



## APPLICATION SHEET

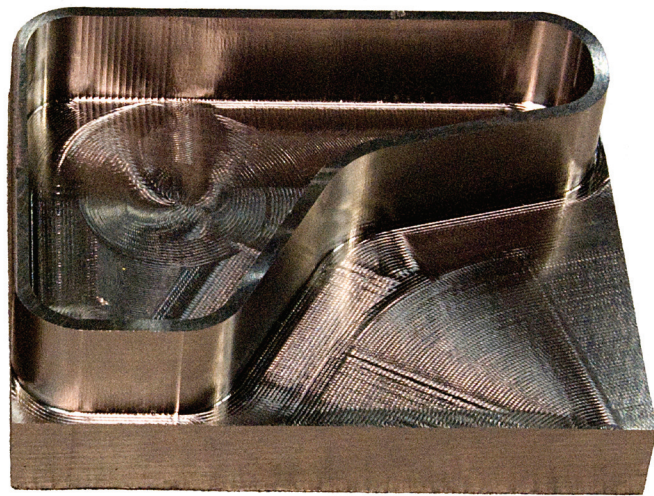
# 6Al4V Titanium

### 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](http://www.1helical.com)



### THE TOOLPATH

#### POWERED BY



### Celeritive Technologies, Inc.

28248 N. Tatum Blvd. B-1, Suite 148  
Cave Creek, Arizona 85331  
Phone 1.888.253.6701  
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[www.volumill.com](http://www.volumill.com)

### APPLICATION PARAMETERS

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| <b>Material</b>           | 6Al4V Titanium                                  |
| <b>Coolant</b>            | Water-soluble flood                             |
| <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® VM20                               |
| <b>Tool Holder</b>        | Milling chuck                                   |
| <b>SFM</b>                | 500                                             |
| <b>RPM</b>                | 3,820                                           |
| <b>CLPT</b>               | .0066                                           |
| <b>IPM</b>                | 126                                             |
| <b>ADOC</b>               | 1.000                                           |
| <b>RDOC</b>               | .035                                            |
| <b>Material Entry</b>     | Helical at 20 ipm / 3°                          |
| <b>MRR</b>                | 4.41 cu.in./min.                                |
| <b>Spindle Load</b>       | Less than 10%                                   |