PRODUCT DATASHEET

Tangential Flow Filtration (TFF) and Diafiltration System

Concentration and buffer exchange





DETAIL – CASSETTE HOLDER

OVERVIEW

The Tech Inc. Tangential Flow Filtration (TFF) and Diafiltration System concentrates and buffer-exchanges proteins, vaccines, viral vectors and other biologics by tangential flow filtration. A low-shear pump circulates the feed across flat-sheet cassettes or hollow-fibre modules, and the system controls transmembrane pressure and adds diafiltration buffer automatically.

MODELS AND CONFIGURATIONS

- **Lab system** – 0.1 to 0.5 m² membrane area.
- **Process-development system** – up to 2.5 m².
- **Pilot system** – larger cassette holders on a mobile frame.

TYPICAL DESIGN DATA

Membrane area	0.1 to 2.5 m², larger on request
Pressure	Up to 4 bar TMP
Wetted parts	SS316L, Ra 0.5 µm, or single-use flow path
Control	Constant TMP or constant flux, automatic diafiltration

APPLICATIONS

Biopharmaceutical process development, protein and enzyme concentration, vaccine and viral vector purification, and food protein work.

KEY ADVANTAGES

- **Gentle** – low-shear pump protects sensitive products
- **Automatic diafiltration** – buffer exchange to a set volume
- **Scalable** – same cassette format from lab to pilot
- **Documented** – batch reports for process development

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

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