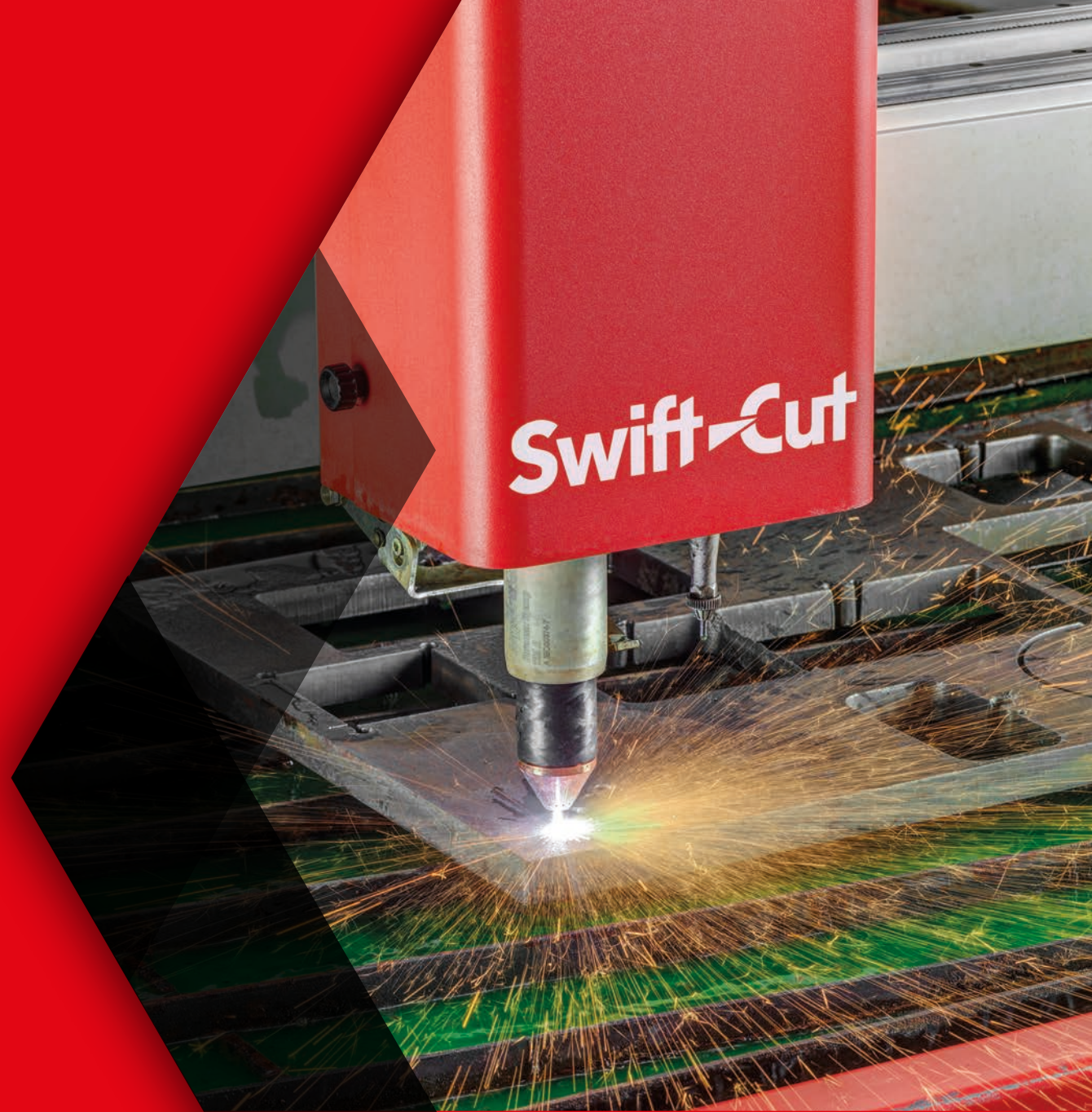# Swift-Cut

PRO

AN **ESAB** BRAND
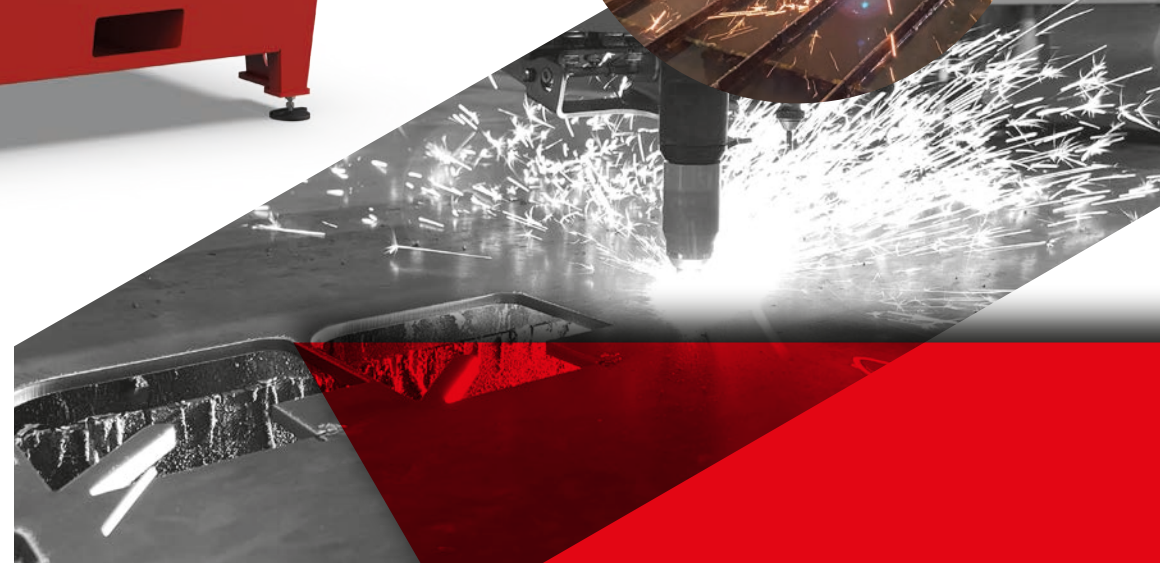
CNC PLASMA CUTTING SYSTEM

Introducing the Swift-Cut Pro

A collection of four cutting edge CNC plasma machines. With its precision guide system and robust design, the Swift-Cut Pro range promises high speed precision cutting at a low cost investment. Easy to use, simple to learn and operate with exceptional aftercare and support, the Swift-Cut Pro range is the answer to affordable in-house metal cutting.

Why choose a Swift-Cut Pro?

The Pro has been continuously developed over the past 10 years. From its inception to now, the range has gone from strength to strength and is now the leading light industrial CNC cutting machine. With intuitive software, industry leading features, and six different base options, the Pro range is designed to deliver fantastic and reliable cutting performance in a package built to last.

"

Swift-Cut tables are ruggedly built, easy to use, have great accuracy and most importantly, give an excellent cut.

Alan Bradford, Plasmatech

"

Our Swift-Cut Pro is Europe's number one selling CNC plasma machine in its class!

The Swift-Cut Pro range comes with advanced industry leading features as standard, combined with easy to use and intuitive software. The Pro range is designed to take metal cutting to another level - its incredible capabilities offer exceptional high-end cutting solutions at amazingly low prices.

FULLY ENCLOSED CUTTING HEAD
Fully enclosed cutting head offers protection to key components against the harsh cutting environment.

BREAKAWAY HEAD
Prevents damage to the torch should an unexpected collision occur.

SOFTWARE
Easy to use SwiftCAM and SwiftCNC software included as standard.

INTELLIGENT TORCH HEIGHT CONTROL
Never have to set up torch height control yourself. Automatic voltage sampling provides repeatable cut quality and increased consumable life compared to conventional Torch Height Control systems.

ENGRAVING TOOL
The SwiftMARK engraving tool allows you to mark and cut in one operation, meaning no more outsourcing or moving your project from one machine to another (optional extra).

LASER POSITIONING CROSSHAIR
Laser crosshair aids in setting the torch start position.

