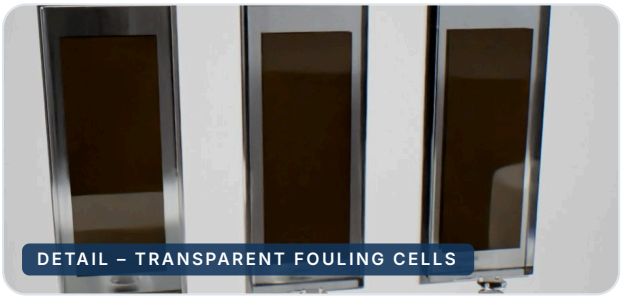
PRODUCT DATASHEET

Membrane Fouling Simulator (MFS)

See biofouling and scaling as it forms





DETAIL – TRANSPARENT FOULING CELLS

OVERVIEW

The Tech Inc. Membrane Fouling Simulator (MFS) reproduces the feed channel of a spiral-wound element in a transparent flow cell, so biofouling and scaling can be watched and measured as they develop. Pressure drop across the channel is logged continuously, and nutrients, antiscalants or cleaning chemicals are dosed under control.

MODELS AND CONFIGURATIONS

- **Single cell** – one channel for method development.
- **Three-cell rack** – side-by-side comparison of spacers or treatments.
- **With camera** – time-lapse imaging of the channel.

TYPICAL DESIGN DATA

Channel	Matched to 28, 31 or 34 mil spacers
Flow velocity	About 0.1 to 0.2 m/s, as in full-scale elements
Measurements	Pressure drop, flow, temperature
Window	Clear acrylic or polycarbonate

APPLICATIONS

Spacer design, pretreatment and antiscalant trials, cleaning studies and biofouling research for RO and NF.

KEY ADVANTAGES

- **Visible fouling** – watch deposits form through the window
- **Realistic** – same spacer and velocity as a real element
- **Fast comparison** – test treatments side by side
- **Quantified** – pressure drop logged continuously

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

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