TenarisHydril Blue® Heavy Wall Connection

Scope

These guidelines apply specifically to the use of TenarisHydril Blue® Heavy Wall connections, all variants.

This document is part of the TenarisHydril Running Manual and provides an overview of best practices for these specific products. It should be used in conjunction with the rest of the sections within the TenarisHydril Running Manual.

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 need to be clearly explained and agreed with the client representative prior to implementation and fully documented in the running report.

References

- GDL31457 - Recommended Guidelines for the Field Inspection of TenarisHydril Connections.
- FTD29356 - Premium Connections Approved Thread Compounds.
- GDL23353 - Blue® Series and Legacy Series Make up Acceptance.
- GDL23356 - Dopeless® Connections.

Equipment, Material & Documents

1. Identify the product to be run, the Dopeless® version and the connections of all accessories.

2. 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.

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 GDL23356 - Dopeless® Connections.

3. Verify all pipe and accessories have genuine TenarisHydril manufactured connections.

4. Visually inspect thread and seal areas prior to running, ensuring no damage is evident.

5. Check condition of both pin and box Dopeless® coating ensuring no peel off or degradation has occurred.

6. Verify the compatibility of the Blue® Heavy Wall connection with any accessories such as cement heads, safety valves, cross overs, etc.

7. Connection weight interchange compatibility is indicated in the connection data sheet.

8. Verify material grade of all accessories ensuring compatibility with main string.

Inspection

1. Inspection criteria for all TenarisHydril connections are outlined in GDL31457, Recommended Guidelines for the Field Inspection of TenarisHydril Connections.

2. Pay particular attention to seal areas.

3. Ensure there is no raised metal on the external seal lead in area directly behind the last pin thread.

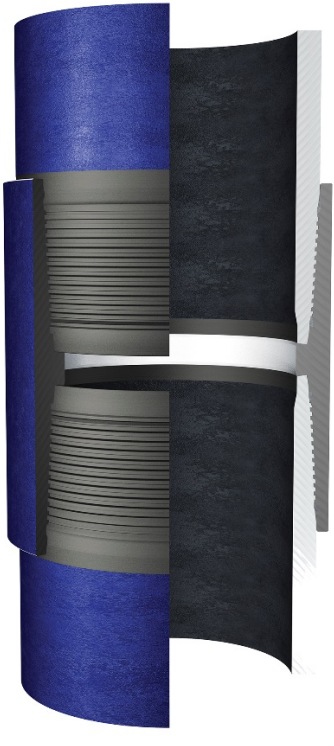
4. Ensure the pin and box torque shoulders have no dents, tears or raised material which could interfere with correct assembly.

Blue® Heavy Wall Configuration

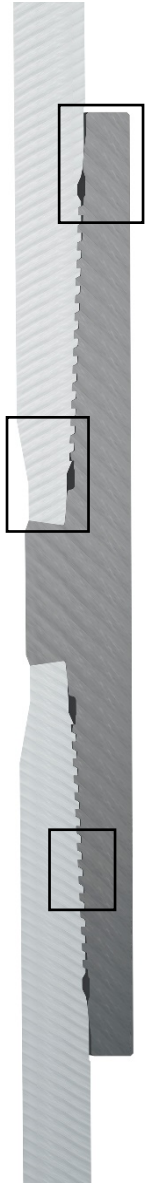
Designed with Dopeless® Technology.

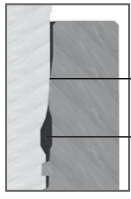
Single or twin start threads, dependent on connection weight, are not interchangeable.

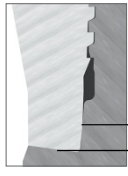
Always check compatibility and visually inspect threads prior to mixing weights.

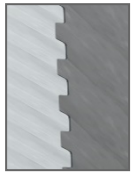


For further information on Dopeless® connections refer to GDL23356, Dopeless® Connections.




EXTERNAL SEAL
LEAD IN AREA


INTERNAL SEAL
TORQUE SHOULDER


3 OR 4 TPI
HOOKED THREAD

Thread Compound Application Blue® Heavy Wall Dopeless® Connections

1. Dopeless® connections do not require the application of thread compound for make up.

2. If for whatever reason thread compound has to be applied to Blue® Heavy Wall Dopeless® connections, apply thread compound as indicated below.

- Apply a very thin layer of thread compound on all pin threads only.
- Do not dope pin seals or box connection.

3. For the correct thread compound to apply, refer to FTD29356, Premium Connections Approved Thread Compounds.

Blue® Heavy Wall Dopeless® Thread Lock

1. When thread locking Dopeless® connections remove the Dopeless® coating from the threads of the pin connection where the thread lock is to be applied.

2. Use a hand or rotary brass wire wheel to remove the Dopeless® coating from the threads, ensuring no contact is made with the seal.

