



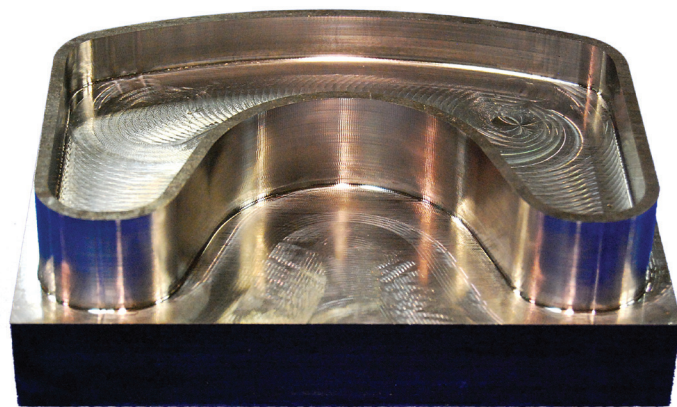
**APPLICATION SHEET**

# 4140 Steel

**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>	4140 Steel
<b>Coolant</b>	Dry with no air
<b>Toolpath</b>	VoluMill™
<b>Endmill Used</b>	Helical Solutions (5-Flute): HEVR-R-50500-R-3
<b>Endmill Dimensions</b>	1/2" x 1/2" x 1.25" x 3" with .030 corner radii
<b>Machine</b>	Milltronics® VM22
<b>Tool Holder</b>	Milling chuck
<b>SFM</b>	1,300
<b>RPM</b>	10,000
<b>CLPT</b>	.0050
<b>IPM</b>	250
<b>ADOC</b>	1.000
<b>RDOC</b>	.030
<b>Material Entry</b>	Helical at 50 ipm / 5°
<b>MRR</b>	7.50 cu.in./min.
<b>Spindle Load</b>	Less than 10%