OIL & GAS – PDT – PRYSMIAN DOWNHOLE TECHNOLOGY

Exploration & Production

Downhole Cables

TEC (Instrumentation and Power Cables)

SPECIALTY TEC: SMALL DIAMETER TEC

TEC - Tubing Encased Cable (TEC) is designed and manufactured to withstand the varying harsh environments found associated with the oil and gas industry. The cable can be utilized for data transmission such as downhole gauge application through to larger cores where power is required or a combination of both.

APPLICATION

Small Diameter TEC's provide downhole access in areas where there is limited space and/or clearance for STANDARD TEC.

STANDARDS & APPROVALS

Advanced Well Equipment Standard Group AWES Recommended Practice for Qualification of Tubing Encapsulated Conductor AWESTEC_01

QUALITY & TESTING

Manufactured in accordance with standard Inspection and Quality Plans Downhole cables are manufactured according to applicable ASTM standards for each specific material:

- Alloy 825: ASTM B704 and B751
- Stainless Steel 316L: ASTM A450 and A632

The pressure ratings of TEC are based on the collapse pressure of the ¼" tube, not burst pressures normally associated with capillary tubes. The collapse (yield) pressure is calculated using API Bulletin 5C3 Formula # 1 - Yield Strength Collapse Pressure Formula

DESIGN & CONSTRUCTION

- Temperature ranges up to 260°C
- Outer tube is tig welded and drawn through a die to final size
- Centralized conductor
- Application Specific
- Double Extruded Filler
- Optional Bumper Bars
- Custom Line Marking
- Safety-Strip® Encapsulation
- Continuous Length up to 100,000 ft.

Outer Tube Materials

- 316L Stainless Steel (UNS 31603)
- A825 Alloy (UNS N08825)

Outer Tube Sizes

- 1/8"

Double Extruded Centralized Core

- Size : 16 AWG - 28 AWG
- Type: Solid or Stranded Conductor
- Plating (if required): Tin, Nickel, or Silver plating

Encapsulation (Optional)

- PP (Polypropolene) / TPR (Santoprene) / PA (Nylon) / PVDF / ETFE (Tefzel) / ECTFE (Halar) / FEP / PFA / ECA 3000
- Round or Square profile

Pressure Rating

- 1/8" up to 25Kpsi

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