3. Leave the Dopeless® coating on the pin seals, torque shoulder and threads where no thread lock is to be applied.

4. Dopeless® boxes should be washed with hot water then dried prior to thread locking.

5. Thread lock should be applied to 50% of the pin threads immediately behind the pin nose seal area.

6. Apply the thread lock manufacturers indicated friction factor.

7. The application of thread compound is not required.

Torque Application

1. The use of computer make up analysis equipment is strongly recommended when assembling Blue® Heavy Wall connections.

2. Check calibration certificates of any torque gauge and computer equipment used for make up.

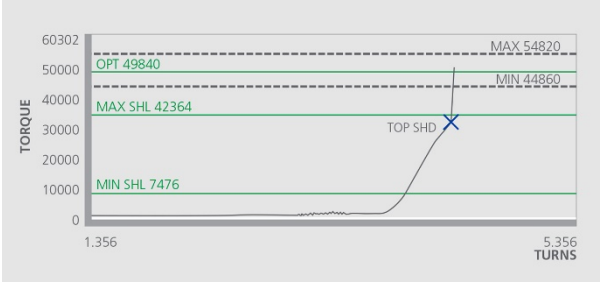
3. Reference torque should initially be set at 5% of optimum torque.

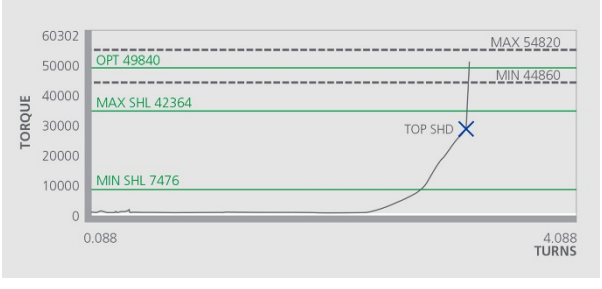
4. The dump valve should be set at optimum torque, verify correct operation on the pipe body prior to first make up.

5. Set the computer turns to 2 initially then adjust as necessary to attain good graph depiction.

6. Refer to GDL23353, Blue® Series and Legacy Series Make up Acceptance, for further explanation.

7. The computer graph make up profile for Blue® Heavy Wall connections should be similar to the ones below.





8. Refer to GDL23356, Dopeless® Connections section for graphs specific to Dopeless® connections.

9. Blue® Heavy Wall connections have limited same size / weight interchange capability, if mixing weight / grade ensure compatibility of design and apply the lower torque values of the two connections.

10. Blue® Heavy Wall connections of the same size may have one or two thread starts depending on wall thickness; close inspection of dissimilar weight connections is essential, the different thread start types cannot be mixed.

11. Torque values of mixed assemblies can be obtained from the tool available at https://dcp.tenaris.com/Mixed_Assemblies

Running

1. The use of a stabbing guide is strongly recommended.

2. The use of a weight compensator is strongly recommended for chrome, pipe with an OD ≥ 14" and stands of three joints OD ≥ 7".

3. 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.

4. Twin thread start connections can have as little as 2 ½ turns from stabbing to make up.

5. **Twin Start Threads**: Rotate at 5 RPM or below to final make up torque.

6. **Single Start Threads:** Commence rotation slowly to ensure no cross threading then spin in at 10 RPM or lower, final make up should be made below 5 RPM.

7. If cross threading is evident, immediately reverse rotate the pipe, completely disassemble, clean and inspect both connections.

8. 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 centralising the pin to prevent hang up.

3. A weight compensator is strongly recommended for chrome, pipe with an OD ≥ 14" and stands of three joints OD ≥ 7".

4. Apply the back up tong jaw below the centre of the coupling.

5. Do not grip the coupling over the external seal area.

6. Apply power tong in low RPM (3-5 RPM) to break the connection, ensuring the pipe is stabilized during the break and spin out process.

7. Do not exceed 10 RPM during spin out.

8. As soon as the connection ‘drops’ during break out stop rotation.

9. Walk Chrome pipe all the way out by hand after initial break.

10. Visual inspection is recommended to classify the thread condition.

11. Any rejected connections should be clearly marked and segregated for further investigation.

12. Apply clean, dry thread protectors on clean, dry connections.

13. Do not apply storage compound to Dopeless® connections.

14. For long term storage of Dopeless® connections, refurbishment by qualified personnel is recommended.

15. Ensure clean, dry, Dopeless® protectors with seal rings correctly in place are installed.

16. If refurbishment cannot be done prior to storage, storage compound may be applied to Dopeless® connections. In this case, remove the rubber rings from the Dopeless® thread protectors prior to installation. Remove storage compound prior to re-run.

Doped variant connections

Blue® Heavy Wall connections come with Dopeless® technology as standard. In case doped variant connections are involved, follow the recommendations from the table below and contact Tenaris for torque values to apply.

	DOPELESS® BOX	DOPED VARIANT BOX
Dopeless® Pin	No thread compound required	Apply thread compound on pin threads, seals and shoulder, and on box seals and shoulder.
Doped Variant Pin	Apply thread compound on pin threads, seals and shoulder, and on box seals and shoulder.	Apply an even coat of thread compound on pin and box connections covering thread, seals and shoulders. Do not fill the dope pocket.