PRODUCT DATASHEET

Membrane Contactor CO_2 Capture Test Rig

Hollow-fibre gas–liquid contactor tests with solvent loop, stripper and reboiler

Product page





Close-up: membrane contactor, solvent loop and stripper

OVERVIEW

The Tech Inc. Membrane Contactor CO_2 Capture Test Rig tests hollow-fibre membrane contactors that bring flue gas and a capture solvent together without mixing them.

TYPICAL DESIGN DATA

Gas	CO_2, N_2 and air blended by mass flow controllers; humidity option
Solvent	Loop with tank, pump, flow measurement and temperature control; materials to suit the solvent
Contactor	Holder for hollow-fibre modules; sizes to order
Codes and standards	CE marking
Regeneration	Cross exchanger, stripper column, reboiler and condenser
Analysis	CO_2 analysers on gas in, gas out and stripper product; solvent sampling points
Results	CO_2 removal, overall mass-transfer coefficient, solvent loading and pressure drop

MODELS AND CAPACITIES

- **TI-MCC-A** – absorption rig
- **TI-MCC-2** – rig with two contactor positions
- **TI-MCC-R** – absorption and regeneration rig

Rigs are built to the contactor sizes and solvents you test.

ORDERING CODE

Example **TI-MCC-R**: **R** type: A absorption, R absorption and regeneration, 2 two contactor positions.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** second contactor position; membrane stripping module; online solvent density and conductivity.

KEY ADVANTAGES

- **Full loop** – absorption and regeneration on one skid
- **Long runs** – pore wetting tracked over time
- **Solvent flexible** – materials chosen for your solvent
- **Mass transfer** – overall coefficient calculated automatically

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

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