

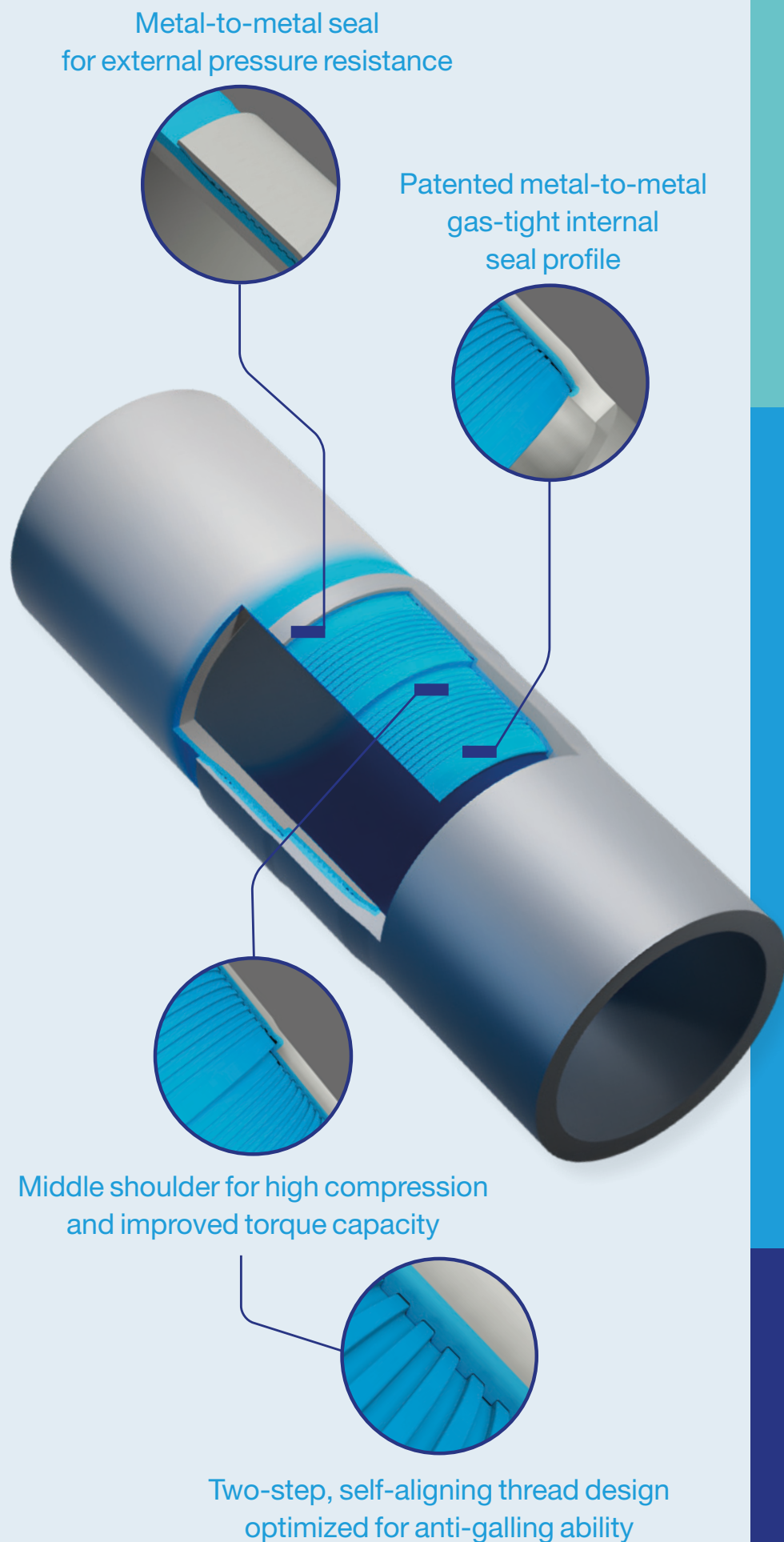
The guidelines provided in this document apply to the use of VAM® SLIJ-3 CLEANWELL® connections, including their mix with standard VAM® SLIJ-3 parts. This document shall be used jointly with the VAM® Book, which is the main document applicable for all VAM® connections. For more information regarding VAM® SLIJ-3 CLEANWELL® and other VAM® products, please contact a Vallourec representative.



ENVIRONMENTALLY FRIENDLY

SAFER OPERATIONS

IMPROVED PERFORMANCE



Metal-to-metal seal for external pressure resistance

Patented metal-to-metal gas-tight internal seal profile

Middle shoulder for high compression and improved torque capacity

Two-step, self-aligning thread design optimized for anti-galling ability

VAM® SLIJ-3 CLEANWELL® increases operational efficiency while maintaining superior performance in ultra-deep offshore environments.

### HIGH PERFORMANCE, ENHANCED RESISTANCE, TESTED, PROVEN & TRUSTED.

CLEANWELL® is a non-polluting coating applied in the mill to threaded connections replacing both storage and running compounds. "Rig-ready", CLEANWELL® reduces handling operations, both in the yard and on the rig. It ensures rapid and safe running in challenging operations, provides excellent sealability and improved protection against galling and corrosion.

