Fractures Found on Stainless Steel Fittings

In November 2018, BSEE was notified of multiple fitting failures occurring on a Gulf of Mexico facility’s chemical injection skid that was recently placed in-service. The deficiencies observed consisted of cracks along various fitting bodies. These cracks can potentially lead to threatening high-pressure gas releases. Furthermore, unused Parker Hannifin IPD (Parker) 316 Stainless Steel (SS) MPI™ fittings arrived at an offshore facility and were determined to be unsuitable for installation. Parker is currently reviewing the root cause(s) for these failures and establishing effective corrective actions. Although the primary type of fitting associated with these fractures has been identified as the Parker 316SS MPI™, this has been an issue discovered on other manufacturer fittings throughout the Gulf of Mexico.
Therefore, BSEE recommends that operators consider the following options:

- Identify the Parker 316SS MPI™ fittings (as well as fittings of similar design) on your facilities and inspect for damage. If cracks or other deficiencies are detected, contact the manufacturer directly per Parker’s product quality alert.

- Schedule more frequent inspections of the equipment that utilize this type of fitting. Apply the fittings to your Quality Assurance / Mechanical Integrity system as a focal point for inspections.

- Include the fittings for review within future facility hazard analyses (if applicable).

-- BSEE --

A Safety Alert is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding an accident or near miss. It also contains recommendations that should help prevent the recurrence of such an incident on the Outer Continental Shelf.