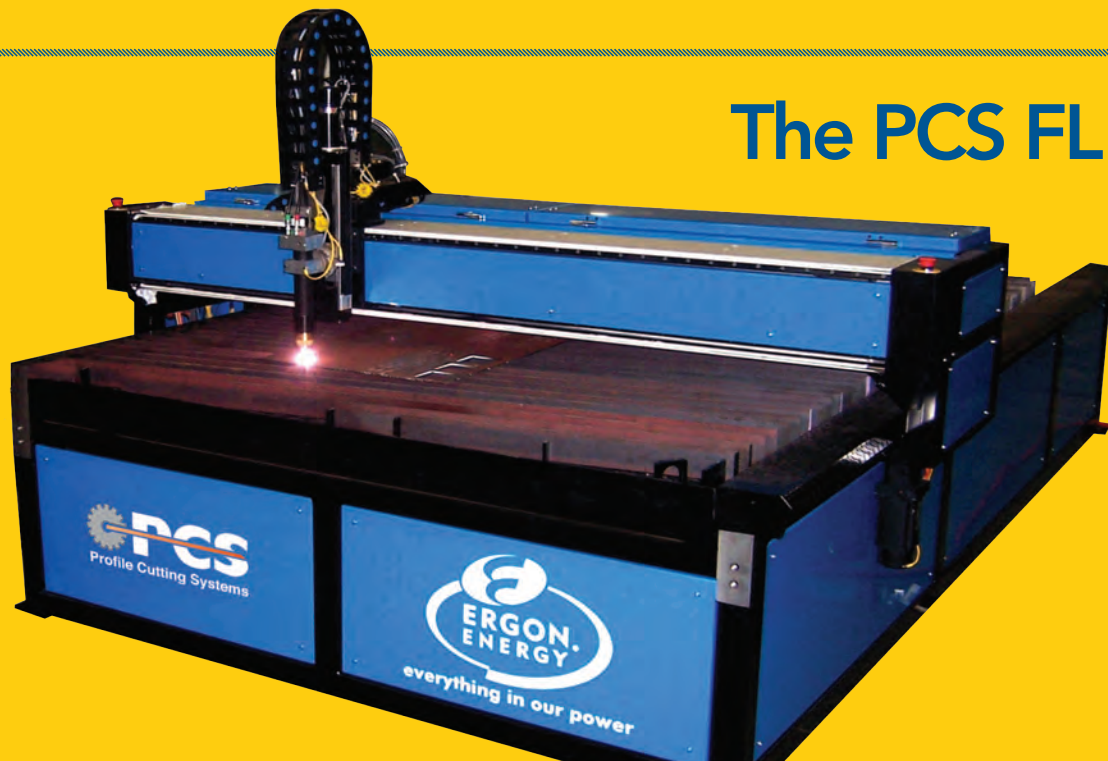


THE FINE LINE

BETWEEN PLASMA AND LASER QUALITY



The PCS FL

The PCS FL Plasma cutting machine incorporates the highest precision components than any other CNC plasma machine in the world.

The components utilized are: THK highest precision grade combined linear rack/rail, THK 1 1/4" (32mm) ball screw, Rexroth digital AC servo amplifiers, Burny 10 LCD Plus CNC controller with PCS Custom Apps, strengthened and machined cutting table. This combination of state of the art equipment and PCS expertise provides near laser quality cutting at a fraction of the CapEx and running costs.

THINGS TO LOOK OUT FOR

Good quality, Durable Rack, Rail and Pinions?

Many cheaper machines utilize smaller or less durable components which work great at first, however these machines are destined to suffer premature wear. Any mechanical backlash or abnormality will guarantee poor quality cutting minute. Furthermore premature wear will result in excessive stress on other components such as motors, belts and drive amplifiers. Many managers have found the initial CapEx advantage of a cheap machine is quickly eroded by the loss of clients seeking better quality cutting and excessive maintenance callouts. Acknowledged managers that consider Arc On Efficiency when determining ROI will always purchase a PCS machine.

Dealing with High-Frequency Electrical Interference?

The plasma cutting process produces extreme levels of high-frequency electrical interference. PCS's extensive two decades of plasma experience and close relationships with component manufacturers has resulted in premeditated methods to screen, protect and select electrical components. Even the slightest penetration of high-frequency electrical interference can lead too difficult to detect intermittent errors which reduce the cutting quality and productivity.

Installation Charges?

PCS provides installation included with any PCS FL quotation. Installation costs can equate to thousands of dollars. Many other boutique machines require installation by a third party where by any abnormality in the installation process will ultimately be charged to the end user.

Engineering and Test Capability?

PCS employ only the very best personnel. In particular staffs within the mechanical and electrical engineering departments are required to have exceptional qualifications while utilizing cutting edge computer engineering packages. In the design stage, all of the PCS machine models are rigorously tested and calculated through advanced computer modeling. This stage permits both major and fine mechanical adjustments that result in increased longevity achieved by very few manufacturers. Once an unparalleled result is achieved a prototype is produced and put through the harshest of tests, and amendments are made. The final result is a benchmarked machine model that can operate exactly as stated in our quotations with no hidden surprises.

Local Support?

When buying from PCS you are dealing directly with the manufacturer. PCS stocks an immense array of spare parts and consumables to ensure that machine downtime is kept to a minimum should a breakdown or natural disaster occur. Equally important, PCS directly provides exceptional knowledge and advice. What down time can you expect for any breakdowns and how will this affect your corporate image? Can you trust the machine manufacturer to provide spare parts for years to come?

