

# Scepter X2™ Automated Connector Polishing System

#### **DUAL POSITION OPTICAL POLISHING**

DOUBLES CAPACITY OF STANDARD SCEPTER™

EXTERNAL PC CONTROL WITH MICROFEED™

INDEPENDENT SUSPENSION WORKHOLDERS

SUPPORTS ALL INDUSTRY STANDARD CONNECTORS / MIL-TERMINI / FERRULES

**AIR POLISHING IN MACHINE** 

**TELCORDIA COMPLIANT** 

## SPECIFICATIONS AND FEATURES

#### Polishing Performance<sup>1</sup>

#### **Apex Offset**

<50 microns, maximum <15 microns, typical Radius of Curvature

10-25 mm, 2.5 mm ferrules 7-20 mm, 1.25 mm ferrules 5-12 mm, APC ferrules

Undercut/Protrusion<sup>2</sup> 0 to -100 nm

<sup>1</sup> Polishing performance meets and exceeds Telecordia specifications, and can be optimized for specific applications. <sup>2</sup> Dependent upon radius of curvature.

#### **Optical Performance**<sup>3</sup>

Back Reflection < -60 dB, UPC < -65 dB, APC

Insertion Loss < 0.25 dB, typical

<sup>3</sup>Optical performance may vary between connector manufacturers.

Program Description FCAPC program . Name/Instructions Polishing MicroFeed Pad Color Polish Polish Polish	Simu Universal Workholder Referencing Routine   MicroFeed Polish Routine Cycle Time (1-999 sec) Pressure (inches travel) 0R Micro Steps (1 - 300,000) Platen Speed (fevs/sec)   FCAPCDENUB Image: Control of the stravel Sector of the stravel Image: Control of the stravel Sector of the stravel Sector of the stravel Image: Control of the stravel Sector of the stravel
Step     Process Name     Instructions     Pad Color     Polish       If     1     Denub     3 num SiC on Drange     Drang I     If Step 1     I       If     2     [5 um Diamond     6 um Diamond on Drange w/water     Drang I     If Step 2     I	Routine     (1'9999 sec)     (inches travel)     UH     (1 - 300,000)     (rever/sec)       FCAPCDENUB     0     6     •     0     III     •
	Image: 30     c     1.3     c     20000     11.5     Image: 1.5
BOIT HicroFeed Polish Routine     Routine Name     FCAPCDENUB     Description     FCAPCDENUB     Stat Position     234732     Image: Comparison of the state of the sta	Image: Constraint of the second state of the second sta

Scepter features an intuitive user interface for creating polishing programs. All polishing parameters including cycle time, pressure and speed settings are easily inputted for all connector types and desired surface geometries.

Specifications subject to change without notice Rev. 1, 4/17



### **Operational**

Connector Capacity 24 connectors using Independent Suspension workholders 58 connectors with high capacity workholders Connector Support All industry standard, MIL-spec and custom connectors/termini Process Time<sup>4</sup>

Approximately 3 to 8 sec/connector **Polishing Pressure** 

Programmable, sub-micron, automated, linear displacement

Polishing Speed Program selectable Cycling Timing Program selectable

Polishing Motion Random orbital

<sup>4</sup> Singlemode UPC finish.



Scepter workholders feature Independent Suspension (IS) at each connector position for controlled pressure and uniform contact with the polishing surface. IS permits air polishing while maximizing film life. Each position is optically aligned for optimal polish geometry using KrellTech's patented technology.