Process Integrity Management Software

INTEGRATED FOR ZERO HYDROCARBON RELEASE

Process Integrity Management software helps Halliburton’s Pipeline and Process Services group control and manage the integrity and lifecycle of all joints on industrial pipework, ultimately preventing bolted and threaded connections from leaking harmful emissions throughout the life of the asset – from construction through commissioning, to regular maintenance. This fully integrated software is a one-stop tool, with one master database capturing all data, planning and analysis, as well as inspection, reporting and leak testing of joints, while also leveraging modern technology for improved speed and efficiency at a lower overall cost.

HOW IT WORKS

The key to eliminating bolted joint leaks lies in improving the management control processes at every step of the planning, preparation, data collection, assembly, tightening, repair, reporting and review stages. One of the primary goals is to limit the potential for human error – a prime cause of joint failure.

Our solution revolves around an existing track record of proven joint integrity management which was designed to reduce the incidence of hydrocarbon leaks to zero. This process is now complimented by the software which streamlines the process to identify individual joints, access detailed information on joint activity history and store records of technician competencies, certified tooling and joint design parameters. Every joint is tagged with a unique reference number which gives users access to all pre-populated information about that joint.

On a tag-by-tag basis, technicians can easily look up a given joint in the software system and enter all actions performed on that joint. This data is saved and stored on a central database for controlled company and customer-wide access, ensuring transparency.

Several users can work on the database simultaneously and synchronize into the same master database. The system can be quickly searched and interrogated.

APPLICATIONS

- Bolted connection inspection
- Bolted connection maintenance
- Bolted connection testing
- Bolted connection certifications
- Threaded connection management
- Purge and leak test packs
- Hydrotest and pneumatic strength packs

FEATURES

- Robust and fast data management system
- Real-time database accessible throughout asset life
- Single source database for all project documentation
- Simple, easy-to-use interface
- Transparent user history
- Visual display of project/joint status and milestone reports
- Automatic generation of step-by-step procedures for PPS services
providing a status check of bolted joints at any time, especially at critical points in the process, such as right before testing begins.

SOFTWARE CAPABILITIES

Process Integrity Management software will calculate recommended bolt load/stresses for ANSI B16.5, BS1560, API 6A, API 17D and MSS SP44 flanges, which allows you to choose both torque and tension tightening methods. Specific software capabilities include functional/physical breakdown structure (FBS), bolt calculator, rapid flange entry, flange register personalization, visual data attachments, smart filtering and grouping, full activity history, workforce details and competency, tool register, drawing management and drawing overlay, full audit trail, flange tagging, joint completion certificate, digital dashboard, leak test packs and more.

ADVANTAGES

A primary advantage of this comprehensive solution is cost savings as a result of reduced engineering and man hours throughout the lifecycle of the facility and seamless transition of knowledge from construction to the operational phase.

Project Integrity Management software also provides increased data accuracy due to a single source database and reduced data input; thereby, minimizing human error. It also improves general plant safety with full visibility and traceability of your process system status prior to any commissioning activity.

In summary, the software has surpassed all expectations and has given Halliburton Pipeline and Process Services a cutting edge tool that encapsulates the industry expectations for innovation and change. The software adds tremendous value over existing flange management methods by streamlining work processes and significantly contributing to a safer, leak-free environment. Backed by Halliburton’s global service capabilities, this is truly a state-of-the-art, industry-leading solution.

ADVANTAGES

» Fully integrates with all industry standard torque and tensioning tools

» Allows attachment of relevant documentation (photos, reports, etc.)

» Enables multiple users on single database via SQL server

» Generates job and joint specific equipment lists

» Organizes data by systems, subsystems, line numbers, ISO numbers, locations, etc.

» Revisions easily modified and accessible for all parties at any time

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

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