PRODUCT DATASHEET

Titanium Tetrachloride Transfer and Purification Skid

Closed TiCl4 transfer, filtration and distillation skids under nitrogen

Product page





Close-up: transfer vessel and nitrogen panel

OVERVIEW

The Tech Inc. Titanium Tetrachloride Transfer and Purification Skid moves titanium tetrachloride (TiCl4) between storage, purification and the reduction or oxidation plant in a closed, dry system. The liquid is pumped or pressure-transferred under dry nitrogen, filtered, and, where the plant needs it, distilled to remove vanadium and other impurities.

TYPICAL DESIGN DATA

Wetted materials	To the licensor or plant specification: carbon steel for dry service, Alloy 600, C-276 or nickel where moisture and HCl may be present
Atmosphere	Dry nitrogen, dew point below about -40 °C
Temperature	Ambient to about 140 °C at the reboiler
Pressure	To about 10 barg
Seals	Sealless pumps or double seals with dry nitrogen barrier
Design code	ASME VIII and ASME B31.3

MODELS AND CAPACITIES

- **TI-TTS-1** – about 1 m³/h transfer
- **TI-TTS-15** – about 15 m³/h transfer
- **TI-TTS-5** – about 5 m³/h transfer
- **TI-TTS-P** – purification skid, sized to the plant throughput

Indicative transfer rates; distillation capacity is sized to the plant.

ORDERING CODE

Example **TI-TTS-5-A-D**: **5** transfer rate, m³/h; P for a purification skid; **A** wetted material: C carbon steel, A Alloy 600, H C-276, N nickel; **D** options: D distillation, F filtration, U unloading station.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** distillation and vanadium-removal section; ISO-tank unloading station; caustic vent scrubber; closed sampling panel; heat tracing and insulation.

KEY ADVANTAGES

- **Closed and dry** – nitrogen padding and purge throughout
- **No fumes** – vents and drains to a scrubber
- **Right metal** – materials chosen for dry or wet service
- **Purity** – filtration and distillation options

How to cite: Titanium Tetrachloride Transfer and Purification Skid (model TI-TTS; Tech Inc., Vaughan, Ontario, Canada). www.techincresearch.com/product-page/titanium-tetrachloride-transfer-skid

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

Disclaimer: All products, designs and content are the property of Tech Inc. Tech Inc. reserves the right to change specifications and details without notice. Images are for representation only; the supplied equipment may differ in appearance. Data are typical; final design to client specification.