PRODUCT DATASHEET

Gravimetric CO_2 Sorption and Cycling Analyser

Microbalance screening of CO_2 sorbent capacity, kinetics and cycling stability

Product page





Close-up: balance and furnace with the gas switching module

OVERVIEW

The Tech Inc. Gravimetric CO_2 Sorption and Cycling Analyser screens CO_2 sorbents quickly on milligrams of material. A microbalance weighs the sample while a gas switching module changes the atmosphere between CO_2 (dry or humid, from air level to flue-gas level) and an inert purge, and the furnace sets the adsorption and desorption temperatures.

TYPICAL DESIGN DATA

Sample	Milligram quantities on the balance pan
Gases	CO_2, N_2, air and purge by mass flow controller; humidity option
Temperature	Furnace around the sample; adsorption and desorption temperatures by programme
Codes and standards	CE marking
Results	Uptake, uptake rate and capacity against cycle number
Note on humidity	With humid gas the mass gain includes water, so humid runs are paired with dry baselines or breakthrough data
Construction	Bench-top balance, gas switching module and humidifier

MODELS AND CAPACITIES

- **TI-GSA-D** – dry-gas analyser
- **TI-GSA-W** – analyser with humidifier

Analysers are configured to the gases, humidity and temperatures you test.

ORDERING CODE

Example **TI-GSA-W**: **W** version: D dry gas, W with humidifier.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** second gas switching channel; oxygen ageing programme; gas cylinders and regulators; installation and operator training.

KEY ADVANTAGES

- **Milligram samples** – screen early batches
- **Automatic cycling** – stability over many cycles
- **Fast** – uptake and kinetics in one run
- **Humid option** – conditions closer to air and flue gas

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

Offices: Chennai · Toronto · Tallinn · Al Khobar

mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

How to cite: Gravimetric CO_2 Sorption and Cycling Analyser (Tech Inc., Vaughan, Ontario, Canada). www.techincresearch.com/product-page/gravimetric-co2-sorption-cycling-analyser

Disclaimer: All products, designs and content are the property of Tech Inc. Tech Inc. reserves the right to change specifications and details without notice. Images are for representation only; the supplied equipment may differ in appearance. Values are typical and can change; results depend on the membranes, sorbents, solvents and gases tested, usage and operation in line with the operation manual. Final configuration to client specification.