

IsoTube[®] AutoLoader[™] System

Collects gas samples for isotopic analysis

Applications

- Collecting gas samples from the wellbore
- Determining the isotopic composition and the origin (biogenic or thermogenic) of sample gases, and identifying their association with oils

Features

- The automated, embedded control system provides several options for triggering the device
- A user-defined hysteresis window helps prevent the device from triggering multiple times during total-gas sampling
- Tube-mounted RFID tags store the date, time, time zone UTC, depth, gas concentration, and serial numbers of the tube and device
- All job/well files are stored in the internal memory of the device and can be downloaded to a computer through the web-based interface. Downloadable job/well files include comprehensive data on each sample, including date, time, time zone UTC, tube and device serial numbers, trigger method, sample depth, and total gas concentration

Benefits

- Offers several options for triggering loading: independent triggers by time, depth returns, and total gas; continuous triggering by depth intervals; and smart triggering using a peak-detection algorithm
- Enables the user to independently activate and disable triggers at any point using the web-based interface
- Provides downloadable job/well files in text and Excel formats, which enables the user to import all sample data, including isotopic analysis, into a single file
- Receives data from third-party devices in WITS0 via Serial RS-232 or Ethernet TCP/IP (active or passive WITS)

Tool Description

The IsoTube AutoLoader system is an automated device that collects gas for isotopic analysis. The device loads durable aluminum tubes into a hopper and, when triggered, automatically captures and stores mud-gas stream samples. After taking a sample, the device automatically loads a new tube in preparation for collecting the next sample.

The device records data—including the depth, time, and gas concentration—for each sample and stores it in a job/well file. A radio-frequency identification (RFID) tag mounted directly on the tube stores the sample time and the serial



The IsoTube AutoLoader efficiently collects gas samples and provides detailed job/well data that aids in isotopic analysis.



IsoTube® AutoLoader™ System

numbers of the tube and device. Users can activate and deactivate triggers, manage data connections to other devices, create new job/wells, and download job/well files through the web-based interface.

The IsoTube AutoLoader can be used in conjunction with other gas-sampling devices to collect isotopes. Isotopic analysis is available through Weatherford at IsoTech Laboratories.

Safety Notice

The IsoTube AutoLoader is only intended for use in safe areas. All gas samples must be properly exhausted.

Specifications

Operating system	Windows® 7*
Power requirements	100 to 240 Vac 47 to 63 Hz
Operating temperature	50°F to 120°F (10°C to 50°C)
Dimensions (L × W × H)	19 × 15 × 22 in. (483 × 381 × 559 mm)
Weight	35 lb (16 kg)
Communications	TCP/IP, serial

*Windows is a registered trademark of the Microsoft Corporation.

