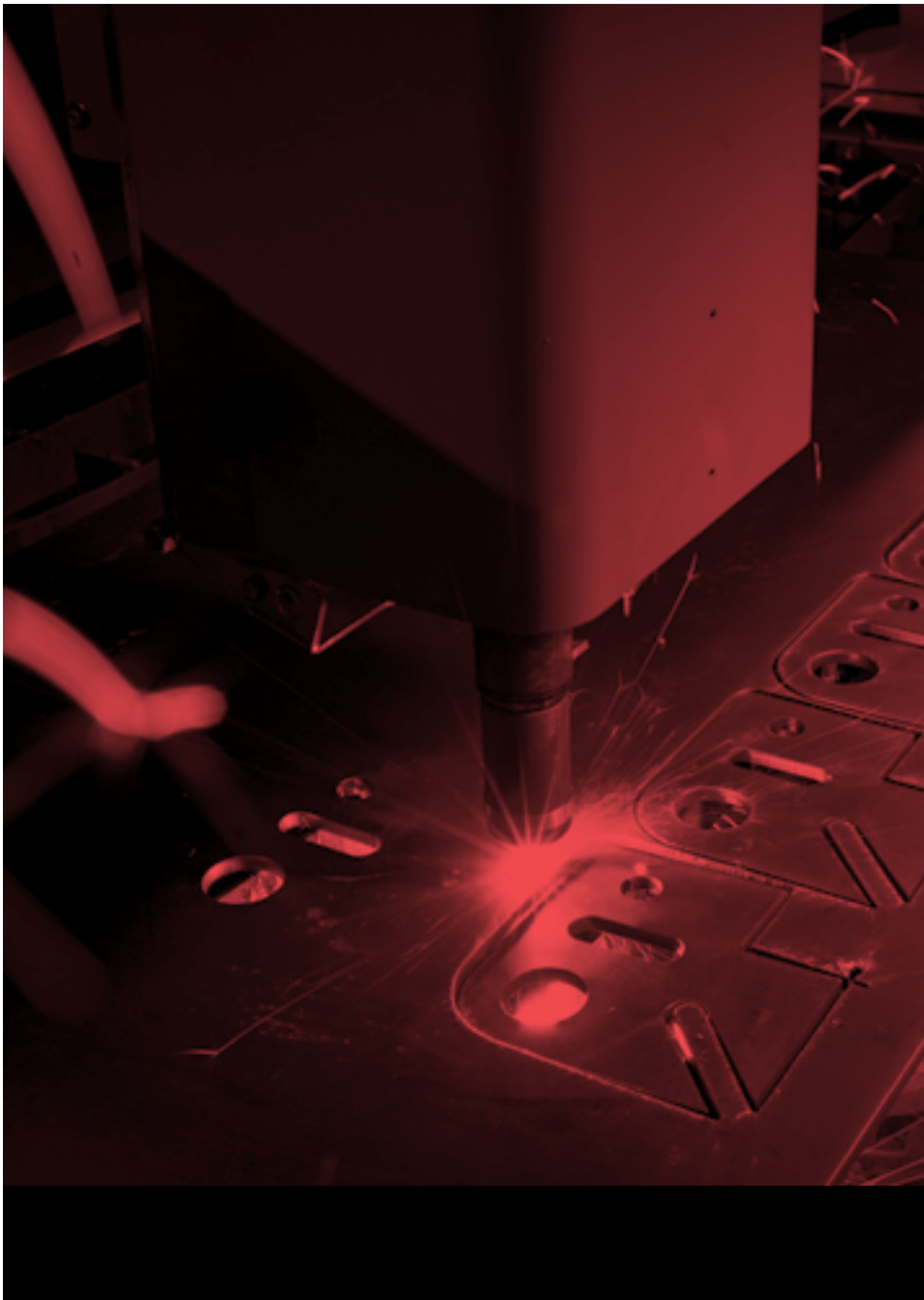


# Buying a CNC Plasma Cutter:

A Straightforward Guide for First-Time Buyers



[swift-cut.com](http://swift-cut.com)

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## A Straightforward Guide for First-Time Buyers

If you're exploring CNC plasma cutters for the first time, you're not alone. Whether you run a fabrication business, manage a busy workshop, or you're stepping into automated cutting for the first time, choosing the right machine can feel like a minefield.

