PRODUCT DATASHEET

Monel HF Acid Vaporiser and Condenser

Hydrofluoric acid vaporisers, condensers and coolers in Monel 400 and Alloy 600

Product page





Close-up: vertical condenser and vapour line

OVERVIEW

The Tech Inc. Monel HF Acid Vaporiser and Condenser vaporises, condenses and cools anhydrous hydrofluoric acid (AHF) in Monel 400 and Alloy 600, the nickel alloys that resist HF where stainless steel fails.

TYPICAL DESIGN DATA

Wetted materials	Monel 400 (UNS N04400) or Alloy 600 (UNS N06600); C-276 for HCl and chlorosilanes
Design code	ASME VIII Div. 1; PED on request
Design pressure	Typically 10 to 25 barg process side
Heating and cooling	Steam, hot water, chilled water or brine
Joints	Welded wherever possible; flanges with gaskets rated for HF
Inspection	PMI on every alloy part, radiography, hydrotest with dry-out

MODELS AND CAPACITIES

- **TI-HFV-50** – about 50 kg/h of AHF vapour, pilot and small plants
- **TI-HFV-250** – about 250 kg/h
- **TI-HFV-1000** – about 1,000 kg/h
- **TI-HFV-3000** – about 3,000 kg/h, vaporiser and condenser as separate units

Indicative AHF vapour rates; final sizing is set by pressure, heating medium and purity needs.

ORDERING CODE

Example **TI-HFV-250-K-M4**: **250** size by AHF vapour rate, kg/h; **K** item: K kettle vaporiser, C condenser, P product cooler, V vessel, S set of vaporiser and condenser; **M4** wetted alloy: M4 Monel 400, A6 Alloy 600, C2 C-276.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** vaporiser and condenser on one frame; receivers and seal pots in the same alloy; closed sampling panel for HF.

KEY ADVANTAGES

- **Right alloy** – Monel 400 or Alloy 600 for HF, C-276 for HCl
- **Dry and clean** – dried after hydrotest, sealed for shipment
- **Qualified welding** – procedures qualified for nickel alloys
- **Matched set** – vaporiser, condenser and vessels from one shop

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

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