

# CARE AND HANDLING OF PC STRAND

## 1. Handling and Storage

- At all times, care should be taken to protect strand from mechanical damage. Abrasions, scrapes, or gouges of strand can reduce its breaking strength.
- To prevent rusting or pitting, strand should be stored in a dry, inside storage area. If stored outside, strand should not be placed on bare soil and should be covered.

## 2. Care Before Tensioning Work

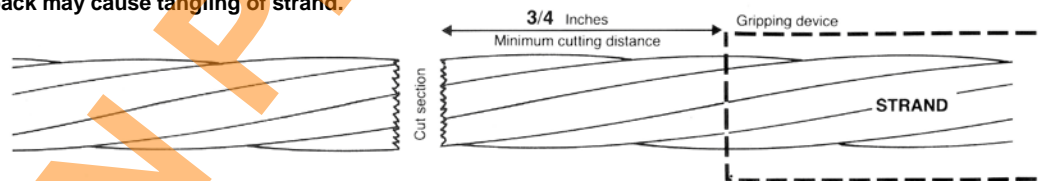
- When pulling strand from inside strand pack, a well made, tight fitting strand payoff cage should be used. Dunnage may be used between the strand pack and the payoff cage to insure a tight fit. Strand should be pulled from the pack in the direction indicated by the arrow mark.
- When strand is partially bent and tensioned, it is necessary to use a roller which has a diameter of minimum five times the nominal diameter of strand.
- When it is necessary to cut the strand after stressing, it is advisable to use a saw or cutting grinder. When using a gas flame for cutting, strand must be cut at a point 3/4-inch to 1-inch away from anchoring wedge.
- Welding, heating and partial bending of prestressing materials must not be done.
- Polishing strand with sandpaper at sections which have contact with anchorage helps to prevent slippage and are good for secure anchoring.
- Care should be taken to use the most suitable anchoring grips for strand, since strand is subjected not only to tensile stress, but also to shearing stress at the gripped section.



## 3. Procedures for pulling strand from inside strand pack:

- Pull Direction**
  - Place strand pack in a strand cage so that the arrow pull direction faces the opening.
- Space Considerations**
  - There should be less than 2" of space between strand pack and frame of strand cage prior to cutting banding straps.
  - 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.



## 4. 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.

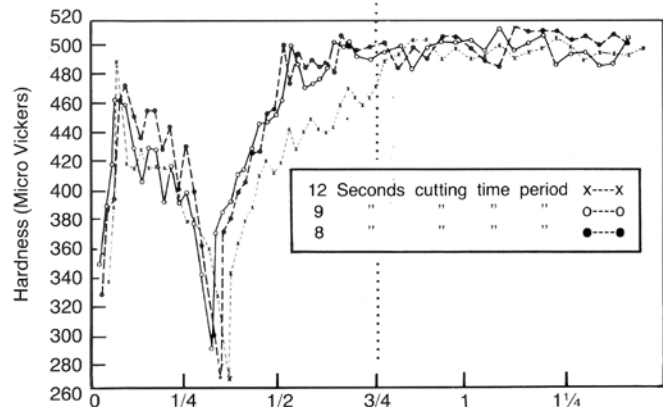


Figure 1 Distance from cut section (inches)