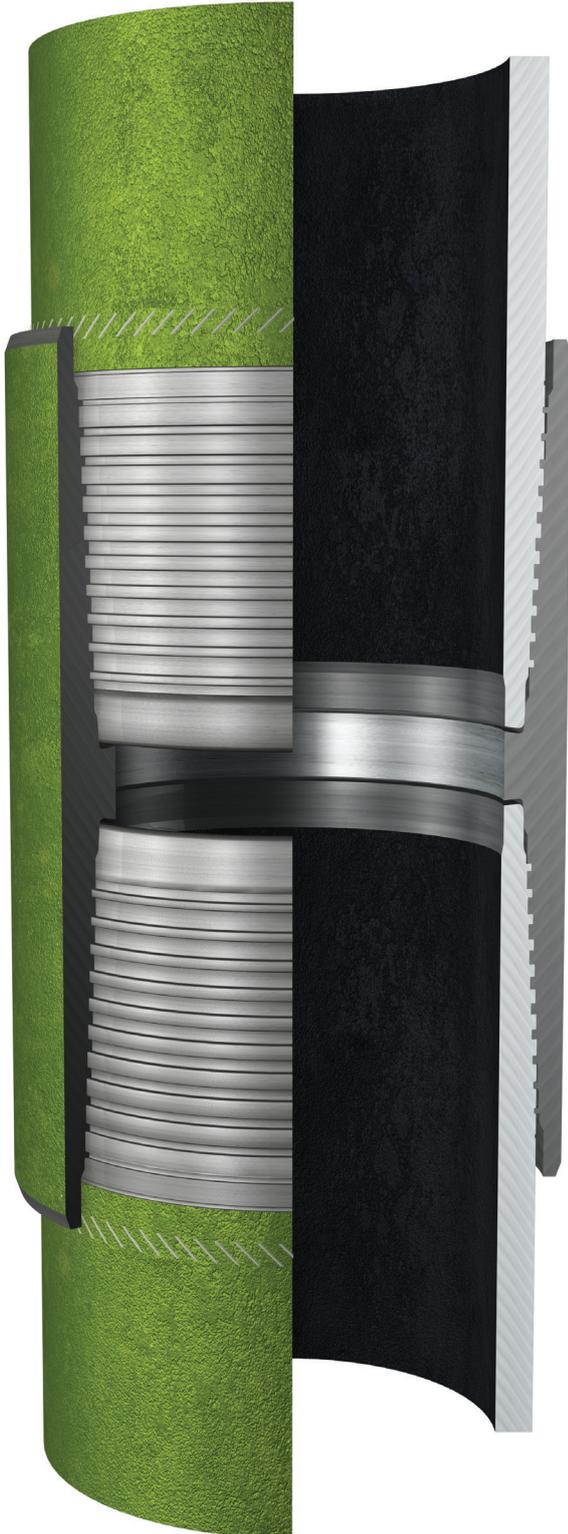


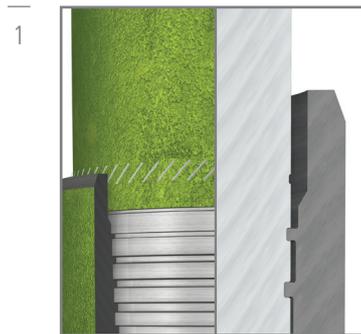
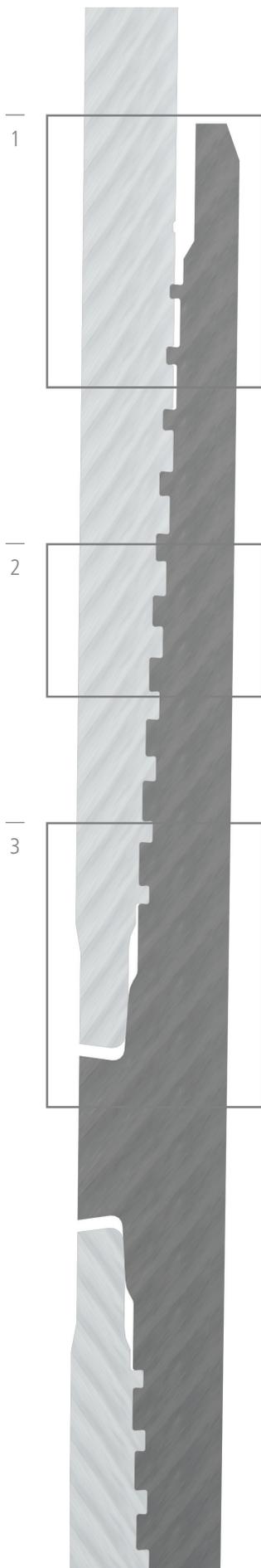
Wedge 463™ connection | 4.1/2" to 7"

The TenarisHydril Wedge 463™ connection is the latest evolution of the original Wedge technology for unconventional applications. It provides exceptional robustness, torque capacity, gas sealability, running efficiency and high fatigue resistance required for horizontal wells.

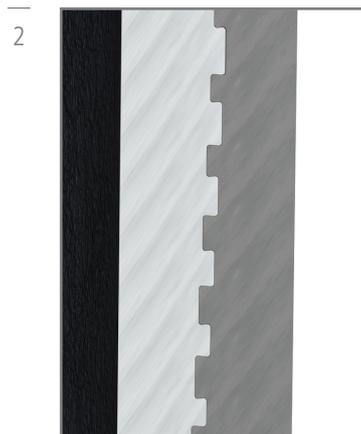


The TenarisHydril Wedge 463™ connection has been designed for production casing in unconventional wells where robust connections with exceptional torque, gas sealability and high fatigue resistance are required. It features the well-known Wedge technology thread profile combined with metal-to-metal sphere-to-cone seal from the extensively field proven Blue® technology. The seal assures 100% internal pressure sealability. The internal shoulder provides additional over-torque capacity to handle rotation in extreme installation conditions.

Tested according to a shales fit-for-purpose protocol that includes fatigue cycling before sealability evaluation & internal pressure cycles to simulate fracking cycles. This connection provides 100% ratings in tension and compression.



- Easy make up: no need of torque vs. turns chart
- The make-up confirmation band allows for visual confirmation of appropriate make-up, even at operating torque



- Unrivaled robustness, running speed and reliability given by the TenarisHydril Wedge thread
- Exceptional torque capability and compression efficiency by the simultaneous engagement of opposing flanks of the dovetail thread



- Metal-to-metal sphere-to-cone seal (from Blue® Technology) for 100% Internal Pressure sealability, working on different positions depending on the applied torque
- Internal shoulder can provide extra torque capacity when subjected to operating torque

MAIN FEATURES

- Lower threads per inch profile compared to alternative solutions, rugged coarse thread design, and deep stabbing allow for speed of installation, enhancing the performance in an industrial drilling approach
- Robustness of Wedge profile minimizes rejects and re-makeups
- TenarisHydril Wedge thread profile provides extra over torque capacity to manage longer laterals
- Pin-to-Shoulder back up mechanism grants additional torque capability to handle rotation
- 100% tension and compression ratings
- 100% internal pressure sealability: internal metal-to-metal sphere-to-cone seal
- Design optimized for fatigue, tested in accordance with FFP shales protocol
- Optional Dopeless® technology

MAIN APPLICATIONS

- Shales
- Casing while drilling
- Rotating while cementing
- Production casing and liners

For further information please visit: www.tenaris.com