

## **Building Solid Foundations**

TEST REPORT NO: TRD-0031

**TEST DATE:** February 25<sup>th</sup>, 2009

**ITEMS TESTED:** TD225-104 & TDH225-104 (New design hub w/ penetrating head)

**TEST PERFORMED:** Torsional load test - The hubs were installed into a helical test fixture, which simulates field torque conditions. Torque was continuously applied with a D-9101-0003 wrench tube via a torsional load apparatus.

<b>TD225-104</b> (3/8" x 10" Helix) 10,000 ft/lb rating	
Load (lb)	Failure Mode
15,786	Hub distorted due to tube rotation / no cracking occurred
14,846	Hub distorted due to tube rotation / no cracking occurred
15,535	Hub distorted due to tube rotation / no cracking occurred

<b>TDH225-104</b> (1/2" x 10" Helix) 10,000 ft/lb rating		
Load (lb)	Failure Mode	
17,138	Hub distorted due to tube rotation / no cracking occurred	
17,184	Hub distorted due to tube rotation / no cracking occurred	
17,835	Hub distorted due to tube rotation / no cracking occurred	



Typical set-up

Typical set-up

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## **Building Solid Foundations**



Typical failure



Typical failure

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