PRODUCT DATASHEET

Closed Catalyst Candle Filter Skid

Closed catalyst recovery after hydrogenation





DETAIL – CANDLE FILTER AND CATALYST RECEIVER

OVERVIEW

The Tech Inc. Closed Catalyst Candle Filter Skid separates hydrogenation catalysts such as palladium on carbon and Raney nickel from reaction mixtures inside a closed vessel. The catalyst is held on filter candles, washed and discharged as a slurry under nitrogen, so operators are not exposed to the solvent or to pyrophoric catalyst.

MODELS AND CONFIGURATIONS

- **Single candle filter** – one vessel for batch filtration.
- **Twin filters** – two vessels for continuous operation.
- **Pilot size** – small vessel for kilo-lab and pilot plants.
- **Packaged with the hydrogenation bay** – supplied with gas panels and samplers.

TYPICAL DESIGN DATA

Design pressure	To client specification
Design code	ASME VIII, or client specification
Materials	SS316L, or to client specification
Candles	Sintered metal or cloth-covered, grade chosen for the catalyst
Blowback	Nitrogen, with automatic or manual sequence

APPLICATIONS

API and fine-chemical hydrogenation, catalyst recovery, and pilot and production reactor bays.

KEY ADVANTAGES

- **Operator safety** – catalyst and solvent stay inside a closed vessel
- **Catalyst recovered** – precious-metal catalyst collected for reuse or refining
- **Less handling** – cake washed and discharged without opening the filter
- **One supplier for the bay** – filters, gas panels and samplers from one supplier

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.