DO NOT BE FOOLED...

You could be putting lives and your business at risk for a few pennies.

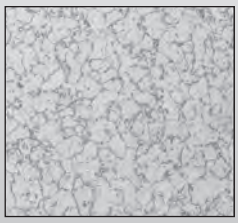
There are suppliers who would like you to believe swaging sleeves are a commodity. Don't be fooled, IT'S NOT SO!

The Crosby COLD-TUFF® process is the difference.

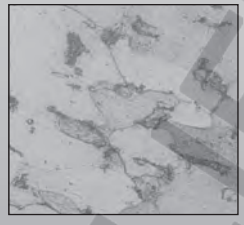
- Since 1973, Crosby's proprietary COLD-TUFF® heat treat process has made swaging sleeves more reliable during the demanding conditions of swaging.
- COLD-TUFF® virtually eliminates the cracking of sleeve during the swaging process, especially at extremely low temperatures.
- The steel microstructure created from the COLD-TUFF® heat treatment process reveals a uniform structure in the Crosby sleeve, that result in Charpy impact values averaging up to ten times greater than those of competitive sleeves. See photo lower left.
- The improved steel microstructure provides increased resistance to cracks that can occur during the sling building process. Cracks are initiated at stress risers.
  - Crosby COLD-TUFF® sleeves dramatically reduce the effects of stress risers that can occur during swaging, where the "cold worked" sleeve makes contact with the wire. Stress risers are not detectable through visual inspection. See photo at right.
  - Because of the higher Charpy values found in Crosby COLD-TUFF® sleeves, stress risers caused by stenciling are not detrimental.

COLD-TUFF® process results in superior ductility that reduces the effects of stress risers.

Un-retouched Photomicrographs of Sleeve (Original Magnification @ 500x)



Crosby COLD-TUFF® Heat Treatment
The ***uniform*** microstructure of the COLD-TUFF® process results in superior ductility and toughness properties.



Competitor's Heat Treatment
The ***non-uniform*** microstructure may lack proper ductility and toughness required for swaging and use.

The Mark Of Quality Is On Every National Sleeve

Crosby or CG and COLD-TUFF are clearly stenciled on every sleeve we make (legible even after swaging) leaving no question as to the quality or the manufacturer.

Crosby COLD-TUFF® and National Swage Fittings
Reliability You Can Depend On

the Crosby® group, inc.

www.thecrosbygroup.com

P.O. Box 3128, Tulsa, OK 74101 • E-mail: crosbygroup@thecrosbygroup.com • (918) 834-4611, Fax: (918) 832-0940