

Section 6: STRAND WEDGES

The specifications require all permanent anchorage devices for post-tensioning to develop at least 95% of the guaranteed ultimate tensile strength (GUTS) of the prestressing steel. The anchorage systems develop the required strength through the interplay between wedges and prestressing steel, and between the wedges and anchor plate. Characteristics that affect this interplay are wedge angle, wedge teeth amplitude and spacing, type of steel, type of heat treatment, and general strand configuration in the anchor plate.

The care, cleanliness, lubrication, surface condition, and finish also affect the efficiency of wedge systems. All manufacturers have quality control procedures that should eliminate obvious manufacturing defects. On-the-job care is left to the discretion of the individual field crews. The Contractor must use wedges that have been authorized by METS. Pulling wedges may not be used as permanent wedges.

The wedge holes of the anchor block should be clean prior to placing the permanent wedges. Sand or foreign particles located in the wedge area of the anchor block can cause the wedges to fail.



Photo 6-1 – Pulling Wedges Inserted into Jack

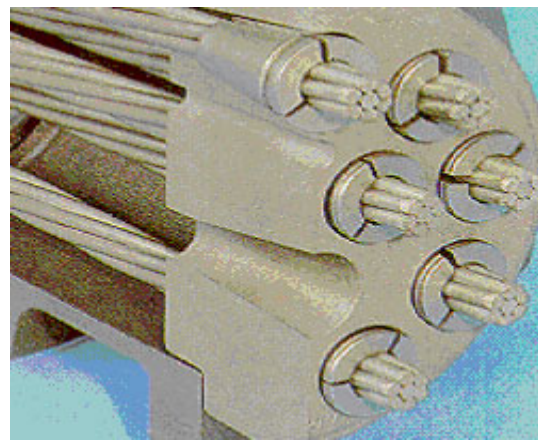


Photo 6-2 – Wedges in Anchor Head.