MACHINE BED OPTIONS
The water bed option offers efficient fume suppression so that in most cases no external fume extraction is required. Alternatively, the zoned downdraft bed option captures fumes and particulate from beneath the cutting area when connected to an extractor or filtration unit.

INITIAL HEIGHT SENSE
The Soft Sense system enables you to repeatably and accurately sense the top of the thinnest to the thickest of materials without distortion of the plate.

HYBRID SERVO MOTORS
Repeatable positional accuracy, monitored torque delivery and smooth motion.

HEAVY DUTY GANTRY
Heavy duty gantry end castings with machined faces, together with the lightweight but rigid gantry provide a precise and stable platform for the cutting head. It also supports twin x-axis linear rails.

FULLY ENCLOSED DRAG CHAINS
Fully enclosed drag chains protect cables against damage from molten material.

LINEAR RAIL ON ALL AXES
Straight, accurate and repeatable movements, they also deliver a smoother motion compared to other guide systems.

FULLY WELDED BASE
Heavy duty base provides support and rigidity.

OPERATORS CONSOLE
Ergonomic operators console with touch screen and keyboard/mouse inputs.

Main Key Features:

- Intelligent Torch Height Control (ITHC) and Soft Sense initial height sense ensure the perfect pierce and cut height no matter what thickness of material

- SwiftCAM and SwiftCNC software included as standard

- 360° breakaway head with auto-reset in the event of a collision

- Downdraft and water table cutting bed options available. Pro 4000 only available as a water table.

- Designed, engineered, and fully supported by the Swift-Cut team

- Fully welded base and compact footprint ensure the machines take up the minimum amount of space required

- Freestanding operators console can be positioned on either side of the machine

- A choice of six plasma power sources with capacities from 0.5mm to 25mm (0.02" to 1")

The Swift-Cut Pro has been designed by our skilled team of engineers to provide an all-encompassing plasma cutting solution with industry leading features as standard and is available in 3 sizes.

Pro 1250 (Pro 44)
1250mm x 1250mm cutting area (4' x 4')

Pro 2500 (Pro 48)
2500mm x 1250mm cutting area (8' x 4')

Pro 3000 (Pro 510)
3000mm x 1500mm cutting area (10' x 5')

Pro 4000 (Pro 613)
4000mm x 2000mm cutting area (13' x 6.5')

Table Specifications

	Pro 1250 (Pro 44)	Pro 2500 (Pro 48)	Pro 3000 (Pro 510)	Pro 4000 (Pro 613)
Table Footprint	1980mm x1840 mm (6.5' x 6')	3226mm x 1840mm (10.5' x 6')	3780mm x 2115mm (12.5' x 7')	4725mm x 2600mm (15.5' x 8.5')
Table weight	800kg (1763lbs)	1000kg (2204lbs)	1100kg (2425lbs)	1300kg (2866lbs)
Height	1500mm (60")			
Cutting envelope	1250mm x 1250mm (4' x 4')	2500mm x 1250mm (8' x 4')	3000mm x 1500mm (10' x 5')	4000mm x 2000mm (13' x 6.5')
Z-Axis travel	130mm (5.1")			
Maximum supported material load	306kg (674lbs)	615kg (1355lbs)	911kg (2010lbs)	1570kg (3462lbs)
Traverse speed	20m/min (787ipm)			
Drive description	Hybrid servo motors and double sealed linear bearings on all axes. Enclosed ballscrew driven Z-Axis. Dual driven Y-Axis.			
Gantry Clearance	150mm (6")			
Maximum material thickness	25mm (1")			
Maximum cut capacity of box section	100mm (4")			
Fume extraction method	Water table or Downdraft			Water table
Input Voltage	110-230VAC (6-4A)			
Input Air Pressure	7-7.5bar (100-110PSI)			
Flow rate	300LPM (10CFM)			
Linear Positional Accuracy	0.5mm/m (0.006"/ft)			
Repeatability	0.4mm/m (0.005"/ft)			
Ballbar Circularity	0.3mm/m (0.004"/ft)			

SwiftCAM Software (features)

Standard

JPEG/DXF/DWG import capable - Import .dxf or .dwg files or convert .jpg images for cutting

