

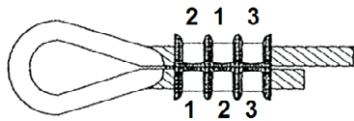
Proper Press Sequences, Wire Rope End Protrusion, and Thimble Clearance for Oval Sleeve Eye Splices

Foreword: Eye-splices with swaged sleeves are a secure method of terminating wire rope. Nicopress is often asked about the proper press sequence when pressing oval sleeves. Other related questions are: proper wire rope end protrusion “tail,” and clearance between the pressed sleeve and thimble. These are important questions which we answer below.

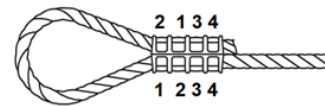
Proper Press Sequences

If making 3 or more presses, it is important to press in the sequences illustrated here:

Recommended press sequences for a 3-press sleeve

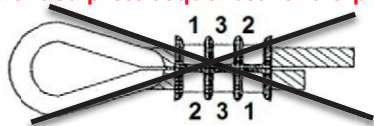


Recommended press sequences for a 4-press sleeve

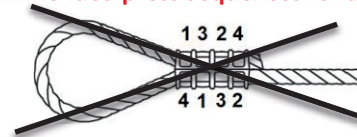


The most important sequences to avoid are ones which press an area on the sleeve in-between two previous presses as illustrated below. Reason: once 2 outer presses are formed followed by pressing an interior position, the middle press will cause sleeve material to push (or flow) against the previously pressed outer positions possibly breaking wires and/or compromising the grip strength of the 2 outer presses. All sequences below illustrate a 3rd press located between the 1st and 2nd presses:

NOT recommended press sequences for a 3-press sleeve



NOT recommended press sequences for a 4-press sleeve



Proper Wire Rope End Protrusion “Tail” and Thimble Clearance

When making an eye-splice, extend the wire rope cut-end a sufficient distance out of the sleeve so when pressing has completed, some portion of the cut end (or “tail”) remains outside the sleeve. Reason: the material flows and lengthens the sleeve as it is pressed and may cause the wire rope end to retract inside the sleeve. If the wire has retracted, the gripping strength cannot be predicted since less rope is gripped by the sleeve, which may reduce the gripping strength between the wire rope and sleeve.

When using a thimble, position the sleeve from the thimble a distance of at least ½ of the wire rope diameter. Reason: when swaging, material flow tends to lengthen the sleeve which may cause the sleeve to contact the thimble – possibly damaging the wire rope wires and/or compromising the grip strength of the sleeve. **Note:** Proper press sequences are also shown for the 3-press sleeve illustrated below.

