



## APPLICATION SHEET

# 6061-T6 Aluminum

### THE TOOL

## Helical

### Helical Solutions LLC

29 Sanford Drive  
Gorham, Maine 04038  
Phone 1.866.543.5422  
Fax 1.866.350.5968  
www.1helical.com



### THE TOOLPATH

#### POWERED BY

## VoluMill™

### Celeritive Technologies, Inc.

28248 N. Tatum Blvd. B-1, Suite 148  
Cave Creek, Arizona 85331  
Phone 1.888.253.6701  
Fax 1.888.253.6701  
www.volumill.com

### APPLICATION PARAMETERS

<b>Material</b>	6061-T6 Aluminum
<b>Coolant</b>	Water-soluble flood
<b>Toolpath</b>	VoluMill™
<b>Endmill Used</b>	Helical Solutions (3-Flute) HAL-C-SR-30500-R-0 (edp#29390)
<b>Endmill Dimensions</b>	1/2" x 1/2" x 1" x 3" with .030 corner radii
<b>Machine</b>	HAAS® EC400 Direct Drive HMC 12k/1000 ipm
<b>Tool Holder</b>	Milling chuck
<b>SFM</b>	1,560
<b>RPM</b>	12,000
<b>CLPT</b>	.0277
<b>IPM</b>	1,000
<b>ADOC</b>	.500
<b>RDOC</b>	.200
<b>Ramping</b>	Helical ramping to .500 depth at 300 ipm / 3° / 12k
<b>MRR</b>	100 cu.in./min.
<b>Tool Life</b>	Undetermined—after 5 parts tool still looked new
<b>Spindle Load</b>	Less than 10%