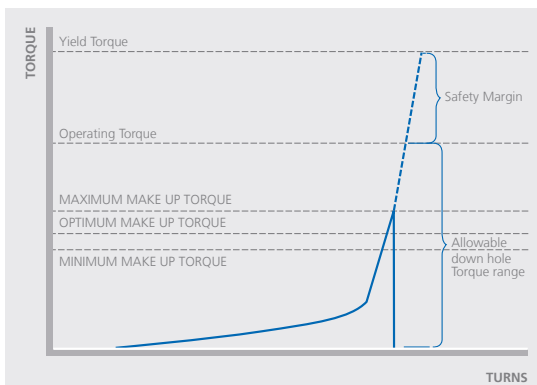


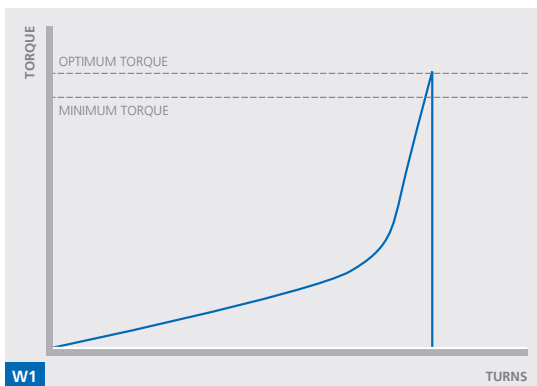
10. Wedge Series™ Make up Acceptance

TenarisHydril Wedge Series 400™, Wedge Series 500™ and Wedge Series 600™ connections exhibit substantially different computer graph profiles to those produced by shouldered connections.

Essentially the thread build portion has a smooth 'ski slope' transition into a linear torque climb as the connection makes up.



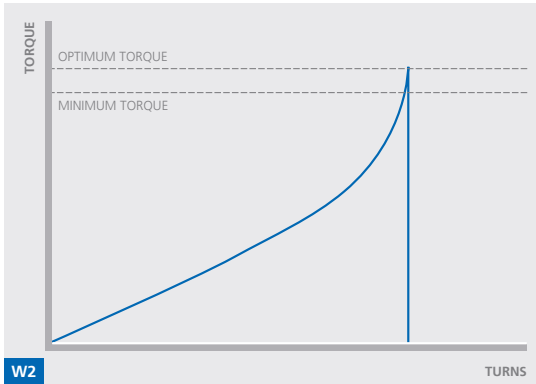
By design Wedge Series 400™, Wedge Series 500™ and Wedge Series 600™ connections do not have the requirement for shoulder torques, if however the computer make up system requires the input of shoulder points, program any appropriate value into the computer.



ACCEPTABLE

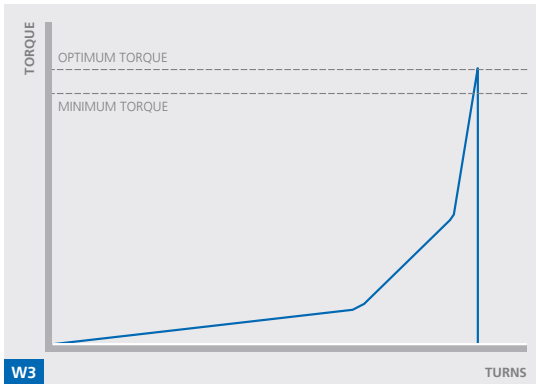
Standard profile graph for a Wedge type connection.

COMPUTER GRAPH WEDGE SERIES



ACCEPTABLE

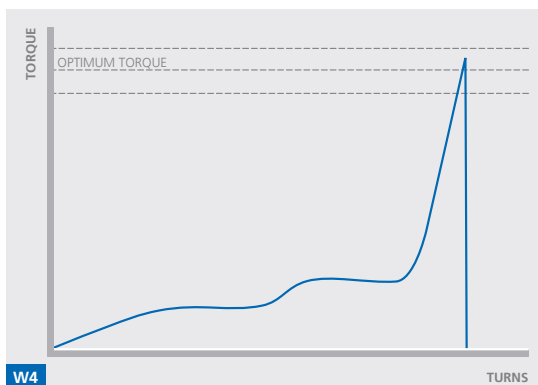
The first graph of this type of thread build should be disassembled and the connections checked. Thereafter all similar graphs can be accepted if all visual indications of correct connection assembly are acceptable.



ACCEPTABLE

Wedge 623® connections may also exhibit a more distinctive make up profile such as above.

COMPUTER GRAPH WEDGE SERIES



ACCEPTABLE

Minor oscillations during assembly.

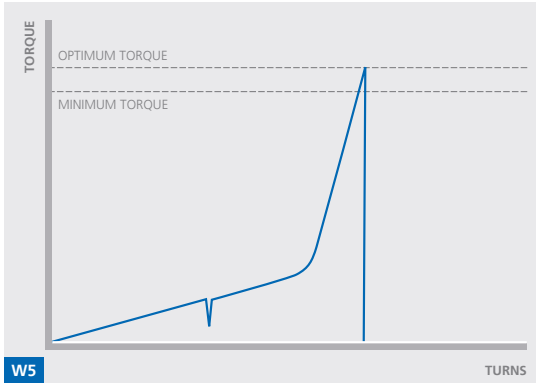
Possible Causes

- Pipe movement during spin in.
- Excessive thread compound application.
- Pipe OD contact from external equipment.
- Excessive spin in speed.

