PRODUCT DATASHEET

Six-Vessel Parallel Reactor Station

Six 600 mL reactors with automated sampling





DETAIL – REACTOR HEADS AND SAMPLING

OVERVIEW

The Tech Inc. Six-Vessel Parallel Reactor Station (model TI-PRS) runs six 600 mL pressure vessels side by side under one control system, with automated sampling from each vessel. It is built for rock–fluid–gas reactor work, in which rock samples, brine and gas react at reservoir-like pressure and temperature over long tests.

MODELS AND CONFIGURATIONS

- **TI-PRS** – six 600 mL vessels with automated sampling, in the rock–fluid–gas reactor class.
- **Independent or common conditions** – each vessel at its own pressure and temperature, or all six run as replicates.
- **Sampling options** – liquid or gas sampling on a set schedule, to suit the test programme.

TYPICAL DESIGN DATA

Number of vessels	Six
Vessel volume	600 mL each
Design pressure	Up to about 200 bar (3,000 psi), or to client specification
Design temperature	Up to 350 °C, or to client specification
Wetted materials	Alloy C-276, or to client specification
Sampling	Automated for each vessel, on a schedule set in the control software
Control	PLC with SCADA, recipe control, alarms and data logging
Pressure design	Designed to ASME VIII or client specification

APPLICATIONS

Rock–fluid–gas interaction, reaction of CO_2 and brine with reservoir rock, scale and corrosion studies, enhanced oil recovery chemistry, catalyst screening, and replicate testing.

KEY ADVANTAGES

- **Six tests in one run** – shorter test programmes, with replicates under identical control
- **Automated sampling** – samples drawn on schedule without opening the vessel or stopping the test
- **Independent control** – each vessel can run at its own pressure and temperature
- **Corrosion resistance** – Alloy C-276 for brine, CO_2 and sour media
- **One data record** – every vessel logged in a single SCADA system

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

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