Shaft Quantitative Inspection Device *(SQUID)* Specifications

February 2016

**SQUID Body**
- Size (height x hexagon largest diagonal): 629 x 647 mm (24.75 x 25.5 inches)
- Weight (including penetrometers and contact plates): 188 kg (415 lbs)
- Material: Stainless Steel and Aluminum
- Standard Kelly bar connection sizes: 101.6 mm² (4 in²), 152.4 mm² (6 in²), 203.2 mm² (8 in²)
- Cable Length: 61 m (200 ft) standard; 152 m (500 ft) cable length optional
- Temperature Range: -20 to 55°C operating; -40 to +85°C Storage
- Applied force limit: 135 kN (30 kips)

**SQUID Penetrometers**
- Material: Stainless Steel
- Number of penetrometers: 3 standard
- Penetrometer tip: area 10 cm² (1.55 in²) standard, larger tips optional; replaceable
- Maximum penetrometer pressure: 100 MPa (14 ksi/2000 ksf)
- Penetrometer pressure measurement resolution: 0.1 MPa (14 psi/2 ksf)
- Maximum depth of penetration: 150 mm (6 in)

**SQUID Contact Plate(s)**
- Size: 152 mm (6 in) OD; 46 mm (1.8 inch) ID; thickness 25.4 mm (1 inch)
- Weight each contact plate assembly: in air 6.75 kg (14.9 lbs); in water: 5.85 kg (12.9 lbs)
- Contact Plate pressure (free to move): in air 4 kPa (0.58 psi/0.083 ksf); in water 3.5 kPa (0.50 psi/0.072 ksf)
- Contact plate displacement measurement resolution: 0.004 mm (0.0002")
- Maximum contact plate movement: 150 mm (6 in)

**Wireless Transmitter**
- Transmission Range: 100m
- Frequency: 2.4 GHz
- Output power: 18 dBm
- Mounting: On cable reel
- Temperature Range: -10 to 55°C operating; -20 to 70°C storage

**SQUID Tablet**
- Size: 320 X 250 X 68 mm (12.6 x 9.8 x 2.7 inches)
- Weight: 5 Kg (11 lbs.)
- Temperature range: 0 to 40°C operating; -20 to 65°C storage
- Display: 26.4cm (10.4"), sunlight readable, resolution 1024 X 768; capacitive touch screen
- Video Outputs: HDMI, VGA
- Battery Power: 4 hour continuous data collection 12 V battery + back-up battery standard
- Charging time: 6 Hours max; 120/240 charger input voltage
- Operating System: Microsoft Windows® 7
- Data storage and ports: 60 GB SSD internal drive; Ethernet port; 4 USB ports
- Optional external accessories: USB keyboard and mouse
- Remote Operation: SQUID Tablet is equipped for high speed internet access and remote operation
- Technical support: SQUID Tablet is equipped for remote error checking and updating
- Units of operation: Traditional US, SI, or Metric
- Full one year warranty on parts and labor

*Patent Pending*