SureCut™

Hypertherm Associates
Software Group

True Hole provides bolt-hole quality automatically

Delivers embedded expertise for XPR plasma systems



No matter your industry or application, your production floor must cut faster and more efficiently to remain competitive. Hypertherm Associates has collaborated with its global partners for over fifty years to provide our customers with the most significant advances in mechanized plasma cutting technology and automation software to boost production and improve the bottom line.

Key business benefits

Improves hole quality automatically
Bolt hole quality is delivered without operator intervention

Competes with laser hole quality
True Hole quality makes plasma suitable for many jobs previously cut with laser

Increases productivity
Reduces the need for secondary processes and completes jobs in fewer steps

Patented True Hole technology produces significantly better hole quality than what was previously possible using plasma.

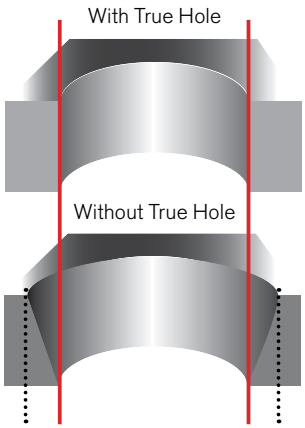
Optimize your Hypertherm plasma performance with SureCut™ technology

Our exclusive SureCut technology automatically embeds advanced cutting capabilities into the plasma cutting process, delivering improved outcomes, simplifying cutting operations, and reducing operator intervention.

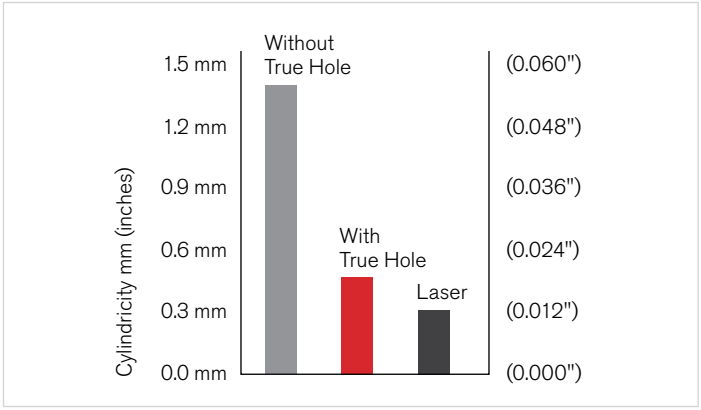
True Hole® produces significantly better hole quality

Since its initial release, True Hole has become a mainstay for those who demand high-quality bolt-ready holes. Historically, machine operators had difficulty achieving good hole quality directly off the plasma cutting table, with drilling often required as a secondary process. True Hole® technology—a patented process for mild steel that virtually eliminates hole taper and improves roundness—produces significantly better hole quality than what was previously possible using plasma.

True Hole eliminates taper and improves roundness



Hole cylindricity



Example based on 10 mm holes, 9.5 mm mild steel plate, 130 A process (0.394" holes, 3/8" mild steel plate)

CAM software or CNC automatically applies True Hole technology

Specific combinations of the following parameters, which may vary based on amperage, material type, thickness, and hole size are applied to the job:

- Process gas type
- Gas flow
- Amperage
- Piercing methodology
- Lead in/lead out technique
- Varying speeds across multiple hole segments
- Arc termination synchronized with torch motion





True Hole processes for XPR by thickness

	3 mm	4 mm	5 mm	6 mm	8 mm	10 mm	12 mm	15 mm	20 mm	22 mm	25 mm
30 A	■	■	■								
50 A	■	■	■	■							
80 A				■	■	■					
130 A				■	■	■	■				
170 A						■	■	■	■		
300 A								■	■	■	■

10 ga	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
■	■								
■	■	■							
		■	■	■					
		■	■	■	■				
				■	■	■	■		
						■	■	■	■

Note: Interpolated hole settings between thicknesses may be possible. Contact your machine manufacturer for details.

System requirements

- For use with mild steel, up to 25 mm (1")
- Applies to holes where the diameter-to-material thickness ratio ranges from 2:1 to 1:1
- Hypertherm XPR® X-Definition® plasma system
- ProNest®, EDGE® Connect, or other CAM or CNC software from an authorized partner
- Not recommended for water tables where the water level is at or above the plate surface

True Hole helps significantly reduce secondary processes.

To stay competitive, manufacturers must improve their total cutting process to boost production and minimize operating costs. SureCut technology optimizes Hypertherm plasma performance by automatically embedding advanced cutting capabilities and delivering improved outcomes for our customers.

SHAPING POSSIBILITY®

PLASMA | LASER | WATERJET | AUTOMATION | SOFTWARE | CONSUMABLES

Learn more about True Hole and other SureCut technologies at www.hypertherm.com/SureCut

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Please visit www.hypertherm.com/patents for more details about Hypertherm Associates patent numbers and types.

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