

T&T Engineering Services

Engineering and rig services for onshore and offshore drilling operations

APPLICATIONS

- Onshore and offshore drilling operations

ADVANTAGES

- Single-source provider for multiple services
- Front-end engineering design (FEED)
- Detailed design and engineering
- Prototype and production construction management

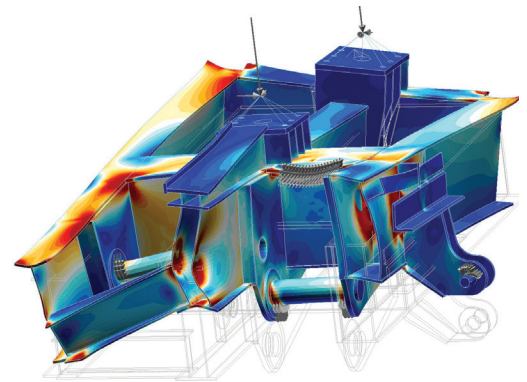
Today, more than 300 state-of-the-art US land rigs bear API nameplates where T&T Engineering is named the engineer-of-record for the drilling structures. From drafting to root cause of failure analysis (RCFA), T&T Engineering provides a wide range of expertise in rig and engineering services.

T&T Engineering can provide

- custom product design, from concepts through fabrication
- product engineering support through the life cycle of the product
- custom automated product design, and design modification and optimization
- mechanical/structural and electrical/hydraulic design and analysis, including remote diagnostics
- 3D solid modeling and rendering
- 2D drafting with geometric tolerancing and dimensioning
- finite element analysis (FEA) and simulation studies
- API 4G rig inspection and design packages
- mast and substructure upgrades or modifications
- rig transport systems including skid or trailerization
- backyard system, equipment handling, and walking and skidding design
- systems integration.

RCFA analyses for rigs

- top drive and top drive guide track failures
- jacking system pinion failures
- trailerized rig structural failures
- mast and crown failures.



T&T Engineering provides engineering for complete rig systems (top right), individual component failure analysis (middle), and full-lifecycle support.