We get it - there's a lot of information out there, and not all of it is easy to digest. That's why we've created this guide: to help you cut through the noise and focus on what matters. No jargon, no pressure - just practical advice based on years of experience and customer feedback.

This guide will walk you through the key considerations when buying your first CNC plasma machine - from understanding the core features to thinking ahead about the kind of support you'll need once it's up and running. It's not a sales pitch. It's a roadmap designed to help you make a confident, informed choice that works for your workshop today and supports your ambitions tomorrow.



### Why trust us?

**Because we've seen it all - businesses with big dreams and tight budgets, teams growing faster than expected, and customers who didn't realise what they were missing until they switched to a smarter cutting solution. Swift-Cut machines are built to grow with your business, but this guide isn't about us - it's about you.**

# What's included in this guide

## 01 Do I really need my own CNC plasma cutter?

Understand the basics - how it works, what it does, and why it might be the right fit for your business.

## 02 What should you look for in your first machine?

Key features to consider, and which ones matter depending on the type of work you do.

## 03 Budget vs. capability

A realistic look at pricing, value, and the difference between short-term savings and long-term investment.

## 04 The hidden benefits of owning your own machine

We explore the benefits that don't always show up on a spec sheet but can make a big difference to how your business runs day to day.

## 05 Buying for the long haul: what to look for in a long-term investment

Key things to keep in mind if you want your purchase to keep working hard for you in the long term

## 06 Try before you buy

Machine demos, walkthroughs, and how to get hands-on before you buy.

## 07 Final Thoughts



### A final word before you dive in

This guide is here to support you, not sell to you. Take your time. Ask questions. Use the QR codes throughout to instantly access machine demos, hear directly from customers, or book a no-pressure trial session at a time that suits you.

# 01

## Do I really need my own CNC plasma cutter?

Outsourcing might be working for now - but if you're seeing longer lead times, higher costs, or limited flexibility, it could be time to bring cutting in-house

**Here are some common reasons buyers start looking at CNC plasma:**

- You want more control over production
- You need faster turnaround times
- You're turning down jobs because you can't cut them
- You want to experiment more with design and development
- You're experiencing labour shortages and need to do more with less staff



***"But I've never used one before."***

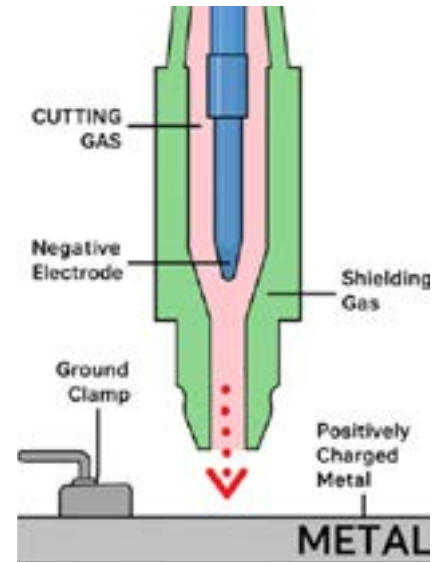
**That's fine. Most buyers haven't. Today's machines are built to be user-friendly, with intuitive software and guided support. It's less about technical expertise and more about having the right setup and support.**



**Scan the QR code to help you decide what it is you need**

# How does it work and what can it cut?

Plasma is the fourth state of matter. We know about solids, liquids and gases, well plasma is the next step. By sending a high voltage electric arc through a conductive gas (usually compressed air) the gas is ionised and becomes plasma. This plasma stream is then typically forced through a narrow nozzle, and the energy generated produces a plasma arc with temperatures approaching 20,000 degrees Celsius. That's more than 10,000 degrees hotter than the surface of the sun! The plasma arc melts the metal below it and blows away the molten material, creating a clean, precise cut.



## Plasma can cut all conductive materials including carbon steel and nonferrous metals.

When discussing CNC plasma cutting, any references made to cutting capacities refer to the piercing ability of the plasma power source. It is important that the plasma arc pierces the material below it quickly and efficiently, so although a 45 Amp plasma power source may edge start 25mm carbon steel with a hand torch, when piercing with a mechanised torch, the maximum thickness it can achieve is 12mm.

