Compressor cross-head guide bolt hole repairs with Full-Torque thread repair inserts
Failed prior repair attempt

- Bolt hole pull-out due to poor stud design
Multiple damaged bolt holes
Bottom view of pulled out piece of cast iron

- Old metal stitching attempt to his the crack with standard threaded pins
Setting up the casting on our horizontal mill
Drilling out the hole to the tap drill size for our Full-Torque thread repair inserts
Pulled-out areas are milled to accept steel plates

- The drilled holes are tapped with special Full-Torque taps with Spiralhook threads
Steel plates are fit into the milled-out areas

- Steel is used to add more strength to these high stress areas
After the plates are stitched in to fill the voids the bore and face are machined

- Full-Torque inserts are installed to increase the strength of all of the bolt holes to make them stronger than the bolts.
Finish machining
Completed repair is now stronger than new