Recommendations

- Reduce quantity of thread compound applied respecting application guidelines.
- Stabilize pipe during make up.
- Reduce spin in speed.

COMPUTER GRAPH WEDGE SERIES



ACCEPTABLE

Tong slip returning to same thread build path.

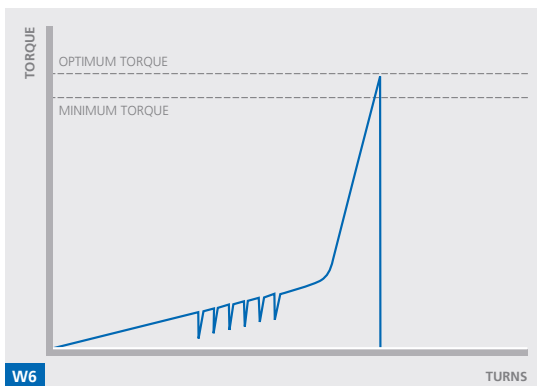
Possible Causes

- Clogged tong dies.
- Worn tong dies.
- Incorrect dies or tong jaws.
- Tong not level.
- Snub line movement.
- Wet or oil covered pipe OD.

Recommendations

- Clean or replace dies.
- Check tong jaws are correct for pipe OD.
- Ensure tong is level.
- Clean pipe OD.
- Check snub line.

COMPUTER GRAPH WEDGE SERIES



UNACCEPTABLE

Multiple tong slips.

Possible Causes

- Clogged tong dies.
- Worn tong dies.
- Incorrect dies or tong jaws.
- Tong not level.
- Snub line movement.
- Wet or oil covered pipe OD.

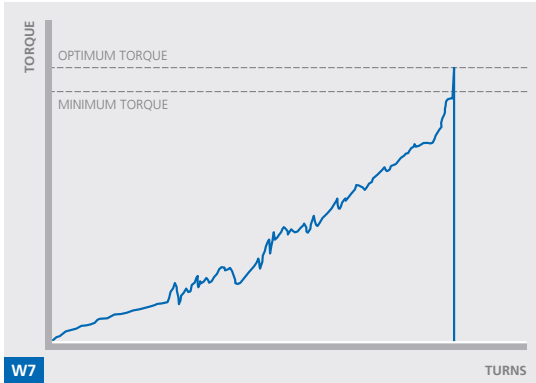
Take action to prevent reoccurrence

- Clean or replace tong dies.
- Ensure tong and back up is level and dies contact pipe OD evenly.

Recommendations

- Break out, clean and inspect both connections for damage.
- If no damage found re-apply thread compound then re-make up connection.

COMPUTER GRAPH WEDGE SERIES



UNACCEPTABLE

High thread interference.

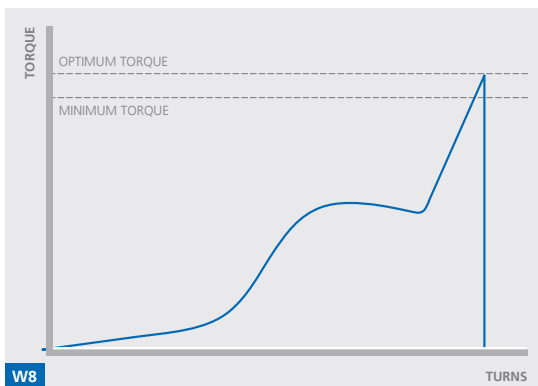
Possible Causes

- Galled threads.
- Damaged threads.
- Pipe movement during spin in.
- Incorrect thread compound.
- Contaminated thread compound.
- Contaminated connections.
- Misalignment.

Recommendations

- Break out, clean and inspect both connections for damage.
- If no damage found re-apply thread compound then re-make up connection.
- Ensure thread compound is correct type and is not contaminated.
- Stabilize pipe during make up.
- Ensure threads are completely clean prior to applying thread compound.
- Remedy misalignment.

COMPUTER GRAPH WEDGE SERIES



UNACCEPTABLE

Excessive hump effect.

Possible Causes

- Pipe movement during spin in.
- Incorrect thread compound.
- Contaminated thread compound.
- Running compound not homogenised.
- Excessive thread compound.
- Misalignment.

Recommendations

- Break out first two graphs displaying this profile, clean and inspect both connections for damage.
- If no damage found re-apply thread compound then re-make up connection.
- If no damage found accept further graphs of similar type.
- Ensure thread compound is correct type and is not contaminated.
- Reduce quantity of thread compound applied ensuring all threads are covered.
- Stabilize pipe during make up.
- Ensure threads are completely clean prior to applying thread compound.
- Remedy misalignment.

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