The thickness it can cut depends on the material type and the amperage of the plasma power source selected. As an example, a 45 Amp plasma power source can cut up to 12mm carbon steel, whereas a 125 Amp plasma power source can cut up to 25mm carbon steel. Here's a table showing cutting capacities of different plasma power sources from the global No. 1 plasma power source manufacturer, Hypertherm:

| Max pierce capacity | Mild steel  | Stainless steel     | Aluminium   | Duty cycle | 100% duty cycle |
|---------------------|-------------|---------------------|-------------|------------|-----------------|
| Powermax45 SYNC™*   | 12mm (1/2") | 12mm (3/8")         | 10mm (3/8") | 50%        | 32Amps          |
| Powermax65 SYNC™    | 16mm (5/8") | 12mm (1/2")         | 12mm (1/2") | 50%        | 46 Amps         |
| Powermax85 SYNC™    | 20mm (3/4") | 16mm (5/8")         | 16mm (5/8") | 60%        | 66 Amps         |
| Powermax105 SYNC™   | 22mm (7/8") | 20mm (3/4") low use | 20mm (3/4") | 80%        | 94 Amps         |
| Powermax125         | 25mm (1")   | 20mm (7/8")         | 25mm (7/8") | 100%       | 125 Amps        |

\* Single phase option available

# 02

## What should I look for in a CNC plasma machine?

There's no one-size-fits-all answer. But there are a few universal things to consider:

### Machine range

Look for a manufacturer that offers a range of sizes and options, so you're not locked into something too small - or too big and complex - for your needs.

### Software

Good software makes or breaks your experience. Look for something simple and intuitive. There are normally three stages in CNC plasma cutting software. The CAD (Computer Aided Design) phase where you draw your part, the CAM (Computer Aided Manufacture) phase, where you choose the material you want to cut your part out of, and where you place your drawn part on the virtual sheet, and finally the CNC (Computer Numerical Control) phase where you load the file you created in the CAM phase, position the torch where you want it to start, and click cut!

A good CAD/CAM/CNC software solution should automatically set up virtually every aspect of the plasma cutting operation such as arc current, voltage, cut flow settings, cut speeds, cut heights, pierce types, pierce heights, and more.

Furthermore, look out for hidden costs like software monthly subscriptions. For ultra-low running costs, you want perpetual software licences, i.e. one that's included with your machine and can be used indefinitely without additional costs.

### Material thickness

What do you plan to cut - and how thick? As we've discussed, plasma is ideal for mild steel, stainless steel, and aluminium, especially up to around 35mm. For anything significantly thicker, you'll need to plan your machine's power source accordingly.

How often will you use the machine? Daily? Weekly? If it's only occasional, a more hobbyist type setup might be enough. But for regular cutting, invest in a durable system from an established manufacturer that's built to last.



***"Have you got the space for it?"***

### Workshop space

Here are some things to consider:

- 1. The different table sizes – and the space required around the table**
- 2. Power supply and socket locations – you may need to move things around**
- 3. Compressor and air supply for the table**
- 4. Room to safely load and unload material – look for a machine that can be loaded from multiple sides**
- 5. Size of sheet material you can lift and store**

Remember some plasma tables are more compact and workshop-friendly than others. Compare cutting envelope size against overall footprint. Fork pockets on multiple sides make moving the table much easier! Moveable operator screens/consols also offer more flexibility and easier loading with less chance of damage.

## Technical support and backup

It's very common for a plasma table to quickly be relied upon as a major income source generator for businesses like yours. If you have an issue, you need it resolving, and fast. Look for manufacturers that can offer local support and expertise, plus remote fault diagnosis technology so they can fix faults quickly without having to come to site. Additionally, CNC cutting tables that have built-in live machine status, diagnostics and help manuals, often allow users to correct faults by themselves without assistance. If help or parts are required, the engineer can use the diagnostic information to arrive on site with the correct parts, ensuring minimal downtime and a fast fix in a single visit.

