



# PHOENIX CS



**The heavy-duty CNC cutting machine** delivering quality cutting at a value-price.

# BETTER CUT QUALITY, LOWER OPERATING COSTS

Seventy years of experience in cutting and responding to customers' needs have resulted in an extensive range of products to meet profile cutting applications. ESAB has developed a range of machines that deliver better cut quality, higher cutting speeds, lower operating costs and allow sophisticated integration into automated production methods.

PHOENIX CS is designed as an entry-level CNC cutting machine incorporating the same quality and benefits associated with ESAB's higher level machines.

- Heavy-duty 3-axis gantry
- Compact design covers 8 ft. to 19 ft. wide, up to 90 ft. long plate
- Heavy duty rails, machined & welded steel construction
- Easy-to-use iCNC touch-screen controller with built-in Process Database for Plasma & Oxyfuel cutting
  - Plasma cutting up to 2 inch thickness with 400amp System
  - Oxyfuel cutting up to 6 inch thickness

## Simplified torch lifter with torch exchange

- Satisfy most basic cutting requirements
- Tool-less torch exchange
- Anti-collision protection with magnetic breakaway mounts
- Maintains automatic initial and cut height control capability for Plasma cut
- Manual height control for Oxyfuel cut



# FEATURES & BENEFITS

**Gantry width choices** - Smaller footprint, take up less floor space, minimizes shop floor impact, leaves more room for value added processes.

**Heavy-duty machined steel beam** - More accurate and stable over the life of machine, holds accuracy better and longer than aluminum.

**Dual-Side Drives** - Better stability and dynamic accuracy over the entire cutting area, better cut parts with smoother finish, sharper corners, and higher speeds.

**Controller iCNC** - Phoenix CS is easy to operate - easily train new operators, start cutting faster, saves time and therefore money.

**Torch Exchange Station** - Reduces cost and increase cut width by putting both torches on a single torch station.

**Plasma System choices** - From MGC for production cuts to AGC precision cuts.

**Nesting Software** - Columbus not only auto nests parts, also helps production planning.



# HEAVY-DUTY STRUCTURE PROVIDES REPEATABILITY

The PHOENIX CS cutting machine as in standard is equipped with oxy-fuel cutting torches for cutting mild steel plates. As a complete solution with iCNC controller and the option of programming system, the PHOENIX CS offers you the ideal system to solve your most common cutting tasks quickly and economically.

