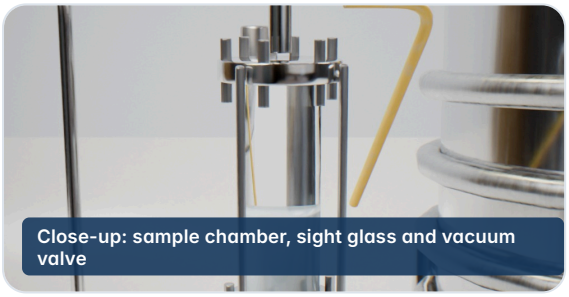
PRODUCT DATASHEET

Vacuum Reactor Sampler

Closed sampling from reactors under vacuum, venturi or overflow type

Product page





Close-up: sample chamber, sight glass and vacuum valve

OVERVIEW

The Tech Inc. Vacuum Reactor Sampler takes samples from reactors, stills and vessels that run under vacuum, where an ordinary sample valve would pull air in rather than let liquid out. A sample chamber is first evacuated below the reactor pressure, so liquid flows into it through a dip tube; the chamber is then isolated, brought to atmospheric pressure with nitrogen and drained into a closed bottle.

TYPICAL DESIGN DATA

Reactor pressure	Full vacuum to about 6 barg
Temperature	To about 200 °C; heated version higher
Sample volume	About 50 to 250 mL
Codes and standards	Pressure parts to ASME B31.3 practice; vacuum duty checked to ASME VIII
Wetted materials	316L, Alloy C-276, glass-lined or PTFE-lined
Seals	PTFE or perfluoroelastomer
Connection	Flanged dip tube or bottom valve

MODELS AND CAPACITIES

- **TI-VRS-50** – about 50 mL
- **TI-VRS-100** – about 100 mL
- **TI-VRS-250** – about 250 mL
- **TI-VRS-H** – heated version

Indicative sample volumes.

ORDERING CODE

Example **TI-VRS-100-V-C**: **100** sample volume, mL; **V** type: V vacuum chamber, J venturi, O overflow; **C** material: 6 316L, C C-276, P PTFE-lined.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** heating jacket; venturi on nitrogen; cabinet with drip tray; carbon canister on the vent; spare seal kit.

KEY ADVANTAGES

- **No air ingress** – the reactor is never open to atmosphere
- **Closed** – sample drains into a sealed bottle
- **Inert** – nitrogen breaks the vacuum, not air
- **Visible** – sight glass shows the fill

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

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