



# **m<sup>3</sup> plasma<sup>™</sup>** **Precision Hole Technology<sup>™</sup>**

ACCURATE. CYLINDRIC. EFFORTLESS.



# Precision Hole Technology™

Effortless production of bolt-ready holes.

**ESAB makes plasma cutting of small holes easier than ever.**

Precision Hole Technology™ is an integrated set of technologies that work together to produce bolt-ready holes in construction steel down to 1:1 diameter-to-thickness ratio

on material from 3 to 25mm thick. When parts are programmed using ESAB's COLUMBUS NET™ software, machine operation requires no intervention to produce high quality holes.\*

\* Dross is to be expected on small hole contours even when other contours are dross-free.

## PRECISION HOLE TECHNOLOGY™ CAPABILITY RANGE

CUTTING CURRENT (Amps)	PLATE THICKNESS (mm)								
	3	5	6	10	12	15	20	22	25
30	•	•							
60	•	•	•						
90		•	•						
100			•	•	•				
130			•	•	•	•			
200				•	•	•	•	•	•
280					•	•	•	•	•
360							•	•	•
450							•	•	•

This capability range applies to m<sup>3</sup> plasma™ / PT-36 "Generation 2" gas control system.

### The ESAB advantage

Only ESAB delivers the full package. Rely on ESAB to manufacture the gantry and integrate the entire system, including the plasma, CNC, height control, programming software and the drive system. ESAB stands behind the entire system because we make the entire system.

Only ESAB m<sup>3</sup> plasma™ / PT-36 systems can fully control shield gases. Extensive testing shows that pure oxygen is not the ideal shield gas for edge quality. m<sup>3</sup> plasma™ is capable of switching, mixing or adjusting shield gases on the fly. Precision Hole Technology™ uses a mix of oxygen and nitrogen as the shield gas, and changes the shield gas between starting and cutting to minimize pierce spatter.

Precision Hole Technology™ also applies to slots with width-to-thickness ratios down to 1:1.