## Manufacturers industry experience

How many machines do they have out there. You need to ensure the table you invest in is built to last. Look for a manufacturer that has consistently sold a lot of machines over a long period of time, and to a wide variety of customers, countries, and sectors.

## Fume suppression - Water table (WT) or Downdraft (DD)

Plasma cutting creates fume. FACT. There's no avoiding it. But a perfectly set up machine should reduce the amount of fume created by optimising cut speeds and heights. The fume that's left needs suppressing. The two most common methods of fume suppression are either a water table setup (a tray of water that sits just below the material your cutting) or a downdraft setup (fume is drawn down through the table via a powerful extraction fan or filtration unit). Which one is best for you depends on what material you will be cutting most often. Water tables are lower cost as no additional extraction is required, and the base design has less moving parts. They are perfect for customers cutting mostly mild steel, and parts benefit from being cooled

as they cut so you can handle them much sooner than parts from a downdraft table. They can be messy though, and water will splash on the sheet material and surrounding area. Parts will need to be dried before processing. If you don't want the mess, have the space for an additional extraction unit and ducting, and want to cut mostly aluminium and stainless steel, then downdraft could be the better choice for you. The parts stay dry, and the area around the table stays cleaner, however as the parts aren't cooled by the water when they're cut, you may have to wait longer before you can handle them, and thin sheet can be more susceptible to warping due to the additional heat input.



**Scan the QR code to help you decide what it is you need**

# 03

## Budget vs. capability

Let's talk budget - because it matters.

There are many ways to cut metal. Traditional hand tools like guillotines, nibblers and grinders, through to fully automated CNC systems like plasma, waterjet and laser. There's no perfect solution as each method has its pros and cons. The best machine for your business is the one that solves most of your production challenges.

Certain applications will favour laser (mainly high volume, thin material), but lasers come with a much higher price tag, often out of reach for small to medium businesses. They have higher running costs, require more frequent servicing, need to be fully enclosed, and will only cut clean 'laser prepared' material.

Waterjet delivers superb edge finish, accuracy, and zero heat input, but it's much slower process than plasma and laser and comes with a higher price tag. It can cut virtually any material though, so isn't limited to just conductive materials.

CNC plasma gives you many of the same capabilities of laser and waterjet at a fraction of the cost - and the right system can grow with your business. It's often the more practical, flexible and cost-effective choice, especially when quality and adaptability are priorities.



***"Can I afford to own my own machine?"***

**Bring your cutting in-house and benefit from reduced lead times, reduced shipping costs, and increased control of your production.**



# 04

## The hidden benefits of owning your own machine

When you're pricing up a CNC plasma cutter, it's natural to focus on the upfront cost. But what's harder to quantify - and often overlooked - are the quieter, long-term advantages of bringing the cutting process in-house. These are the benefits that don't show up on a spec sheet but can make a big difference to how your business runs day to day.

### 1. Total control over your workflow

Relying on a third-party cutting service often means waiting in line, working to someone else's schedule, and losing time to back-and-forth emails or delivery delays. Owning your own machine gives you full control. Need a last-minute part? Changed a design? No problem—you can react immediately, without the hold-up.

### 2. Faster turnaround = happier customers

When you're not waiting days (or weeks) for parts to come back, your projects move faster. That means meeting tight deadlines, responding quickly to client changes, and building a reputation for reliability. It's not just about cutting metal - it's about cutting lead times, too.

### 3. Prototyping on your terms

Innovation doesn't follow a 9–5 schedule. Having your own CNC machine gives you the freedom to try new ideas, test parts, and refine designs as inspiration strikes - without booking time on someone else's machine. That agility is a gamechanger for workshops that value continuous improvement.

### 4. Better cost management

Outsourcing might seem cheaper on paper, but the costs can add up - especially if you're doing small runs or making frequent changes. With your own machine, you know exactly what your cutting is costing you, and you're not paying someone else's markup. Over time, that adds up to serious savings.

### 5. Skill building and staff development

Running a CNC plasma cutter doesn't just get the job done - it also builds skills in-house. Your team becomes more confident, more capable, and more involved in the end-to-end process. That leads to better communication, better problem-solving, and a stronger business overall.