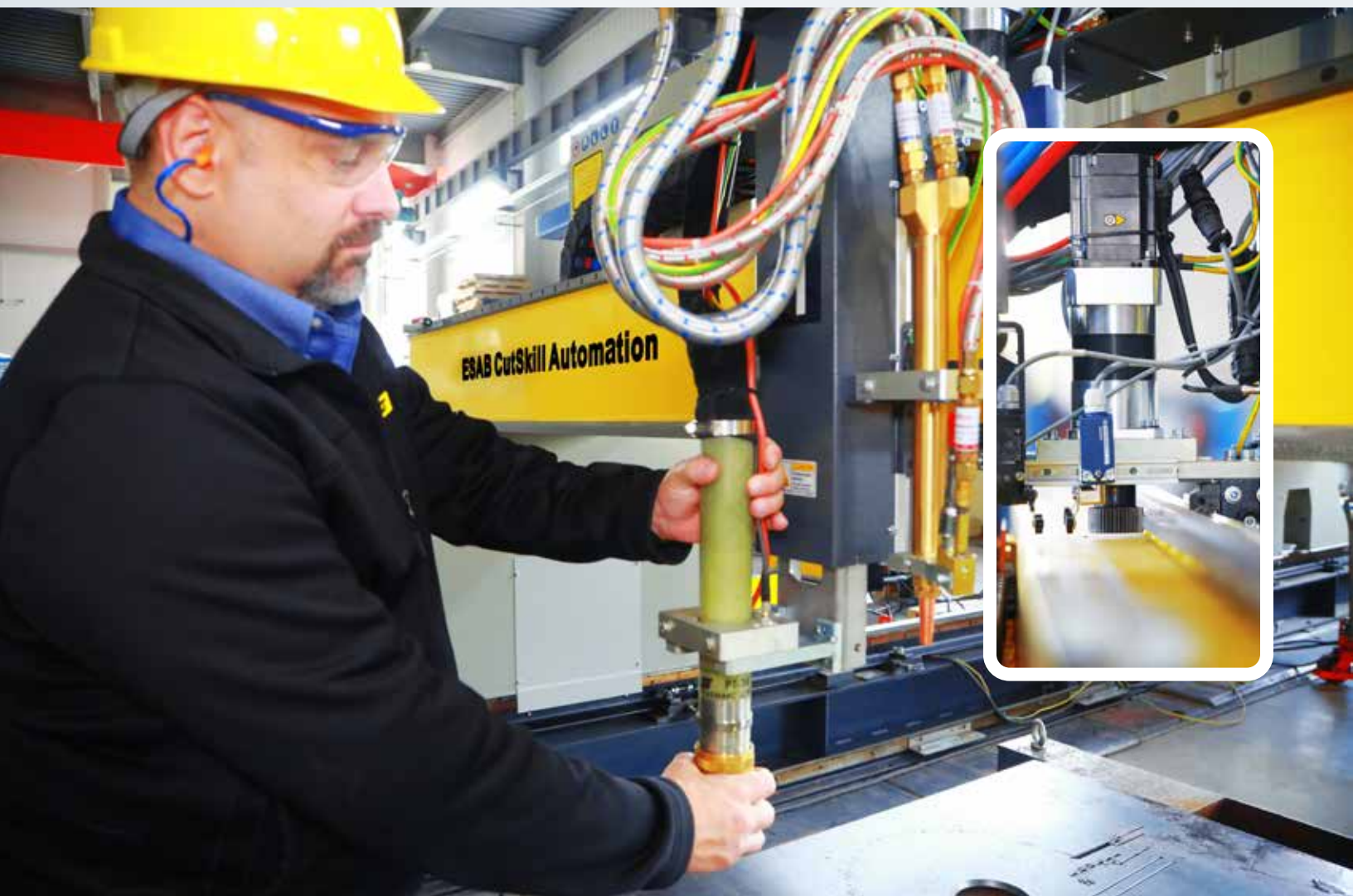
## Simple Oxyfuel System

- Max Pierce/Cut @ 2-1/2"/6"
- Anti-collision protection with magnetic breakaway mounts
- Manual height control
- Automatic ignition
- Uses GK series of consumables

PHOENIX CS CNC cutting machine has a rugged 3-axis heavy duty gantry design for smooth motion and accuracy for improved cutting performance. With dual-side, high-speed AC drives and a high-speed plasma lifter, PHOENIX CS aims to deliver higher productivity.

## Gantry and Dual Side Drives

- Heavy steel beam construction is strong and durable
- Linear rail gives smooth motion and consistent accuracy
- AC drives with 700 ipm traverse speed and fast torch lifter reduce positioning time for shorter overall cycle time
- Linear guiding system combined with powerful drives enable high dynamic accuracy over the entire cutting area



# EASE OF USE GUARANTEED BY SMART CONTROL

## iCNC Industrial Touch Screen Controller

Simplicity and ease of operation are at the heart of the Phoenix CS powered by ESAB's touch-screen based iCNC Controller

- Large 15" Touch Screen
- Integrated process database for fast, simple Plasma or Oxyfuel torch setup
- Integrated MicroCAD for on-the-spot editing
- Built-in Wifi for remote assistance capability



## iHC XT - the Height Control that Knows Your Plasma Processes

With the Intelligent Height Control iHC XT, simply confirm the system has the material, thickness and amps you are using to cut your next work. The intelligent iHC XT takes care of the rest - no more incorrect settings or operator errors.



## Nesting Software Columbus 3

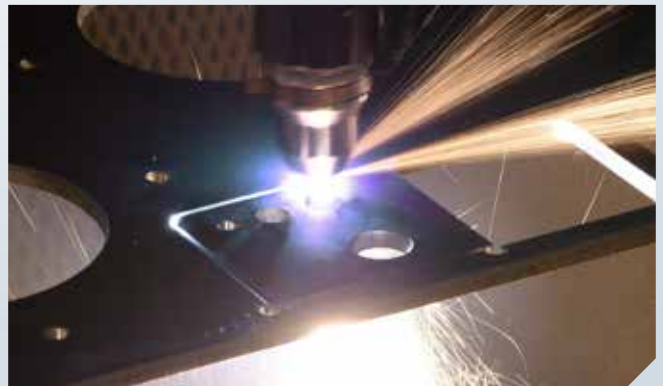
- Automatic nesting
- Entry and administration of parts data
- Internal CAD
- Recording, managing and defining of new and remnant plates
- Export of calculations
- Calculation of time, paths, weights and areas from nesting diagram and parts list
- Organisation and management of shapes to be executed
- Bevel module for programming of plasma, gas cutting and laser bevel tools



## Diameter PRO™ - from Mild Steel to Bolt-Ready Holes

Diameter PRO allows you to cut high quality "optimized" holes in three simple steps.

