

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

## ESAB's Precision Hole Technology™

Now ESAB makes it easier than ever to produce world-class plasma cut holes and high quality edge cuts. Our new Precision Hole Technology is built in to ESAB's Columbus.NET™ programming system and takes full advantage of the advanced features of ESAB's m<sup>3</sup> plasma™ system, Vision® CNC, and arc voltage height control to deliver outstanding plasma cut holes.

ESAB is the only supplier that brings the entire package together, including plasma, CNC, software, height control, and the cutting machine – all from one supplier, all integrated to work perfectly together to provide the highest quality plasma cuts and most accurate plasma cut holes.

## Enhanced Cylindricity

To create bolt-ready holes with plasma requires cylindricity measured in thousandths of an inch. To achieve this, all aspects of the plasma cut must be carefully controlled, including the lead-in and lead-out, height control, speed, acceleration, kerf offset, and plasma gases. Only ESAB can fully automate every parameter that affects hole quality.



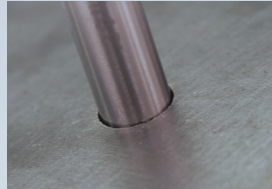
**Precision Hole Technology is available on many new ESAB machines equipped with m<sup>3</sup> plasma and ESAB's Columbus.NET programming system.**

**Precision Hole Technology is also built-in to ESAB's new Vision T5 CNC, which automatically optimizes small holes created with the EasyShape™ part program generator, or imported in DWG or DXF files.**

# Only ESAB delivers the complete system solution.

## Precision height control

Improving hole cylindricity requires precise control of torch height. ESAB's Soft-Touch technology with encoder-based positioning doesn't rely on arc voltage when cutting small holes, so it gives the most accurate control of torch height. It can also be programmed to retract during piercing, then return to a precise cutting height before motion begins.



## Precision plasma gas control

ESAB's m3 plasma introduced shield gas switching and mixing as a way to use air, pure oxygen, or mixed oxygen-nitrogen for the optimum cut quality in every situation. Precision Hole Technology uses a precise shield gas mix to produce the optimum hole quality on carbon steel up to 1 inch thick.



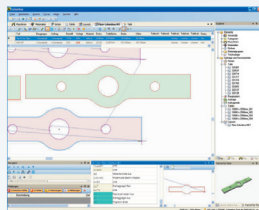
## Precision machine motion

Only ESAB delivers truly the entire cutting machine solution, all from one company. This includes the cutting machine with the world's most advanced digital AC drives able to produce the precision machine motion necessary for small hole cutting. Precision Hole Technology is one more example of how ESAB is the only total solution provider for plasma cutting machines.



## Software that makes it happen

ESAB's Columbus.NET™ software ensures you get all the precision and performance possible from your ESAB cutting machine. This programming software automatically applies Precision Hole Technology to small hole programs where applicable, all while achieving the best possible plate utilization.



## Precision path control

ESAB's Vision 5x CNCs feature advanced motion and kerf algorithms to ensure precision small hole cutting down to 1:1 diameter-to-thickness ratio. All Vision 5x controls are capable of the special kerf control necessary to ensure piercing in the exact hole center, an essential part of Precision Hole Technology.



Put Precision Hole Technology to work today. Visit [esab-cutting.com](http://esab-cutting.com) or call 1.800.ESAB.123.

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