Automatic Lead in/out - Software automatically applies lead in/out for quicker programming

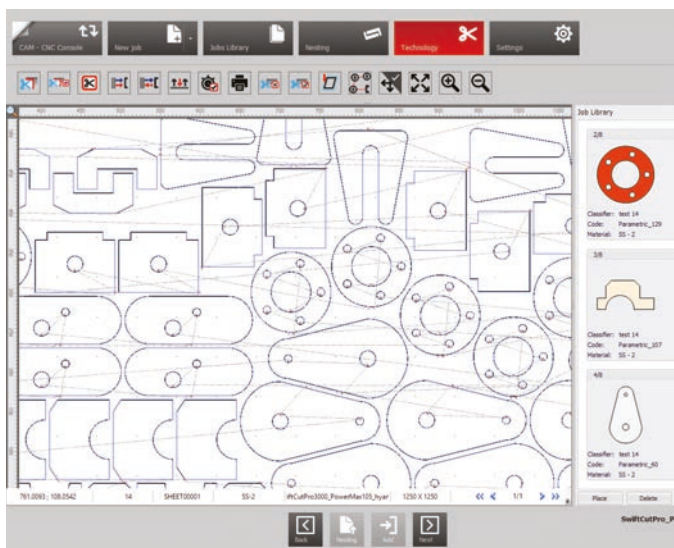**Automatic nesting* -** Automatically nests parts for economical sheet usage

Part in part nesting - Nest parts in scrap areas to fully utilise sheet**

Advanced Drawing Importer - Built in system to clean, scale or delete items within problematic drawings

Parametric shape library - 89 configurable shapes

* Advanced SwiftCAM only

** Can be done manually in standard software or automatically in SwiftCAM Advanced

SwiftCNC Software (features)

G-Code Browser - Allows the user to start cutting from any individual profile within the G-code

Cut recovery - This function allows the user to start from any position along the cut path whilst maintaining cut accuracy and reducing material waste

Direct Cut Control - Remote control of settings for Hypertherm Powermax plasma systems

- Automatic control of cutting amps
- Automatic control of air pressure
- Automatic control of cut mode
- Read fault codes from the operator's console
- Continuous arc mode - A simple unique solution allowing operators to cut wire mesh and perforated materials with the Hypertherm Powermax plasma systems

Basic and advanced displays - Basic view for beginners and advanced view for more experienced operators

G-code Favourites - Save up to 5 G-code files for quick loading

G-Code queue - Queue up to 5 G-Code files for quick loading

Sheet trim - Easily trim off scrap material. Options to go between 2 or 3 points on the material

Sheet alignment - Simply use the plasma shield to reference the two bottom corners of the sheet and the software will automatically adjust your part(s) or nest to the new angle. This will ensure the plasma arc will not 'run off' the material as it travels up the cutting bed

Datum store - Don't lose a datum point again, this system stores your last datum point so even if you lose power, you will not lose your position

Configurable datum points - Set up to 5 datum points anywhere on the cutting bed. This can be used to reduce setup times when using jig fixtures or to set custom parking positions

Dry-run mode - View the plasma torch movement, cutting order and speed in real time before you switch on the pump, so any problems are found and corrected without wasting material unnecessarily

Touchscreen display - Seamlessly switch between the wireless keyboard and mouse or the touchscreen display

Graphical toolpath display - Visual representation of where you are on the toolpath

Operator console spec

- Touchscreen HMI with wireless keyboard and mouse control
- Footprint – 550mm x 600mm (21" x 23")
- Height – 1595mm (62")
- Weight – 40kg (88lbs)
- Operating system – Windows 10, 64 bit
- Software included – SwiftCAM, SwiftCNC
- Remote support application installed as standard

