TenarisHydril SLX® Connection

Scope

These guidelines apply specifically to the use of TenarisHydril SLX® connections. This document should be used in conjunction with the TenarisHydril Running Manual, which is the main document applicable to the running of all TenarisHydril premium connections.

Tenaris Field Service Representatives can modify these guidelines when circumstances dictate. Implementation will only occur if the representative deems the modification to be non-detrimental to product integrity. All modifications being explained and agreed with the client representative prior to implementation and fully documented in the running report.

References

DM Code GDL23369/2 / October 2019

- TenarisHydril Running Manual.
- Premium Connection Approved Thread Compounds FTD29356.
- Recommended guidelines for the field inspection of TenarisHydril connections, GDL31457.
- SLX® Handling Plugs TSH-BD-26.0002.

Equipment, Material & Documents

1. Verify the appropriate thread compound is available.



ment FTD29356 for a list of roved by Tenaris.

3. Latest version of the specific Product Data Sheet can be obtained from Tenaris web site. In case this is unavailable. request the data sheet from the local Technical Sales representative or contact-tenarishydril@tenaris.com.

Pre-Running

- 1. Never move or handle pipe without the correct thread protectors securely in place.
- 2. Ensure connections are cleaned and free of all debris and / or contaminants, cleaning methods employed should conform to the recommendations contained within the TenarisHydril Running Manual.
- 3. Visually inspect threads and seal areas prior to running, ensuring no damage is evident.
- 4. Verify the connections to be assembled are genuine TenarisHydril manufactured connections.
- 5. Verify compatibility of the SLX® connection with any accessories such as pup joints, cross overs, cement heads, etc.
- 6. Verify material grade of all accessories ensuring compatibility with main string.
- 7. Check availability of handling plugs, minimum of 3 to ensure efficiency of running process.
- 8. Check the handling plugs are in good condition and fit correctly onto pipe.
- Check single joint elevators have sufficient clearance to slide over box expanded area and seat against the handling plug.



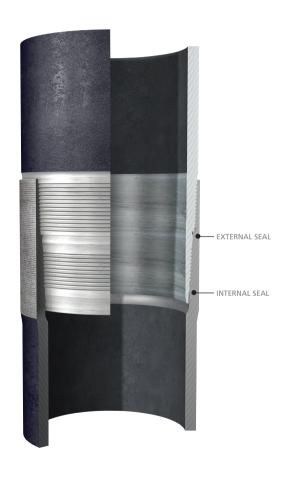
- 10. Check the handling plugs are genuine TenarisHydril threads
- 11. Verify handling plug number and maximum lift capacity.
- 12. Never exceed the maximum lift capacity.
- 13. Ensure handling plug OD / weight is compatible with pipe connections. SLX® has limited same OD / weight interchange capability.
- 14. Refer to the TenarisHydril running manual for the care and use of handling / lift plugs.

Inspection

- 1. Inspection criteria for all TenarisHydril connections is as outlined in the Field Service Operative Guideline GDL31457.
- 2. Pay particular attention to seal areas.
- 3. Ensure the area from pin nose to seal has no tears, gouges or raised metal.
- **4.** Ensure the pin and box torque shoulders have no dents, tears or raised material which would interfere with correct assembly.
- 5. Check box connections for mashes or ovality caused by transportation, handling or storage.

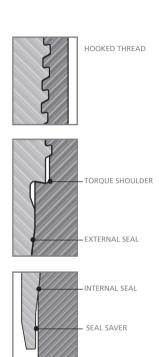


SLX® Configuration









Thread Compound Application





- 1. Apply a thin coating of thread compound on the full pin end only, threads, seals and pin nose, the thread form should be clearly visible.
- 2. Do not apply running compound to the box end.
- 3. Thread compound should be cleaned from the box if received 'rig ready'.
- **4.** Do not apply the thread compound manufacturers friction factor.



Thread Lock Application





Connections must be clean and dry when applying thread lock.

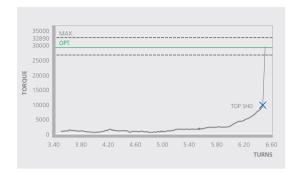
- 1. Apply a thin coating of thread lock on the threads of the large step of the pin connection.
- 2. Do not apply thread lock on the seals or torque shoulder.
- 3. Apply thread compound to the box seals, torque shoulder and the threads of the small step of the connection.
- **4.** Do not apply the thread lock manufacturer's friction factor.
- 5. If the thread lock has a friction factor greater than 1, use maximum make up torque value indicated on the data sheet.

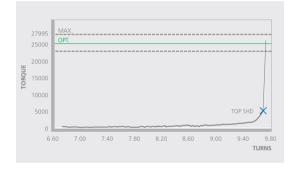


Torque Application

- 1. The use of computer make up analysis equipment is strongly recommended when assembling SLX® connections
- 2. There are no defined shoulder points for SLX® connections, however a shoulder point must be in evidence.
- 3. Shoulder point must be lower than minimum make up torque and higher than reference torque.
- 4. Reference torque should initially be set at 5% of optimum torque.
- 5. The dump valve should be set at optimum torque, verify correct operation on the pipe body prior to first make up.
- 6. Set the computer turns to 1 initially then adjust as necessary to attain good graph depiction.
- 7. Refer to the TenarisHydril running manual make up acceptance section for further explanation.
- 8. The computer make up profile for SLX® connections should be similar to the ones below.







- 9. SLX® connections have limited same size different weight interchange capability, refer to TenarisHydril premium connections catalogue for interchange capability.
- 10. If different weight or grade of connections are to be mixed apply the lower of the indicated make up torques.



Running

- 1. The use of a stabbing guide is strongly recommended.
- 2. The use of slip type elevators is strongly recommended.
- **3.** The use of a safety clamp is strongly recommended.
- **4.** The use of a weight compensator is strongly recommended for chrome, large OD or heavy pipe.
- 5. To avoid cross threading stab pipe in a smooth controlled fashion ensuring the pipe is vertical when doing so, continue to support and stabilise the pipe throughout the stabbing and make up operation.
- 6. Upon commencement of initial rotation use low RPM (5 RPM or below) in order to ensure the pipe has not cross threaded during stabbing.
- 7. If cross threading is evident, immediately reverse rotate the pipe slowly, break out and inspect both connections.
- 8. Maximum spin in speed should not exceed 15 RPM.
- 9. Apply power tong at low RPM (do not exceed 5 RPM) for final make up.
- 10. Walk chrome pipe all the way in to hand tight, then apply tong only for final make up.



Pulling

- 1. Automatic stabbing system or stabber is highly recommended to maintain the pipe in a vertical position.
- 2. The use of a stabbing guide is recommended to assist in centralizing the pin to prevent hang up.
- **3.** The use of slip type elevators is strongly recommended.
- **4.** The use of a safety clamp is strongly recommended.
- **5.** A weight compensator is strongly recommended for chrome, large OD and heavy pipe.
- 6. Apply the back up tong jaw on the pipe body, never grip the box connection.
- 7. Apply power tong in low RPM (3-5 RPM) to break out the connection, ensuring the pipe is stabilised during the break and spin out process.
- 8. Walk chrome pipe all the way out after initial break out.
- 9. Visual inspection is recommended to classify the thread condition. Any rejected connections should be clearly marked and segregated for further investigation.
- 10. Apply clean, dry thread protectors after applying storage compound on clean, dry connections.
- 11. Storage / thread compound should always be applied to connections post job, even rejects.

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