PRODUCT DATASHEET

CO_2 Capture Solvent Screening System (VLE and Wetted-Wall Column)

CO_2 solubility and absorption-rate screening of amines and new capture solvents

Product page





Close-up: VLE cell, wetted-wall column and thermostat

OVERVIEW

The Tech Inc. CO_2 Capture Solvent Screening System (VLE and Wetted-Wall Column) screens absorbents for CO_2 capture before they go into a pilot plant.

TYPICAL DESIGN DATA

VLE cell	Jacketed, stirred cell; pressure and temperature to order; CO_2 loading from pressure decay and liquid analysis
Wetted-wall column	Known contact area; liquid and gas flows controlled; CO_2 measured in and out
Temperature	Thermostat circulator for absorber and stripper temperatures
Codes and standards	CE marking
Results	VLE curves, cyclic capacity, absorption flux and gas-side mass-transfer coefficient
Materials	Stainless steel and glass; seals chosen for the solvent
Control	PLC with touch-screen HMI and data logging

MODELS AND CAPACITIES

- **TI-SSS-V** – VLE cell system
- **TI-SSS-W** – wetted-wall column system
- **TI-SSS-VW** – combined system

Systems are built to the solvents, temperatures and pressures you test.

ORDERING CODE

Example **TI-SSS-VW**: **VW** version: V VLE cell, W wetted-wall column, VW combined.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: reaction calorimeter for heat of absorption; viscometer and density meter; second VLE cell.

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