

## TIP EVALUATION

1ST 3mm

|                                  |                |
|----------------------------------|----------------|
| SIZE .....                       | 25/04          |
| FLUTES .....                     | 3              |
| SPIRALS PER 16MM .....           | 3.33           |
| HELIX ANGLE .....                | 28.4° & 4.6° ● |
| CUTTING ANGLE .....              | (-) 30° ●      |
| DEBRIS REMOVING AREA .....       | 55% ●          |
| X-SEC. AS % OF CUTTING DIA. .... | 28%            |
| CORE AS % OF X-SEC. AREA .....   | 62%            |
| ROTATION TO FAILURE .....        | 1060°          |
| PEAK TORQUE AT FAILURE .....     | 61.06 gf/cm    |
| 60° DEFLECTION .....             | 4.82 g         |
| PLASTIC DEFORMATION .....        | 0°             |

# BioRaCe®

COMPANY:  
BRASSELER USA

MANUFACTURER:  
FKG DENTAIRE

MADE IN:  
SWITZERLAND

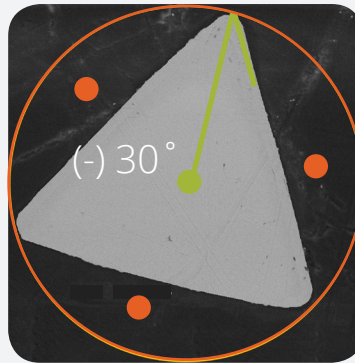
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## SEM IMAGES

COURTESY OF UT MEMPHIS



TIP



TIP X-SECTION



## DISCUSSION:

- Note that the nearly non-spiraled sections along the working length provide an area that can become more easily spiraled when rotational torsion is applied. The result is relatively high rotation to failure but added no significant increase in peak torque. It is also important to remember that 3 rotations, once bound, only requires 0.6 seconds to fail while rotating at 300 rpm.

SEMs are provided by Dr. Franklin Garcia-Godoy, Professor and Senior Executive Associate Dean for Research Director, Bioscience Research Center University of Tennessee Health Science Center

TIP

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