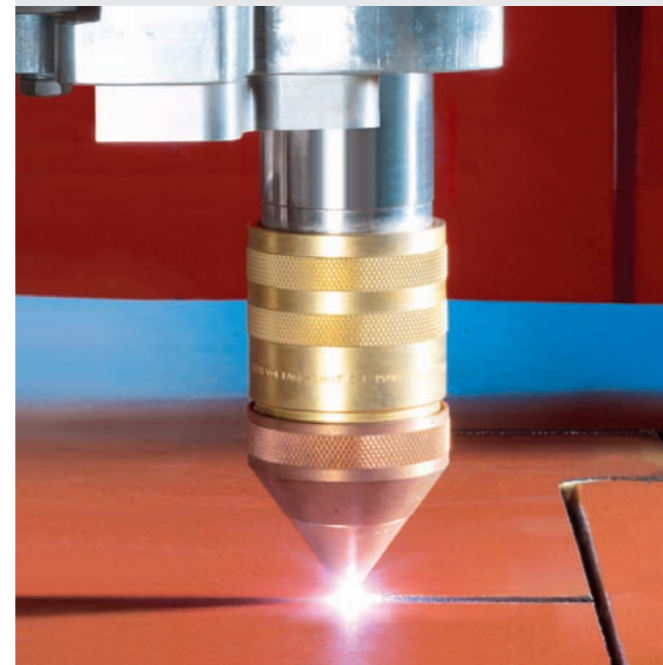
A 12mm pin in a 12mm hole in 12mm steel



A 20mm pin in a 20mm hole in 12mm steel



A 25mm pin in a 25mm hole in 12mm steel



### The equipment is in place:

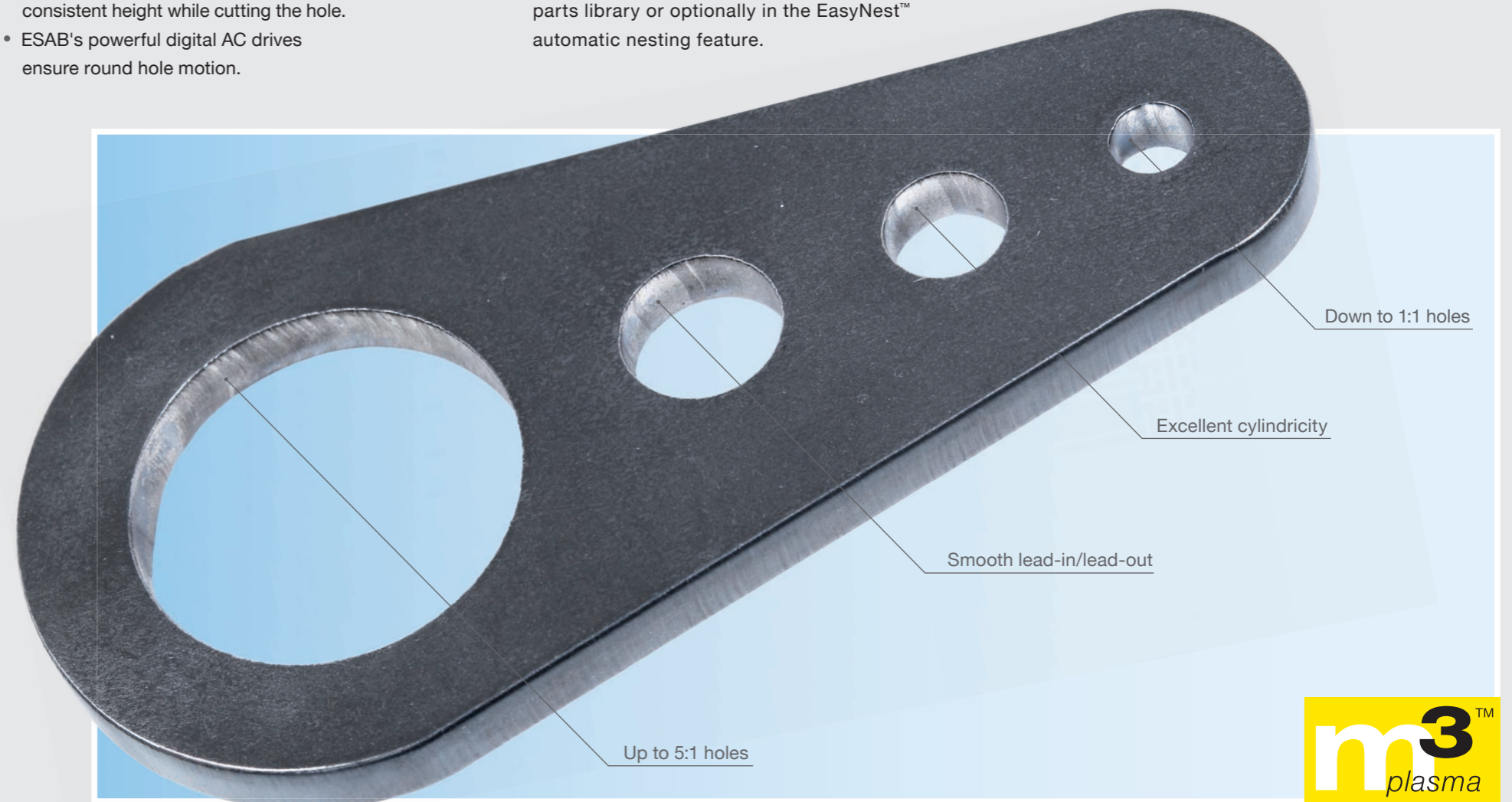
- m<sup>3</sup> plasma™ allows precise mixing and modulation of the shield gas, shaping the arc for the highest cylindricity.
- ESAB's encoder-based height control ensures roundness by maintaining a consistent height while cutting the hole.
- ESAB's powerful digital AC drives ensure round hole motion.

