TenarisHydril Wedge 563® Dopeless® 3.0 Connection

Scope

These guidelines apply specifically to the use of TenarisHydril Wedge 563® connections with Dopeless® 3.0 technology. This document shall 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

- GDL00337 - TenarisHydril Running Manual
- FTD29356 - Premium Connection Approved Thread Compounds
- GDL31457 - Recommended guidelines for the field inspection of TenarisHydril connections.
- GDL23533 - Running Guidelines for TenarisHydrill Wedge® 563

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Equipment, Material & Documents

1. Latest version of the product specific data sheet can be obtained from Tenaris WETE / TESA.

2. The use of a torque turn computer monitoring system is recommended to be used to make up this connection with Dopeless® 3.0 configuration.

3. The use of a torque turn computer monitoring system is strongly recommended to be used to make up this connection when applied on chrome steel.

Pre-Running

1. Never move or handle pipe without the correct thread protectors securely in place.

2. Ensure connections are clean and free of all debris and / or contaminants, cleaning methods employed should conform to the recommendations contained within the TSH Running Manual.

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

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

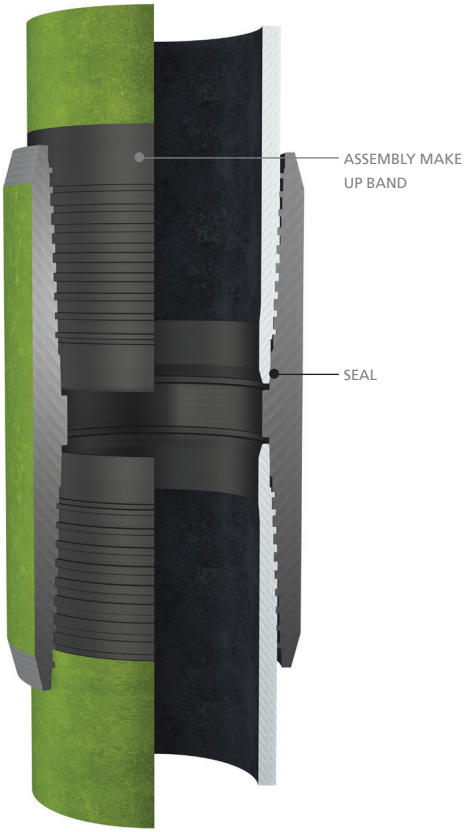
5. Check condition of both pin and box Dopeless® 3.0 coating ensuring no peel off or degradation has occurred.

6. Verify compatibility of the W563® pipe with any accessories such as pup joints, cross overs, cement heads etc.

7. Connection weight interchange compatibility is indicated in the TenarisHydril premium connections catalogue.

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

Wedge 563® Dopeless® 3.0 Configuration



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Inspection

1. Inspection criteria for all Wedge 500™ series connections is as outlined in GDL31457.

2. Pay particular attention to seal area.

3. Ensure the pin nose has no raised metal.

Dopeless® 3.0 Interchange Capability

When assembling together two interchangeable Wedge 563® connections with different weight and/or grade and/or lubrication technology (Dopeless®, Dopeless® 3.0/3.1 or doped), follow the recommendations below.

RUNNING COMPOUND APPLICATION

- In case one of the ends is Dopeless® 3.0/3.1, apply a very thin coating of running compound on the full pin end, threads and seal. Do not dope any part of the box connection.

- In case both ends are Dopeless® 3.0/3.1 there is no need to apply running compound. If for whatever reason dope has to be applied anyway, follow indications from previous bullet as well.

TORQUE APPLICATION

- Apply the higher of the two optimum torques, regardless of the specific combination weight/grade/lubrication technology.

Refer to FTD29356 for a list of approved thread compounds.

Thread Lock Application

1. Ideally when running a Dopeless® 3.0 string the connections to be thread locked should be the non Dopeless® variant with the connections cleaned of thread compound and completely dried, then thread lock applied as indicated below.

2. Thread lock should be applied to 50% of the threads at the back of the pin connection.

3. Thread compound should then be applied to the threads and seal at the back of the box.

4. When thread locking Dopeless® 3.0 connections remove the Dopeless® 3.0 coating from the threads on the pin connection where the thread lock is to be applied.

5. Remove the Dopeless® 3.0 coating with the aid of a hand held wire brush or a rotary brass wire brush and suitable rotary device.

6. Leave the Dopeless® 3.0 coating on the pin seal and threads where no thread lock is to be applied.

7. Dopeless® 3.0 boxes should be washed with hot water then dried prior to thread locking.

8. Thread lock should be applied to the threads furthest from the pin nose, approximately 50% of the threads should have thread lock applied.

