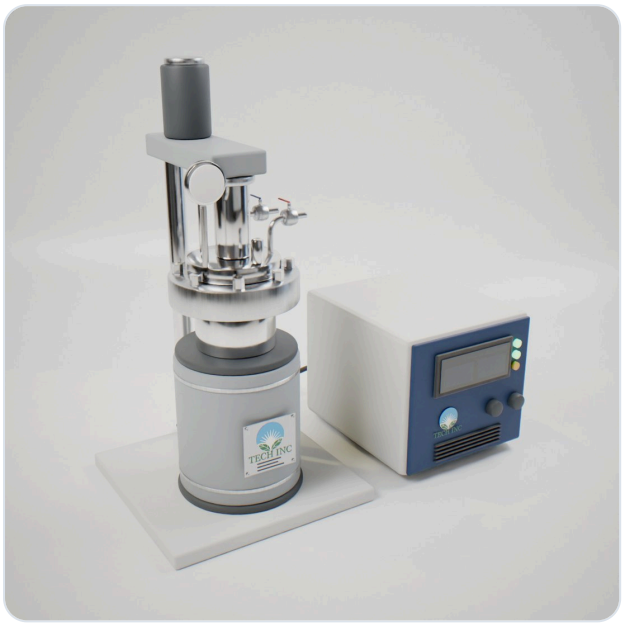
PRODUCT DATASHEET

Benchtop Stirred High-Pressure Reactor (Alloy C-276)

Stirred Alloy C-276 bench reactor to 200 bar and 350 °C





DETAIL – VESSEL HEAD AND VALVES

OVERVIEW

The Tech Inc. Benchtop Stirred High-Pressure Reactor (model TI-BR) runs chemical reactions at up to about 200 bar (3,000 psi) and 350 °C in a single stirred vessel on the bench. Every wetted part is Alloy C-276, a nickel alloy that withstands the acids and sour gas that would corrode stainless steel. Research laboratories, catalyst developers and process R&D groups use it for batch reactions, catalyst screening and corrosion studies.

MODELS AND CONFIGURATIONS

- **TI-BR** – single benchtop stirred reactor with Alloy C-276 wetted parts.
- **Heating and cooling** – electric heater as standard, with an internal cooling coil for exothermic reactions.
- **Head layout** – gas feed, sampling, liquid charging and condenser ports arranged to suit the test programme.

TYPICAL DESIGN DATA

Design pressure	Up to about 200 bar (3,000 psi), or to client specification
Design temperature	Up to 350 °C, or to client specification
Vessel volume	To client specification
Wetted materials	Alloy C-276, with other alloys to client specification
Agitation	Magnetically coupled stirrer, with speed range to client specification
Pressure design	Designed to ASME VIII or client specification
Controls	Temperature, stirrer speed and pressure control, with alarms, interlocks and data logging

APPLICATIONS

Catalyst testing, hydrogenation and oxidation, polymer and materials synthesis, corrosion and materials testing, petroleum and petrochemical R&D, and university and institute laboratories.

KEY ADVANTAGES

- **Corrosion-resistant wetted parts** – Alloy C-276 handles the acids and sour media that attack stainless steel
- **No shaft seal leakage** – a magnetic coupling drives the stirrer through a sealed housing
- **Full envelope on the bench** – up to about 200 bar and 350 °C in a benchtop footprint
- **Configurable head** – ports and fittings arranged to your test programme
- **Clear records** – temperature, pressure and stirrer speed logged for every run

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

Offices: Chennai · Toronto · Tallinn · Al Khobar

mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

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