PRODUCT DATASHEET

Falling-Film Solvent Recovery Skid (100 L/h)

Continuous 100 L/h ethanol recovery skid





DETAIL – FALLING-FILM EVAPORATOR AND SEPARATOR

OVERVIEW

The Tech Inc. Falling-Film Solvent Recovery Skid (100 L/h) (model TI-FFE-100) recovers ethanol and other solvents continuously from extracts and mother liquors. The feed runs as a thin film down heated stainless tubes under vacuum, so the solvent boils off in seconds at low temperature and heat-sensitive extracts are not damaged. It is the next step up when batch rotary evaporators can no longer keep pace with production.

MODELS AND CONFIGURATIONS

- **TI-FFE-100** – continuous falling-film unit recovering 100 L/h of ethanol.
- **Two-stage version** – second separator for a higher final concentrate strength, to client specification.
- **Flameproof version** – drives and instruments for classified solvent areas, to client specification.

TYPICAL DESIGN DATA

Recovery rate	100 L/h of ethanol, or sized to the duty
Operation	Continuous feed under vacuum
Wetted materials	SS316L, or to client specification
Heating	Hot water, thermal fluid or low-pressure steam
Design code	Designed to ASME VIII or client specification
Controls	PLC and HMI, with GMP documentation on request

APPLICATIONS

Ethanol recovery at herbal and botanical extract plants, solvent recovery in pharma and fine-chemical plants, extract concentration and flavour and fragrance production.

KEY ADVANTAGES

- **Continuous duty** – steady output without batch changeovers
- **Gentle on product** – short residence time at low boiling temperature
- **High recovery** – condensed solvent returned to the process
- **Compact** – complete unit on one skid with its own controls
- **Easy cleaning** – stainless construction with spray-ball or flushing connections

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

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