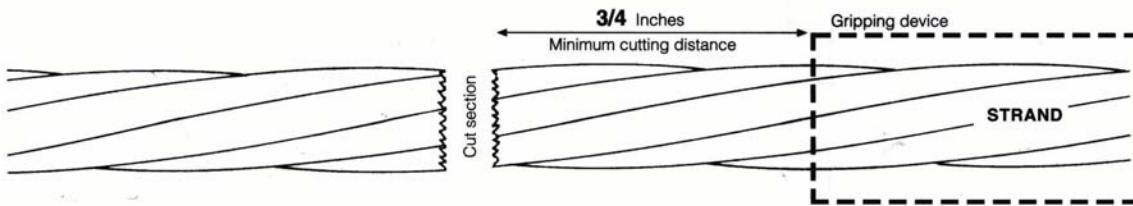
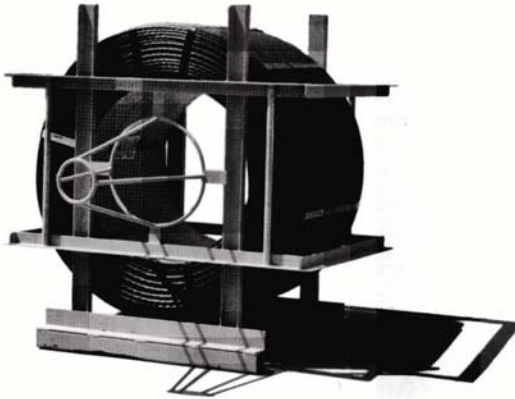


**Procedures for pulling strand from inside Strand Pack**

1. Pull Direction
  - a. Place strand pack in strand cage so that arrow pull direction faces opening.
2. Space Considerations
  - a. There should be NO SPACE between strand pack and frame of strand cage prior to cutting banding straps.
  - b. When there is space, insert spacers (such as wooden boards) prior to cutting banding straps.

**Note:** Excessive expansion of pack may cause tangling of strand.



**Cutting Torch Effects**

Years of experience and lab tests have shown that heat from cutting torch greatly affects strand hardness. (Figure 1)

**Caution:** Never torch-cut strand within 3/4 inches of gripping device.

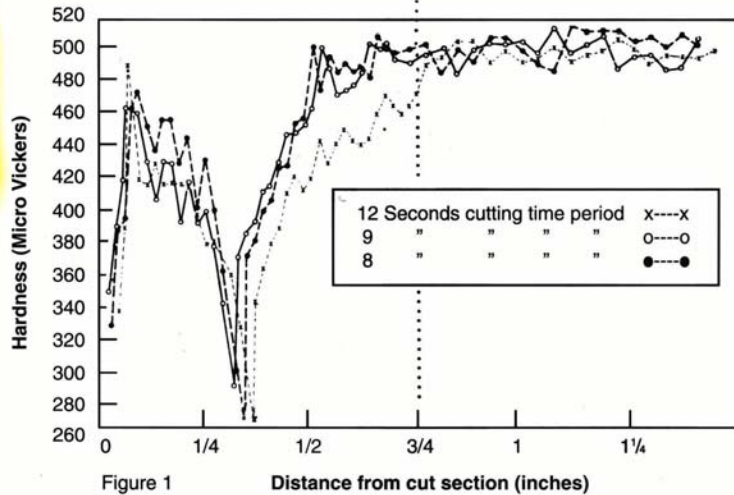


Figure 1 Distance from cut section (inches)



**Sumiden Wire Products Corporation**

Corporate Offices: P.O. Box 8719-95208 • 1412 El Pinal Drive • Stockton, California 95205 • (209) 466-8924 • Fax (209) 941-2990

710 Marshall Stuart Drive • Dickson, Tennessee 37055 • (615) 446-3199 • Fax (615) 446-3197  
 13290 Sabre Boulevard • Victorville, California 92394 • (760) 246-6091 • Fax (760) 246-3023

**High Temperature Effects**  
Effects of high temperature on breaking strength/yield strength are shown in Figure 2.

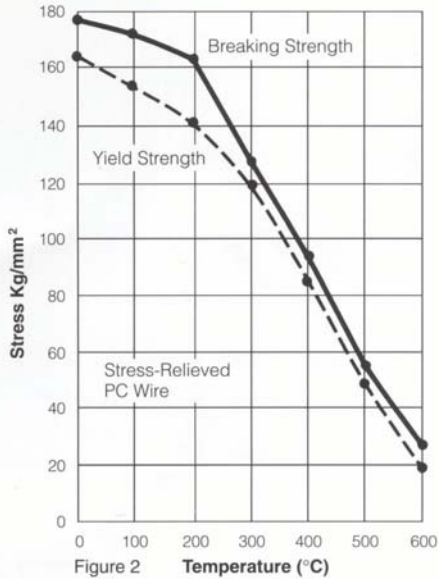


Figure 2 Temperature (°C)

**Effects of Bending Stress**

When bending stresses by bend-up or bend-down rollers are introduced into tensioning of strand, the following must be adhered to:

The diameter of rollers should be more than five times the diameter of strand. (Figure 4)

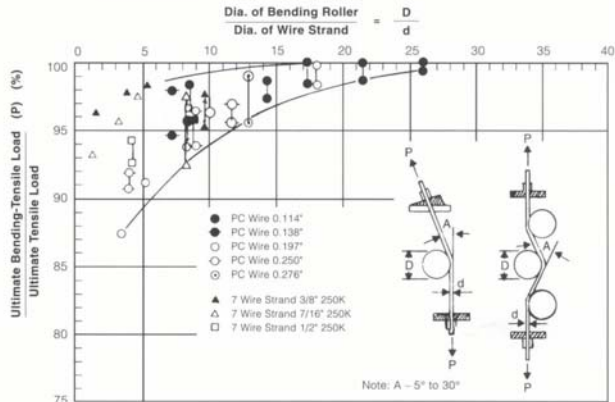


Figure 4

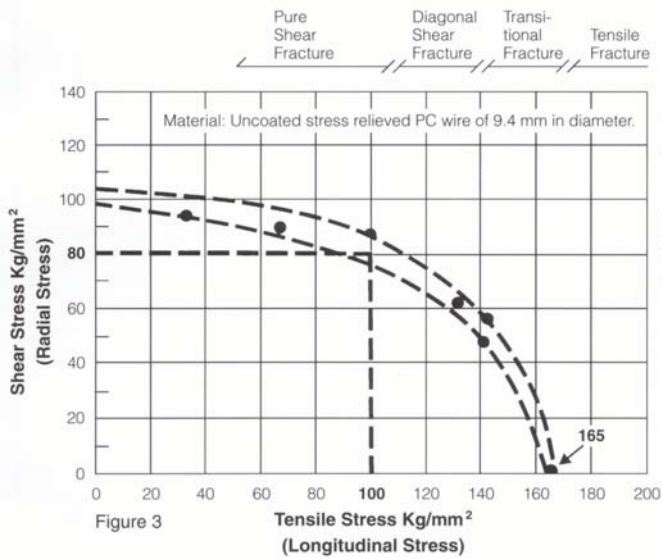


Figure 3

**Breaking conditions when both tensile stress and shear stress are applied to PC tensioning material.**

For example, PC wire with ultimate tensile strength of 165 Kg/mm² breaks at tensile strength of 100 Kg/mm² when shear stress of 80 Kg/mm² is applied at the same time. (Figure 3)