9. The application of thread compound is not required.

10. Do not apply thread lock to seal area.

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Torque Application

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

2. Set tong dump valve at optimum torque then test on pipe body.

3. For Dopeless® 3.0 connections apply the specified torques as indicated on the data sheet.

4. Do not apply thread compound.

5. For Dopeless® 3.0 connections, applying optimum torque twice (double bump) is not necessary.

6. If dope is applied to a Dopeless® 3.0 connection apply 'Double Bump';

- Once optimum torque has been attained relax the tong and re apply optimum torque.
- If movement over ½" is witnessed re apply optimum torque +20%.
- Repeat process, checking to ensure no other factors are absorbing the applied torque.
- Often the issue is caused by excessive application of thread compound.
- Continue making up further joints applying higher torque if required.

7. Double bump, (as above) every connection with an OD of 10 ¾" or larger if dope is applied.

8. When applying thread lock to standard doped connections, doped version torque values +20% should be used then double bump the connection.

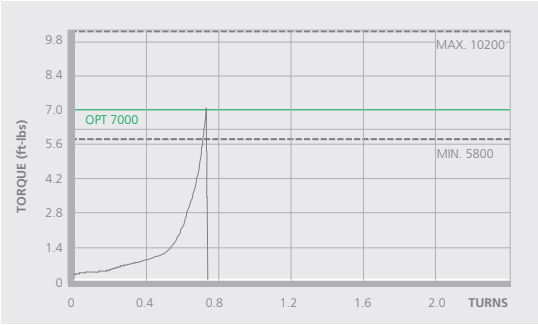
9. When applying thread lock to Dopeless® 3.0 connections, Dopeless® 3.0 torque values +20% should be used then double bump the connection.

10. Computer make up equipment is not mandatory for Wedge 563® connections in carbon steel, but is recommended.

11. Computer make up equipment is strongly recommended for Wedge 563® connections in chrome steel.

12. Graph analysis for Wedge 563® is similar to that for all Wedge Series 500™ refer to the TenarisHydril running manual make up acceptance section for further explanation.

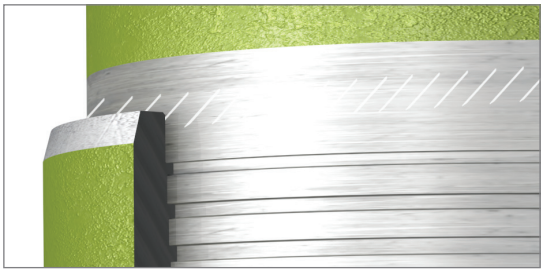
13. When computer equipment is used to monitor connection make up, the graph profiles should be similar to the one below.



14. Wedge 563® has limited same size / weight interchange capability, if mixing weight / grade ensure compatibility of design and apply the higher torque value of the two connections.

15. The make up band can be used as an additional verification of correct final position after assembly, visually checking that box face finishes within the make up band lines.

16. Frequency of the visual check of make up band should be agreed with Tenaris Field Services representative and documented in running report. It is suggested to visually check the first 5 joints, then every 20 joints during the job.



Running

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

2. The use of slip type elevators are recommended.

3. The use of a weight compensator is strongly recommended for chrome, large OD or heavy weight pipe.

4. To avoid cross threading, stab pipe in a smooth controlled fashion ensuring the pipe is vertical when doing so, continue to support and stabilize the pipe throughout the make-up operation.

5. Upon commencement of initial rotation use low RPM (5 RPM or below) in order to ensure the pipe has not cross threaded during stabbing.

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

7. Maximum assembly speeds are indicated in the table below. These are applicable for running in singles with tong or CRT and assuming ideal conditions

8. Conditions may dictate lower assembly speeds than the maximums indicated. High winds or excessive pipe movement among other variables will necessitate a lower RPM to be used.

TSH W563		OD	SPIN IN RPM	FINAL M/U RPM
Carbon Steel	Standard Product	4 1/2" - 7 5/8"	40	15
		Above 7 5/8"	25	10
	Dopeless® Technology Dopeless® 3.0 Technology	4 1/2" - 7 5/8"	40	15
		Above 7 5/8"	30	10

9. Walk chrome pipe all the way in to hand tight, then apply tong only for final make up.

10. Never apply back-up tong over the coupling.

11. Minor rust or discolouration can be removed with the use of a clean, dry rag or Scotch-Brite™ ensuring the Dopeless® 3.0 coating remains intact.

12. Dopeless® 3.0 connections do not require the application of thread compound for makeup.

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Pulling

1. The use of a stabbing guide is strongly recommended to prevent hang up.

2. A single joint compensator is strongly recommended for chrome, large OD or heavy pipe.

3. Apply the back-up tong jaw on the pipe body below the coupling.

4. Apply power tong in low rpm (3-5 RPM) to break out the connection, ensuring the pipe is stabilised during the break out process.

5. Do not exceed 15 RPM during spin out.

6. Walk chrome pipe all the way out by hand after initial break out.

7. Visual inspection is recommended to classify the thread condition, any rejected connections should be clearly marked and segregated for further investigation.

8. Do not apply storage compound to Dopeless® 3.0 connections.

9. For long term storage of Dopeless® 3.0 connections, refurbishment by qualified personnel is recommended.

10. Ensure Dopeless® protectors with seal rings correctly in place are correctly installed on clean and dry connections.