Garrett Gas Train



Brand: OFI Testing Equipment, Inc.
Product Code: 151-00
Availability: Call for availability
Call for Price: 832-320-7300

Description
The Garrett Gas Train is the most widely used portable instrument for the determination of soluble sulfides and carbonate concentrations in drilling fluid. Soluble sulfides include H_2S and the sulfide (S^{-2}) and bisulfide (HS^-) ions. Total soluble carbonates include CO_2 and the carbonate (CO_3^{-2}) and bicarbonate (HCO_3) ions. Mud filtrate is acidified inside the gas train, converting all sulfides to H2S or all carbonates to CO_2, depending upon the test. The gas train separates the gas from the liquid and an inert carrier gas transports the gasses through the separate chambers. In chamber three, the gas stream is passed through a Dräger-Tube™, which responds to H_2S or CO_2 by darkening along its length, with the stain length proportional to the amounts of concentrations in the filtrate. For qualitative H_2S analysis, lead acetate paper disks may be inserted to determine the presence or absence of sulfides. The OFITE Garrett Gas Train consists of a transparent train, pressure regulator assembly, CO_2 and N_2O cartridges, Dräger-Tubes™ for H_2S and carbonate detection, and a convenient carrying case. For determining active sulfides in oil-based fluids, OFITE offers a separate kit that analyzes whole mud samples.

Components

- #142-58: O-ring, Small
- #143-00-003: Regulator, Low Pressure
- #143-02-10: CO2 Puncture Head Assembly
- #143-03: Barrel for CO2 Bulb
- #145-601: Hydrogen Sulfide Test Papers, Package of 100

- #151-00-001: Gas Train Body, Acrylic
- #151-00-003: Binding Head Machine Screw, Nylon
- #151-00-005: Washer, #10, Nylon
- #151-05: Thumb Screw for Lid
- #151-06: Gas Bag, 1 Liter
- #151-07: 2-Way Bore Stopcock with Teflon® Plug
- #151-09: Hand Vacuum Pump, Dräger Model 31
- #151-14: Hose, 3/8" OD × 1/4" ID × 1/16" Thick, 1' Length, Rubber
- #151-14-1: Tube, 3" Length, Nylon
- #151-15: Fitting for Filter Flow Tube, Nylon
- #151-16: Septum for Injection, Rubber
- #171-90-14: Hose Barb, 1/8" NPT × 1/4"

Dräger-tubes®

- #151-02: Dräger-tube®, H_2S 100/a, Range 100 - 2,000 ppm, Package of 10
- #151-03: Dräger-tube®, H_2S 0.2%/A, Range 0.2 - 7 Vol.%, Package of 10
- #151-04: Dräger-tube®, CO_2 100/a, Range 100 - 3,000 ppm, Package of 10

Glassware

- #151-01: Dispersion Tube, Glass
- #151-08: Flow Meter Tube, API
- #153-34: Pipette, 1 mL × .01 mL, Glass
- #153-40: Pipette, 10 mL × .1 mL, Glass
- #153-63: Syringe with Needle, Disposable, 10 mL

O-rings

- #142-58: O-ring for Nylon Fitting
- #143-02-13: O-ring for CO_2 Bulb Puncture Pin
- #143-02-14: O-ring for Puncture Pin Holder Assembly
- #151-10: O-ring for Dräger-tube® Pump
- #151-11: O-ring for Flow Meter Tube Floating Ball
- #151-12: O-ring for 2nd and 3rd Chamber
- #151-13: O-ring for 1st Chamber

Reagents

- #151-17: Defoamer, Octanol/Octyl Alcohol, 2 oz (60 mL)
- #230-15: Sulfuric Acid, 5 N, 2 oz (60 mL) UN2796 Case
- #151-53: Case with Foam Insert

Optional

- #143-05: CO_2 Bulbs, Box of 10, UN2037
- #143-08: N_2O Bulbs, Box of 10, UN1070
- #151-00-LH: Garrett Gas Train Kit Without HAZMAT Items
- #151-00-SP: Spare Parts Kit

Size: 18.75" × 14.5" × 8" (48 × 37 × 20 cm)
Weight: 17 lb 5 oz (7.9 kg)