## PREPARATION

- VAM® SLIJ-3 is an integral connection, thus lifting or handling plugs are required during running. A minimum of 3 lifting plugs is recommended (2 for running, 1 spare). It is recommended to place the tong grips at least 3" above the pin threads and to grip the box at least 6" from the pipe end.

- CLEANWELL® joints are easily identifiable by their gray protectors instead of the standard Vallourec pink protectors.
- In order to maintain CLEANWELL® integrity before and after each operation, it is recommended to keep thread protectors on whenever pipes are to be transported, handled or stored.

## CLEANING, INSPECTION AND THREAD COMPOUND APPLICATION

### CLEANING

- There is no storage compound applied on CLEANWELL® joints. Even if CLEANWELL® can be used when contaminated with mud, water or dope, a cleaning step is recommended prior to running.
- Once protectors are removed, connections should be cleaned with a clean rag, high-pressure air or water jet. In the latter case, it is recommended to dry the connection after washing.
- Any kind of solvent, diesel or cleaning chemical compounds must be avoided.

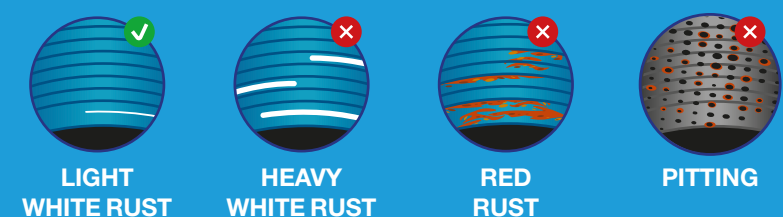
### INSPECTION

- Check the pin & box threads and seals to ensure no damage to the base material has occurred. Some areas missing blue coating are accepted.
- Light abrasion or light white rust noticed on blue coating is perfectly acceptable and can be run as is.

- Red rust, severe abrasions, extensive removal of the blue coating with a clear exposure of the bare metal should be reported to a VAM® specialist in order to decide on the connection's suitability.

### MAKE-UP

- No running compound should be applied while making up a CLEANWELL® pin into a CLEANWELL® box.
- Please contact your local VAM® representative to get further advice on acceptable CLEANWELL® visual aspect upon inspection.



LIGHT WHITE RUST

HEAVY WHITE RUST

RED RUST

PITTING

## RUNNING PROCEDURE

### EQUIPMENT TO BE USED

- Stabbing guides shall be used to prevent damage to both pin and box connections during stabbing.
- Handling equipment: the maximum permitted misalignment shall be less than half the pipe diameter.

### MAKE-UP TORQUE

- Make-up torques for CLEANWELL® assemblies and for mixed assemblies between CLEANWELL® and standard parts are different than standard VAM® SLIJ-3 make-up torques. Please check the product CDS to ensure correct torque application.

### BREAK-OUT

- In case a break-out is needed, the connection should be carefully cleaned and freed from debris generated during make-up.
- Inspect the thread and seal area, ensuring no damage is present.
- Inspect CLEANWELL® coating, ensuring no peeling, lining or major scratching has occurred. In case of any doubt, please contact your VAM® representative.

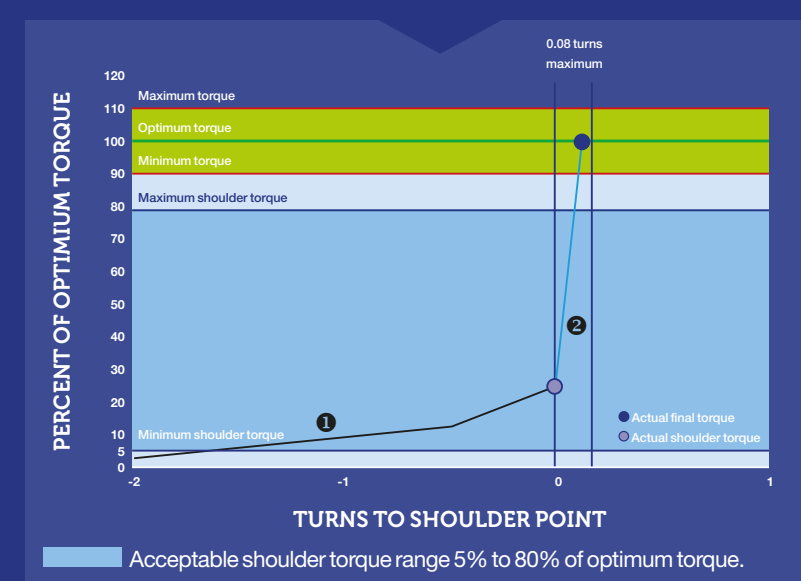
### NOTE

If a break-out is required for OD 14" and above, maximum torque range should be targeted for the second make-up.

### ACCEPTANCE CRITERIA

- A torque-turn graph is required to validate good make-up and to provide a record. The graph should feature:
  - Torque on Thread and Seals
  - Torque on Shoulder

VAM® SLIJ-3 CLEANWELL® - MAKE-UP GRAPH



### THREAD LOCKING COMPOUND APPLICATION

In case of thread locking application, please contact your local VAM® support to advise.

BOOST YOUR EFFICIENCY, REDUCE COSTS AND ENSURE 100% WELL INTEGRITY WITH VAM® FIELD SERVICE

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