

TEJAS TAKES THE *STRESS* OUT OF CONNECTIONS!



TTNY TTXS TTRS1*

- ✓ Your single source for connections
- ✓ Utilize our experienced thread technicians at your threading location to achieve optimum productivity
- ✓ Our thread technicians are available 24/7 for your convenience
- ✓ ETDBW- Easy to Do Business With



TTRS1 BENEFITS

- ✓ 40% reduction of coupling hoop stresses
- ✓ 100% efficiency under tension/compression & internal/external pressure
- ✓ High torque strength
- ✓ Reduced erosion corrosion
- ✓ Simple running procedures
- ✓ Interchangeable with API buttress
- ✓ Lower cost accessories
- ✓ Pin-to-Shoulder connection



*TTRS1 and the Tejas logo are registered trademarks of Tejas Tubular Products, Inc.

PROFESSIONAL AFFILIATIONS

-  International Association of Drilling Contractors (IADC)
-  American Petroleum Institute (API)
-  National Minority Supplier Development Council (NMSDC)



Tejas Tubular Products, Inc.

Corporate Office
8799 North Loop East, Suite 300
Houston, Texas 77029 USA

Tubing & Accessories Plant
8640 North Green River Drive
Houston, Texas 77028 USA

Casing Plant
8740 Miller Road #2
Houston, Texas 77049 USA

Tubing Plant and ERW Mill
600 Caporal Drive
Stephenville, Texas 76401 USA

New Carlisle Works (Casing)
31140 Edison Rd
New Carlisle, Indiana 46552 USA

Phone: 713-631-0071
Toll-Free: 800-469-7549
Fax: 281-822-3401
Email: sales@tejastubular.com
Web: www.tejastubular.com



REDUCED STRESS CONNECTION

The Tejas Tubular Products® TTRS1* connection is an improved buttress thread design. The TTRS1 connection was developed and tested to reduce stress levels due to multiple hydraulic fracturing stages, bending, and rotation of the casing. Featuring lower hoop and axial stresses, the connection has been tested under tension and compression loading combined with internal pressure and bending. The robust torque shoulder is designed to provide 100% compression efficiency and a higher torsional rating for drilling with casing operations.

Applications

- Hydraulic fracturing
- Drilling with casing
- Horizontal well
- Shale formation

Available

- 4½" OD to 7" OD

Features

- Threaded & coupled connection
- Coupling with internal torque shoulder
- Axial pin-to-shoulder metal contact
- Reduced stress thread design
- Flush ID
- Coupling with external 20° bevel

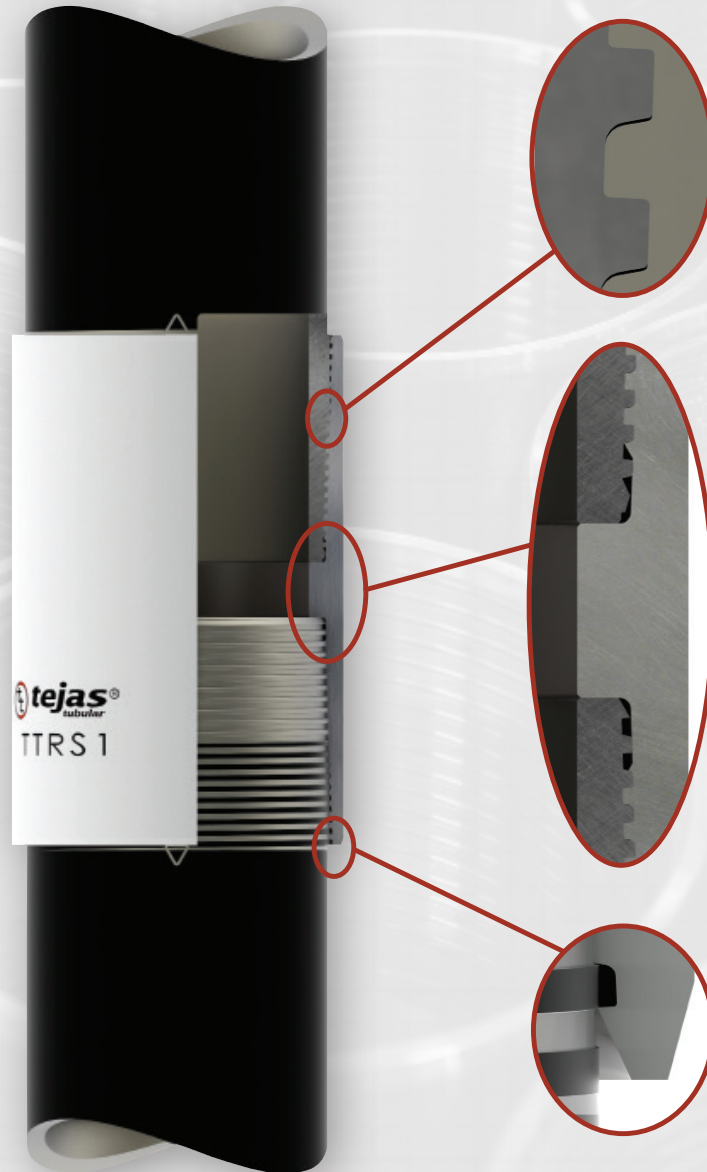
Finite Element Analysis (FEA)

FEA was performed on TTRS1 connection to confirm the design lowers hoop stress, a major cause of split couplings in field operations.

Torque-to-Yield

Torque-to-yield testing was performed to verify the torsional limits of all TTRS1 connections.

TTRS1 Features



THREAD FORM

- Standard API Buttress
- 100% tensile efficiency

INTERNAL TORQUE SHOULDER

- Internal flush design minimizes turbulence to prevent erosion corrosion
- High torque strength
- 100% compression efficiency

20° COUPLING OD BEVEL

- Provides smooth downhole operations



Over 30 million feet in the ground!

Extensively tested and validated by:



Stress Engineering Services, Inc. performed both single load and combined load testing on the TTRS1. The TTRS1 can withstand combinations of tensile strength, bending, internal/external pressure, rotating and compression.†

†All design & testing data is available upon request

