

Introducing Rapid Part™ technology

Significantly increase the number of parts produced per hour

Hypertherm's Rapid Part technology delivers significant productivity increases, automatically without operator intervention. Rapid Part technology is available via Hypertherm's Integrated Plasma Cutting Solutions and uses motion optimization techniques programmed into the part program and automatically executed by the computer numerical control (CNC).



With Rapid Part technology applied



Without Rapid Part technology applied

Parts produced using the same cutting machine and the same cutting time duration.

Note: Cut-to-cut cycle time improvement will be apparent on all jobs, with the most significant productivity improvements achieved on nests using thin plate with a high part/pierce count.

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What is Rapid Part technology?

Rapid Part technology achieves productivity enhancements by reducing cut-to-cut cycle time (the time the arc is off), including the time from the last cut or pierce to the next pierce. This typically includes torch retract, table motion, initial height sensing (IHS) and gas pre-flow.

Rapid Part technology reduces wasted time in the cutting process

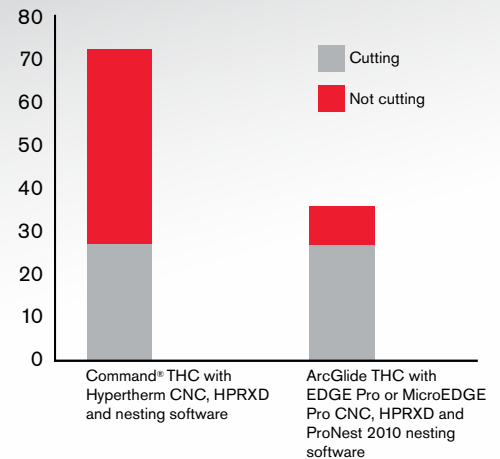
- Increases the number of parts produced per hour by up to 100%.
- Delivers cut-to-cut cycle time reduction automatically without operator intervention.

Less cut-to-cut cycle time means increased productivity

- Using an 8" (20.3 cm) flange, more than half the time after the operator presses "go" is spent moving between cuts when using competitive THCs.
- Hypertherm's Integrated Plasma Cutting Solutions, with Rapid Part technology, reduces the cut-to-cut cycle time by 80% and the time it takes to cut each part by about 50%.



Total part time (8" [20.3 cm] flange with 8 holes)
Red = 80% reduction; 50% reduction overall



Revolutionary plasma performance: Rapid Part technology

Rapid Part technology works by targeting and optimizing four aspects of the total cutting process that cause longer than necessary cycle time and which occur during the period from the last cut or pierce to the next pierce.

Rapid Part technology

<p>1. Torch retract</p> <ul style="list-style-type: none"> Rapid vertical (Z-axis) motion using the ArcGlide® THC intelligently retracts the torch to the next pierce height, based on material and part properties. 	<p>2. Table motion</p> <ul style="list-style-type: none"> Optimized motion instructions programmed using ProNest® 2010 with its optional Collision Avoidance module, which minimizes the chances of torch collision and the distance between the end of one cut and the pierce on the next part. 	<p>3. Initial height sensing</p> <ul style="list-style-type: none"> Rapid Z-axis motion using the ArcGlide THC. Automatic fast-to-slow speed crossover calibration. IHS skipped intelligently, based on part geometry and nest configuration. 	<p>4. Gas pre-flow</p> <ul style="list-style-type: none"> Completed simultaneously during initial height sensing and during machine motion if IHS is skipped.
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Hypertherm's Rapid Part technology achieves maximum results using the following Integrated Plasma Cutting Solutions components

- ProNest 2010 nesting and process optimization software
- EDGE® Pro or MicroEDGE Pro CNC
- ArcGlide THC
- Hypertherm HyPerformance® HPRXD® plasma system

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Cut with confidence®

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