### 6. It becomes a selling point

Customers love knowing that you do everything in-house. It tells them you're invested, you're capable, and you're in control. Whether you're quoting for new work or pitching to a potential partner, your own cutting setup can help you stand out from the crowd.

Owning a CNC plasma machine isn't just about bringing metal cutting under your roof - it's about bringing more speed, flexibility, confidence, and control into your business. And once it's there, you'll wonder how you ever managed without it.

# Buying for the long haul: what to look for in a long-term investment

A CNC plasma machine is a big investment - not just in terms of cost, but in the way it shapes your business operations for years to come. That's why it pays to think beyond today's cutting needs and look at the bigger picture: how will this machine support you as your workshop evolves?

Here are the key things to keep in mind if you want your purchase to keep working hard for you in the long term:

## 1. Upgrade options

Your needs will grow - so your machine should be able to grow with you. Look for models that offer:

- **Plasma power source upgrades** to boost performance as your work gets more demanding
- **Software add-ons** like automatic nesting might not be a requirement now, but could save lots of time and money in the future
- **Operating system upgrades** that can be installed/retrofitted for maximum machine life and ROI
- **Retrofittable bolt-ons** like pneumatic engravers you can add at a later date when the requirement arises

Choosing a system that's upgradeable means you're not buying the most expensive setup now - you're investing in something that can scale with your ambitions.

## 2. Solid manufacturer support

Even the best machines will need a helping hand now and then. When they do, you want to know your manufacturer is there with real support - not just an FAQ page. Look for:

- UK-based (or local) technical support you can actually speak to
- Fast responses and remote diagnostics
- Engineers who understand your industry and application

When something goes wrong - or you're just unsure about a feature - timely, expert help makes all the difference.

## 3. A warranty that actually means something

Some warranties only cover the basics, while others are designed to give you peace of mind for the long haul. Swift-Cut is currently exploring an industry-first 6-year warranty on certain models - something that's unheard of in this space.

A long warranty tells you two things:

- The manufacturer stands behind their build quality
- You won't be footing the bill for early failures or hidden issues

That's not just a perk—it's a sign of confidence you can bank on.

## 4. Training and guidance (before and after you buy)

No matter how advanced a machine is, it's only as effective as the people using it. Make sure the provider offers proper training- not just handover instructions.

- Pre-sale guidance helps you choose the right setup for your workshop
- On-site or remote training helps your team get up to speed quickly
- Ongoing support and learning resources help you make the most of your investment over time

Look for a supplier that sticks around after the sale, because real success with CNC cutting doesn't end at delivery – it starts there.



## ***Don't Box Yourself In***

Specs are important, but flexibility is what makes a machine truly work for your business. The ability to adapt, upgrade, and get help when you need it can be the difference between a short-term fix and a long-term asset.

Buying your first CNC plasma cutter is a big step. Choose a machine - and a manufacturer - that's ready to take that step with you.



**Tom Lamb's first Swift-Cut experience - watch it now by scanning the QR code**

# 06

## Try before you buy

You wouldn't buy a car without test-driving it - so why should this be any different?

At Swift-Cut, we offer multiple ways to see our machines in action:

- Visit our demo rooms
- Live video link
- Send us your DXF file (or even a high-contrast jpeg image)
- Watch our videos
- Come to our monthly Cutting and Coffee open day (Currently UK only)
- See us at exhibitions and open days around the world



**Scan the QR code to hear directly from our customers – people just like you who once faced the same decisions. Discover how Swift-Cut helped transform their businesses, and how it could do the same for yours.**

# Final thoughts

A CNC plasma machine isn't just a tool - it's a turning point. It gives you control over production, opens new revenue streams, and creates space for innovation.

If you're serious about growing your business - or simply want more control over your workflow - then investing in the right CNC plasma cutter could be the smartest move you make.

**Still have questions? Want to see what it could do for your setup?**



**Scan the QR code here to book a no-pressure demo.**

# Swift-Cut: Engineered to grow with you.

This guide is designed to help you make the right decision for your business - not to give you the hard sell. Whether you're just starting out or scaling up, we want you to feel confident that we understand the challenges you face and the solutions that will genuinely make a difference. See why over 5000 companies worldwide have chosen Swift-Cut as their CNC plasma provider.

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