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Cutting Power Options

Plasma Source: Hypertherm and ESAB

Max pierce capacity	Mild steel	Stainless steel	Aluminium	Duty cycle	100% duty cycle
Powermax 45 XP*	12mm (1/2")	12mm (3/8")	10mm (3/8")	50%	32Amps
Powermax 65 SYNC™	16mm (5/8")	12mm (1/2")	12mm (1/2")	50%	46 Amps
Powermax 85 SYNC™	20mm (3/4")	16mm (5/8")	16mm (5/8")	60%	66 Amps
Powermax 105 SYNC™	22mm (7/8")	20mm (3/4") low use	20mm (3/4")	80%	94 Amps
Powermax 125	25mm (1")	20mm (7/8")	25mm (7/8")	100%	125 Amps
ESAB A120	20mm (3/4")	15mm (5/8")	15mm (5/8")	80%	100 Amps

* Single phase option available

ESAB A120

NEW **Hypertherm® Powermax SYNC™**

Powermax **105** SYNC™

Air Spec

- Clean, dry air supply that should meet ISO8573-1 class 1.2.2.
- Input air pressure – 7- 7.5 BAR (100-110 PSI)
- Flow rate – 300 LPM (10 CFM)

Options

- SwiftMARK engraving tool
- Zoned Downdraft (DD) or Water Table (WT)
- Powermax and A120 consumable kits
- SwiftCAM Advanced software
- Compressor options available
- Air dryer options available
- 3 stage compressed air filtration
- Filtered extraction or extractor fan options for Downdraft machines
- Anti-rust solution
- Anti-fungal tablets
- Wireless or hardwired internet connections

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Swift-Cut aftercare **is second to none**

We take as much pride in helping our customers after the sale as we do when we are making the sale, and every aspect of the user being able to get the absolute best from their Swift-Cut Pro has been thought about. Whether you need remote assistance, advice, or an engineer's visit, we will always make sure that you are getting the very best in aftercare.
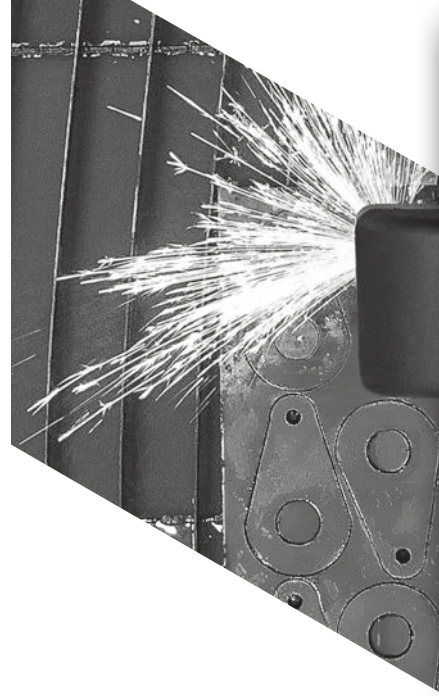
There are a number of options to choose from when you come to decide how you wish to maintain your machine, and with over forty years combined experience in plasma and waterjet cutting, we have great knowledge when it comes to cutting on many different grades and types of material.

To enable us to support and train our global customers and sales partners, Swift-Cut has invested heavily in technology that allows us to provide remote services by using Smartphone, Tablet and Wearable Technology via collaborative software tools to train, assist and diagnose the problem with precision and in less time. The My Swift-Cut app allows us to provide real-time video support which minimises time spent on the job and keeps machine downtime to a minimum.

We offer interactive online service kits which are designed to keep your cutting table running at its best, with the minimal amount of downtime. As part of the package, our support team will dial in remotely and talk you through the service procedure, step-by-step.

In addition to the standard warranties that come with all our cutting tables, if you feel you need more, you can purchase extended warranties which can cover all aspects of support, parts or both, giving you even more peace of mind. Contact a member of our team for further details.

> "
> Swift-Cut has enabled us to diversify from our primary business into an area we would never have ventured into.
>
> *Leightec*
> "

Swift-Cutter CNC family

Here at Swift-Cut we build long-standing relationships with our customers, with many buying multiple machines from us over time.

Once you buy a Swift-Cut table, you become part of our family, we'll share what you do and let you know what other Swift-Cutters are up to.

Our social media pages are an interactive platform where we hope our customers feel at home, or check out our Swift-Cutters Case Studies page on our website for more idea of what your fellow Swift-Cutters are up to and how they get the very best from their machines.

If you require any further help or information please visit swift-cut.com

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