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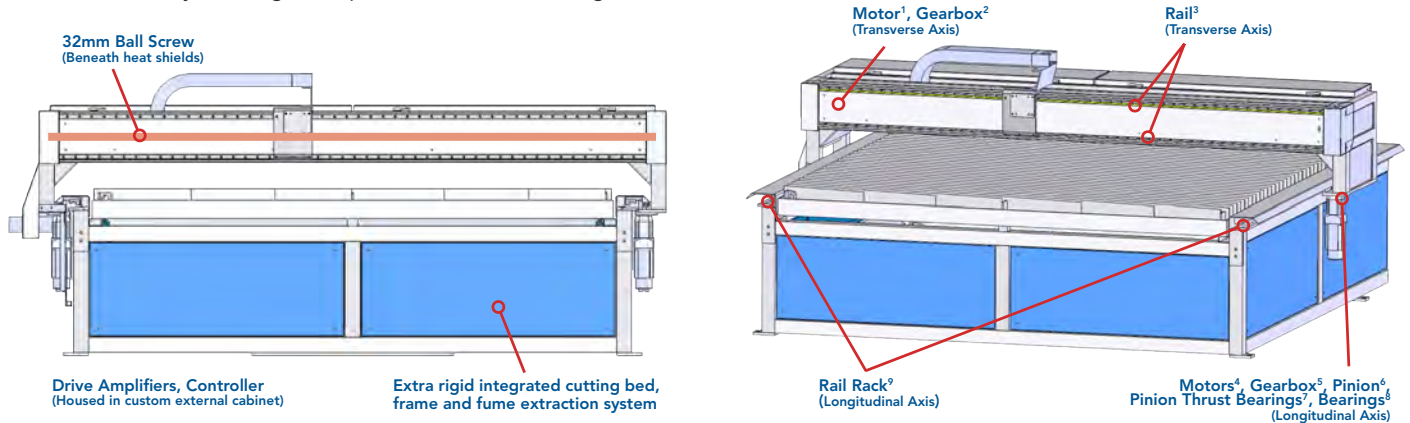
Partners
KALIBURN
PLASMA CUTTING INNOVATION
Hypertherm

BURNY

PCS
Profile Cutting Systems

The PCS FL is designed for high speed and ultra high accuracy plasma cutting of material up to 2" (50mm). The machine carriage is designed to be as light as possible yet maintain incredible rigidity. Consequently within the machine carriage the transverse axis comprises of a Digital AC servo motor which provides drive to a 1 1/4" (32mm) ball screw, effectively reducing stress placed on the main carriage.

The longitudinal Digital AC servo motors are fitted at virtually the same level as the cutting torch thereby minimizing any flexing and twisting forces. This unique design combined with the extra rigid construction of the integrated cutting bed, frame and fume extraction system, allows for a clean and ultra precise cut.



Machine Dimensions

Effective cutting width	Upto 8'3" (2.5m)
Effective cutting length	Infinite
Overall machine height	4'3" (1.3m)

Drive System and Controller

Controller		Burny® 10 LCD Plus with Custom PCS Apps \$&S 9 See fagUZ eUd/WVH I [Val e * W TWVWVW &9 4 6 6 D%D3? ! # \$ * 9 4 EE6I E7D5A EI dW afWW[SY aef[Le S V @Wi ad d%Vk
Drive Amplifiers	Longitudinal & Transverse	Independent 3-Axis (X, XX & Y) AC digital Rexroth IndraDrive amplifiers. SERCOS comms.
Motors	Longitudinal Axis⁴	11 FT/LB (15Nm) max torque Rexroth AC servo
	Transverse Axis¹	11 FT/LB (15Nm) max torque Rexroth AC servo
Gearbox	Longitudinal Axis⁵	Planetary Gearboxes <5 Arc Min
	Transverse Axis²	THK 1 1/4" (32mm) ballscrew <7 arcmin

Recommended Plasma Cutting Operation

Power Source	Kaliburn Spirit ;; or Hypertherm XPR
Output Current	100 - 400 amp
Plasma Torch Lifter System	INOVA Torch Height Control System
Cutting Capacity	0.36" - 2" (1 - 50mm)

Standard Safety Features

Machine Protection	Heat shields standard
E-Stop	Independent Emergency-Stop circuit
End Limits	Software controlled with redundant mechanical limit switches

Machine Travel

Traverse speed	Up to 1260 ipm (32 m/min) - Safety Limited
Profiling speed	Up to 1260 ipm (32 m/min)
Max acceleration	6.6' /s/s (2.0 m/s/s)
Machine accuracy on axis	0.002" /3" (0.05 mm/m)
Machine repeatability on axis	0.002" (0.05mm)
Rail/Rack - Longitudinal axis⁹	Precision ground THK linear rail rack
Rail - Transverse axis³	Precision ground THK linear rail
Pinions - Longitudinal Axis⁶	Precision ground THK
Pinion Thrust Bearings⁷	As standard
Cable carrier	Cable carrier standard. Floor mounted.
Bearings⁸	Linear Bearings on longitudinal & transverse axis High quality, readily available bearings used throughout

Customizations

- Customized cutting width
- Infinite length
- Automatic torch height control
- Plasma cutting
- PCS Zero Offset Plasma Bevel
- Paint marking
- On Table plate stock database
- Job reporting interface for managers
- Advanced maintenance logger
- Digitally zoned fume extraction
- Automatic plate alignment
- On Table plate stock database
- Job reporting interface for managers
- Advanced maintenance logger
- Digitally zoned fume extraction
- PCS designed & manufactured dry cutting tables

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