PRODUCT DATASHEET

Flow-Assurance Test Rig: Wax, Asphaltene and Scale

Dynamic scale loops and solids-detection rigs for inhibitor qualification

Product page





Close-up: capillary coil and onset cell window

OVERVIEW

The Tech Inc. Flow-Assurance Test Rig: Wax, Asphaltene and Scale qualifies the inhibitors that keep wells and pipelines free of wax, asphaltene and scale. A dynamic tube-blocking loop pumps two brines that form scale when mixed through a narrow capillary at temperature and pressure and measures how long it takes the differential pressure to rise, with and without inhibitor; a solids-detection cell measures the onset of asphaltene precipitation or wax appearance in live oil as pressure or temperature changes.

TYPICAL DESIGN DATA

Pressure	To about 200 bar (scale loop) or 700 bar (onset cell)
Temperature	To about 200 °C
Capillary	About 1 mm bore, 1 to 3 m, in stainless or Alloy C-276
Codes and standards	Pressure parts designed with a safety factor on burst; electrical to IEC 61010
Detection	Differential pressure; light transmission or NIR for solids
Pumps	Dual precision pumps, pulse-free
Software	Test sequences, blocking time and onset reports

MODELS AND CAPACITIES

- **TI-FAR-DSL** – dynamic scale loop, about 200 bar, 200 °C
- **TI-FAR-ASP** – asphaltene onset cell, about 700 bar
- **TI-FAR-WAT** – wax appearance cell
- **TI-FAR-C** – combined rig

Indicative maximum pressure.

ORDERING CODE

Example **TI-FAR-DSL-C**: **DSL** type: DSL, ASP, WAT or C; **C** wetted material: S stainless, C C-276.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** C-276 wetted parts; second test section; recombination cell for live oil; annual service.

KEY ADVANTAGES

- **Field conditions** – pressure and temperature
- **Lowest dose** – compare dose against performance
- **Objective** – blocking time and onset measured
- **Corrosion-resistant** – C-276 option

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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