



TECHNICAL DATA SHEET
HOOKLOAD / WOB SYSTEM
(TENSION TRANSDUCER)

No. SPECS-DRL-055

Rev. 0

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TITLE: HOOKLOAD / WOB SENSOR SYSTEM (TENSION TRANSDUCER)

DEPARTMENT: TECHNICAL SUPPORT

DESCRIPTION:

The line-tension transducer is mounted near the deadline anchor of the rig wire rope system. Hookload is measured by monitoring the amount of tension created by the load of the Top Drive System or swivel and Kelly.

The sensor is independent of all drilling contractor systems and hence does not affect nor depend on the functionality of the hydraulic system of the rig



A. Standard Unit Specifications.

- BRAND: Varco
- MODEL: TCE-100K Line-Tension Transducer.
- SENSOR TYPE: Strain-gage (Wheatstone Bridge).
- INSTALLATION LOCATION: Deadline Anchor.
- MEASURING RANGE: 100,000 lbs (45,360 kg), single-line load. For 10 lines, effective range is 1,000,000 lbs (453,600 kg).
- ACCURACY: ±0.2% of SPAN.
- OTHER FEATURES: Accepts wire-rope diameters from 7/8 to 2 inches (22.5 to 50.8 mm) without requiring modification.
Lightweight – 17 pounds (7.7 kg).
- APPROVALS/CERTIFICATION: EEx ia IIB T6 to EN50 020 (ISSeP certificate number 94.101.199X), Class I, Division 1, Groups C & D hazardous locations, temperature code T4 (UL file E139543). “CE” marked for compliance with European Union EMC Directive (89/336/EEC).
- OUTPUT: Chart Recorder, DLS System, Digital Monitors.

APPROVAL:

Dept. Supervisor : VICTOR SAET Date: 17th March 2003

Technical Committee : ALAN MORRISON Date: 17th March 2003