PRODUCT DATASHEET

Closed-Circuit RO (CCRO) Pilot Test Skid

High-recovery RO trials on your own water





DETAIL – PRESSURE VESSELS IN SERIES

OVERVIEW

The Tech Inc. Closed-Circuit RO (CCRO) Pilot Test Skid proves how far a feed water can be recovered before scaling or fouling sets in. It runs the closed-circuit, semi-batch cycle: feed enters the loop at the rate permeate leaves, a circulation pump keeps crossflow through short vessels, pressure rises with concentration, and at the set recovery a flush valve displaces the brine with fresh feed while production continues.

MODELS AND CONFIGURATIONS

- **Brackish water** – up to 41 bar.
- **High-pressure** – 69 or 82 bar for seawater and reject concentration.
- **Containerised** – for long site trials.

TYPICAL DESIGN DATA

Permeate	0.2 to 2 m^3/h (4-inch) or up to 8 m^3/h (8-inch)
Recovery	Set per cycle, up to 95% on suitable brackish feeds
Pressure	Up to 41 bar; 69 or 82 bar options
Materials	SS316L or super duplex wetted parts
Control	PLC and HMI, CSV export

APPLICATIONS

Brackish and well water, RO reject recovery, cooling-tower blowdown, mine and industrial wastewater reuse, and ZLD pre-concentration studies.

KEY ADVANTAGES

- **Real recovery data** – cycle-by-cycle logs of pressure, flux and conductivity
- **Less scaling risk** – short residence time and regular brine purge
- **Flexible** – recovery, flux and crossflow set from the HMI
- **Scale-up ready** – standard elements, so results transfer to full plant

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

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