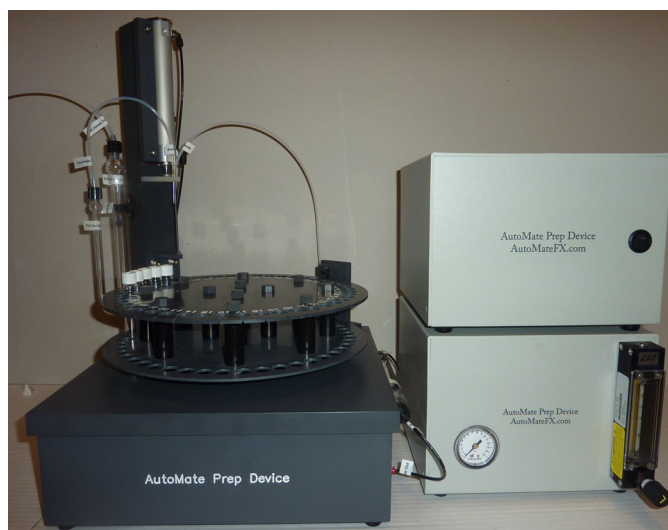


The AutoMate Prep Device and Picarro WS-CRDS Carbon Isotopic Analysis of Carbonate and DIC

- The AutoMate Prep Device is an automatic preparation system for acidification of solid carbonates and DIC in water
 - Fully automated $\delta^{13}\text{C}$ analysis when coupled with Picarro's LIAISON interface and IsoCO₂ WS-CRDS system
 - Shipboard, Field, and Laboratory automated analysis of carbon isotopes of solid carbonate and DIC!

The AutoMate Prep Device acidifies samples to convert carbonates or DIC in water to CO₂ gas. Evolved CO₂ gas is transferred from the AutoMate Prep Device to the Picarro LIAISON interface and then to the Picarro Wavelength-Scanned Cavity Ring Down Spectroscopy CO₂ isotope analyzer for carbon isotopic determination.

- Fast, fully automatic acidification of carbonate and DIC samples
- Low, consistent blanks
- Low downtime between samples
- Small dead volume
- Robust instrument with low maintenance costs
- Easy to use and maintain
- Compatible with several acids
- Wet portions of instrument isolated from electronic portions of instrument.



AutoMate Prep Device www.automatefx.com

For more information on the AutoMate contact:

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1 (352) 275-8642

The AutoMate Prep Device uses Exetainer (Labco, Ltd.) glass vials with screw caps with septa as sample analysis chamber. The AutoMate requires few consumables: UHP N₂ carrier gas, septa top vials, acid, and de-ionized water.

The AutoMate Prep Device is also a front-end instrument for determination of total CaCO₃ in solid samples and total DIC in water. The AutoMate works with UIC, Inc. CO₂ coulometers (5011 and 5012 native; 5014 and 5015 emulators) and Li-Cor LI-820 CO₂ analyzers. The AutoMate Prep Device runs on completely customized, simple LabVIEW™ software. Software is customized for each analyzer and to user's specifications.

AutoMate Prep Device Specifications
for use with Picarro's Liaison interface and IsoCO₂ WS-CRDS system
by AutoMate FX, Inc.

Carousel specs:

45 position carousel, holds 12ml septa top vials (Labco Inc. Exetainers)

Space requirements:

~3 feet x ~2 feet (~0.9m x ~0.6m)

Electrical requirements:

Input: 88 to 264 V AC

Maximum power consumption 66 W

Gas requirements:

Compressed nitrogen gas (Ultra high purity N₂)

Environmental conditions:

Ambient temperatures (5-45° C), Non-condensing atmosphere

Language:

English software and manual

Communication:

AutoMate Prep Device to PC - RS232

AutoMate Prep Device to Liaison - contact closure

Control software:

LabVIEW executable, Sample table allows input by paste or manual data entry

Warranty Period:

12 months

Tech support:

By e-mail or telephone