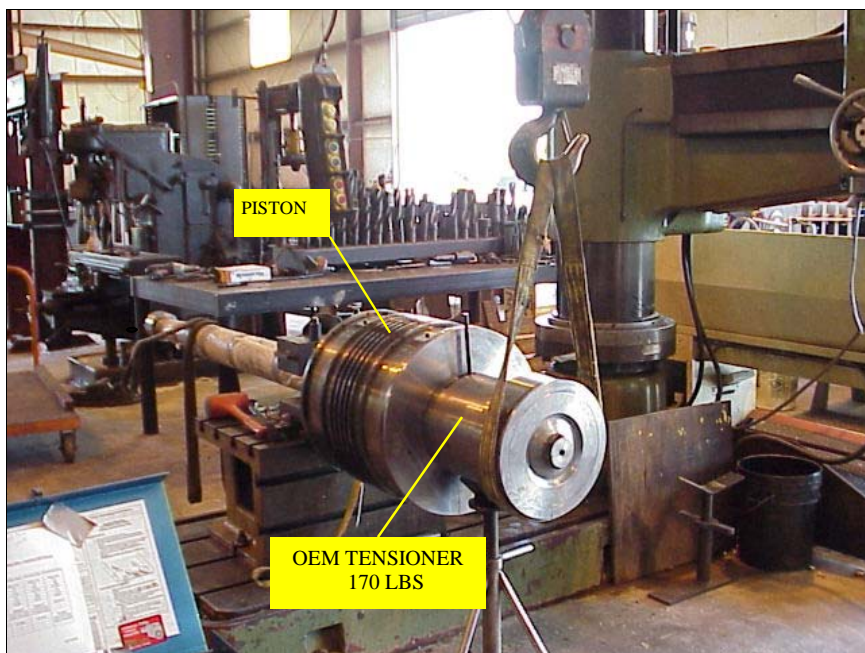




*Tensioning Solutions -
External Tensioners*

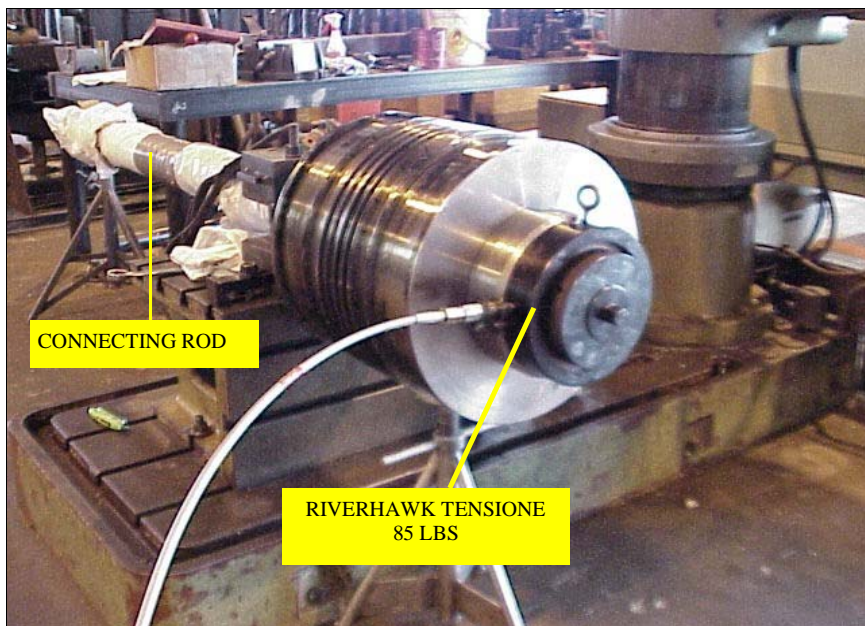
.....Reciprocating Compressor Piston-to-Piston Rod Attachment

- Lighter Design
- Improved Safety Features
- Ease Of Installation (One Man Operation)
- Eliminate O-Ring Extrusion
- Bleeding Eliminated (Reduced Ram Area)



Problem:

OEM supplied external tensioner designed to operate at moderate hydraulic pressure with a large ram area to achieve 620,891 lb. tensioning load required to stretch the 3.35" diameter compressor rod. This resulted in a heavy device that presented safety issues, requiring additional lifting support without the means of a lifting adapter during installation. The design also utilized a two-piece puller screw requiring additional adapters for the internal threaded rod connection. Extensive bleeding of air required due to ram dead space area. Also o-ring extrusion problems within the load cell.



Solution:

Original tooling replaced with a Riverhawk external tensioner designed for a higher pressure rating with reduced ram area resulting in a lighter, modular design developing the same tensioning load. A thru-stud puller eliminates the need for adapters thus threading directly into the connecting rod. The lighter weight design provides a lifting eye for a one-man installation. Load cell incorporates nitrile seals in lieu of original o-rings.