### The CNC is ready:

- ESAB VISION™ 5x controls feature advanced motion and kerf algorithms to ensure precision small hole cutting.
- The VISION™ T5 CNC includes Precision Hole Technology™ built into the EasyShape™ parts library or optionally in the EasyNest™ automatic nesting feature.

### COLUMBUS NET™ completes the solution:

- COLUMBUS NET™ software automatically applies optimised hole cutting geometry and process codes.
- All hole-cutting expertise is captured in a database.
- No manual intervention is required.



# ESAB CUTTING SYSTEMS

Productivity - Service - Reliability



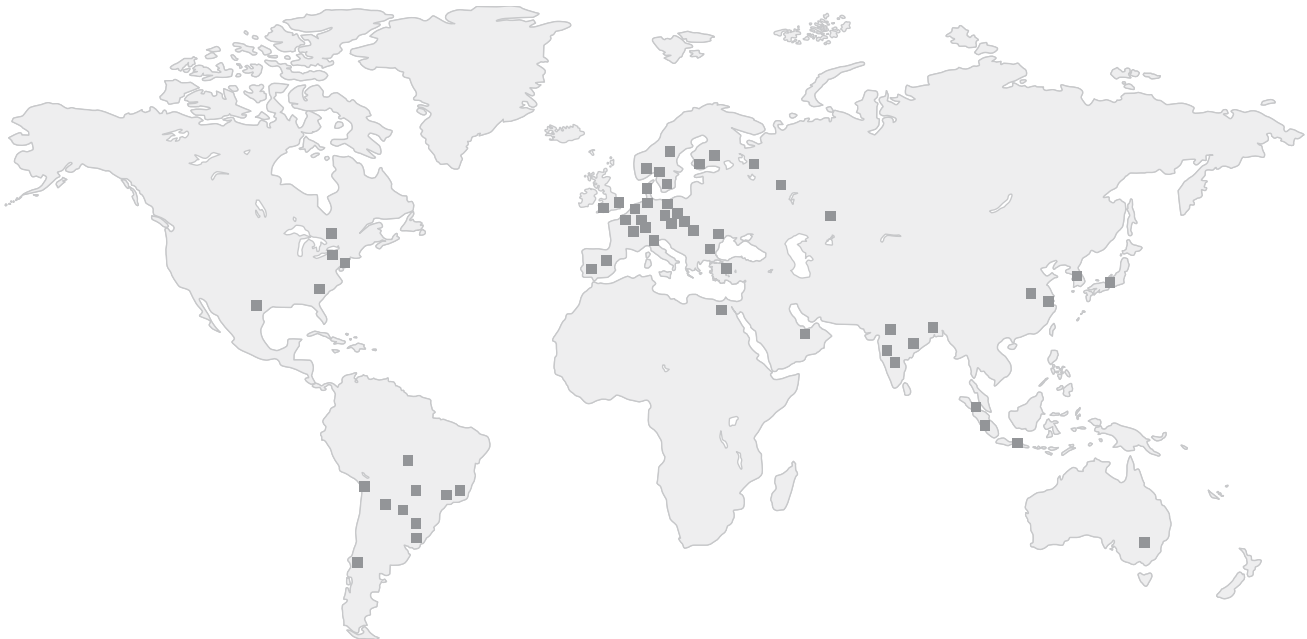
**When you buy ESAB**, you get more than just a machine. You get an experienced and dedicated partner supporting you throughout the life of your machine.

We are committed to exceeding your expectations of after-sales service and support, to providing an efficient supply chain for spares, wear parts

and consumables; and to offering a comprehensive range of services and products to ensure your continuing success.

Quality products, innovative technology and dedicated customer service, these are the hallmarks of your partnership with ESAB.

ESAB sales and service offices worldwide



## ESAB CUTTING SYSTEMS GmbH

Robert-Bosch-Str. 20 · 61184 Karben · Germany

Phone: +49 (0) 6039 / 40-0 · Fax: +49 (0) 6039 / 40-301

e-mail: [info@esab-cutting.de](mailto:info@esab-cutting.de) · Internet: [www.esab-cutting.net](http://www.esab-cutting.net)

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