



Case Study – Refinery, Texas City

As part of a large-scale turnaround, a very well known and respected industrial contractor was awarded the task of disassembly, repair and reassembly of process equipment and piping for several large units. As often is the case, most of the equipment involved high pressure and high temperature flanges with large diameter bolts. This project needed to be performed safely, in a limited amount of time and result in no leaking flanges.

The contractor had the “manpower”, but would require technical support and an enormous amount of tooling that Francis Torque Service had provided in the past. Tools included hydraulic, pneumatic and hand operated torque wrenches, large capacity tensioning equipment and dozens of flange spreaders and specialty tools. By utilizing Francis Torque’s equipment, manufacturing capacity and technical expertise combined with their own labor source, the contractor was able to save over \$1 million in outside labor and tool rental – purchase – repair costs.

FRANCIS TORQUE SERVICE –

- Assigned a “project manager” dedicated exclusively to this project. 24 hour support, 7 days a week. We never close!
- Performed a thorough site survey and work scope evaluation to assure tooling would be properly determined and available when needed.
- 3D-Printed, designed, manufactured and delivered hydraulic bolt tensioners for 4-3/4” diameter bolts that met the required load factors while fitting flanges never designed for tensioning.
- Supplied over \$1.5MM of torque wrenches, tensioners and specialty tools. The quantity and quality of certified calibrated equipment absolutely necessary to eliminate downtime.
- Provided onsite technical support including tool selection and set-up; lubrication selection and application; torque stages, torque patterns and pump settings. This aided in the completion of the turnaround, incident and accident free.
- Worked “hands on” to improve safety and assure proper procedures which resulted in 100% leak free connections.