Diameter PRO cuts bolt-ready holes with minimum-to-no taper. As soon as the holes are cut, the work piece is ready for finishing or assembly. That saves time and money, eliminating secondary processes and increasing productivity.



# TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Track Width (mm)	2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000
Track Length	13 to 98 ft. (4 to 30 m)
Parking Length	6.5 ft. (2 m)
Possible Tool Arrangements	1 plasma only 1 plasma + 1 oxy-fuel on exchange station, no oxy-fuel AHC
Max. Tools	2
Max. Tool Carriages	1 (No band)
Max. Plasma Torches	1
Max. Oxy-Fuel Torches	1
Max. Marking Tools	Marking only with plasma torch
Max. Plasma Thickness	2" (50 mm)
Max. Oxy-Fuel Thickness	2-1/2" (60 mm) piercing / 6" (150 mm) edge starting
Oxy-Fuel Gas Control Type	Manual 3 regulator, mounted at torch station
Max. Traverse Speed	700 ipm (18000 mm/min)
Plasma Beveling	No
Oxy-Fuel Beveling	No
Plasma Options	<ul style="list-style-type: none"> <li>• m2-200i</li> <li>• iSeries 100 – 400</li> </ul>
Marking Options	Plasma marking with plasma torch
CNC	ESAB iCNC
Main Axes Drives	Yaskawa Sigma 7 AC drives, AC Brushless Motors
Main Axes Gearboxes	25:1 Eisele Planetary Gearbox
Gantry Type	Dual-Side Drive
Beam Design	Single piece beam & deck, welded assembly, machined with single linear rail (top) and flat track (bottom).
Carriage Type	Aluminum extrusion with individual mounts for linear bearing blocks or roller bearings.
Rail Type	Heavy-duty railroad type rail, machined on top and 2 sides. Machined surface for rack mounting. Mounted on fabricated H-Beams.
H-Beams	12" (300 mm) H-Beams, to be supplied by the customer or local distributor, depending on sales region.
CNC Mounting	Standard on Left, optional on Right
Cable Chain Mount	High or Low, Right or Left
Plasma torch holder	Torch clamp with magnetic breakaway
Plasma Initial Height Sensing	Ohmic Sensing
Oxy-Fuel Torch Holder	Torch clamp with magnetic breakaway
Oxy-Fuel Height Sensing	Not Available
Torch lifter type	C2-200 lifter with linear rail, ACME screw, DC-Stepper motor

Plasma System	Amp	Max Pierce MS	Max Cut MS	Remarks
m2-200i	200	1" (25 mm)	2" (50 mm)	Economical
iSeries 100	100	1/2" (12 mm)	3/4" (20 mm)	Excel on S/S
iSeries 200	200	1" (25 mm)	2-1/2" (65 mm)	Excel on S/S
iSeries 300	300	1-1/2" (40 mm)	3" (75 mm)	Excel on S/S
iSeries 400	400	2" (50 mm)	3-1/2" (90 mm)	Excel on S/S



# UNRIVALED SERVICE AND SUPPORT.

Like all ESAB products, the Phoenix CS CNC cutting system is backed by our commitment to superior customer service and support. Our skilled customer service department is prepared to quickly answer any questions, address problems, and help with the maintenance and upgrading of your ESAB equipment and software. We offer:

- Value packages, including machine and process audits to maximize your investment
- Proactive preventive maintenance programs and maintenance contracts to keep your equipment and software up and running
- ESAB plasma consumables for the perfect cut
- Specialized repair services
- Retrofit upgrade products and packages for the latest in machine, control, and software technology
- Complete product and process training, including advanced training programs

And, our products are backed with the most comprehensive warranty in the business. With ESAB, you can be confident that the product you purchased will meet your needs today and in the future. Ask your ESAB sales representative or distributor for a complete ESAB solution.

**For more information, visit [esab-cutting.com](http://esab-cutting.com)**



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