HBS Bulletin

HARDBANDING SOLUTIONS by POSTLE INDUSTRIES

Edition: March Year: 2018

WORK STRING TUBING PROCEDURES VIDEO

https://www.youtube.com/watch?v=vpoUkjVx9IQ&t=28s

EXTENDING THE LIFE OF WORK STRING TUBING

With the resurgence in drilling activities, there is a pent-up demand for equipment and assets. These shortages include an inventory backlog of usable work string tubulars.

An option, to reduce the need for new work string tubing is to extending the life of existing connections. Postle has responded with 2 new procedures that can benefit rental companies, drilling contractors and other tubing owners.

TubeBanding™ with Duraband®NC

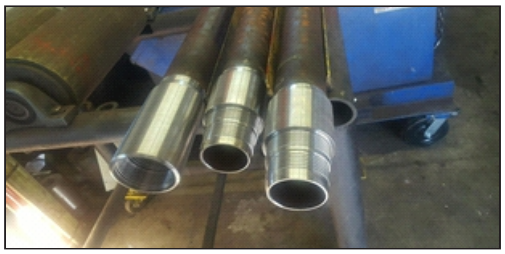
It is commonly accepted that work string rejection rates, due to outside diameter wear of the connections, are increasing. Since 2015, a hardbanding process developed by Postle Industries has been applied to work string tubulars. This process is known as "TubeBanding™,"

The TubeBanding process is rapidly gaining industry acceptance as a first line of defense against the costly downtime associated with work string tubing rejection. DuraBand is used to protect the outside diameter of the upset much the same as it is utilized for tool joints on drill pipe. In this application, Duraband provides the same superior wear resistance, non-cracking, casing friendly, and reapplication properties that the industry relies upon.

Work String Connection Restoration

The even more difficult technological challenges inherent in restoring work string connections were overcome last year, with the introduction of a tube welding process capable of restoring undersized connections to their original outside diameter dimensions. The new, patent pending restoration process, developed by Hardbanding Solutions, for upset build-up allows for low-heat input, which enables welding over thin walled tubing.

Postle's TubeWeld-110 welding alloy utilized in the restoration process is similar in chemistry to P-110 Grade Steel. Furthermore, the restored connections can accept the TubeBanding application to further extending the service life.



The Restoration Process

The outside diameter (OD) of a worn connection must have at least 1/16-inch (.0625 inches) of original metal thickness, at the open end, in order to accept the build-up application using a low-heat input welding process. The only additional limitation to utilizing this restoration process is the remaining length of the connection. If the connections don't have enough remaining length for additional thread re-cuts, it might not make economic sense to invest in the OD restoration process.

The process used to restore connections is designed for minimum heat input. A specific build-up welding product, Postalloy Tube-Weld 110, was designed to provide specific metallurgical properties and weldability under unique conditions. This combination of carefully controlled heat and very tight welding parameters using a specified welding procedure significantly reduces the possibility of burning through the original metal. Once the weld has been properly applied, the weld material is milled to the connection's originally specified diameter and the threads re-cut. Using the tubebanding process to restore connections is recommended to further protect rebuilt upset connections.

Conclusion

These 2 processes for extending the life of work strings can help hardbanding applicators increase their business opportunities. Contact anyone at Hardbanding Solutions by Postle Industries for information. Enjoy the video.

Please watch our video on Youtube at:
https://www.youtube.com/watch?v=vpoUkjVx9IQ&t=28s

Postle Industries, Inc. ● Cleveland, OH USA
sstefancic@postle.com ● hardbandingsolutions.com