

Lab+Life SCIENTIST



Isotopic analysis
volcanos and ancient history

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Surface area and porosity analyser

Surface area and porosity are important physical properties that influence the quality and utility of many materials and products; therefore, it is important that these characteristics be accurately determined and controlled. Likewise, knowledge of surface area and porosity is often important to understanding the formation, structure and potential application of many natural materials.

The Particle and Surface Sciences & Micromeritics Tristar 3030 system is a fully automated, three-station sur-

face area and porosity analyser designed for quality control and research organisations. The instrument can collect up to 1000 data points and fine details of the isotherm can be observed and recorded, providing high resolution and revealing pore structure details. Containing all the capabilities of previous Tristar models, the product also features an updated dewar design and isothermal jacket technology, ensuring extended hours of continuous temperature control.

The corrosion-resistant stainless steel manifold is designed for accurate gas management. The dedicated saturation pressure (P_0) port enables the measurement of saturation pressure on a continuous basis. The three analysis ports operate simultaneously and independently of one another. The instrument also features a krypton option, allowing precise measurements in the very-low surface area range.

By simply moving the calculation bars, the user is immediately updated with textural properties. User-selectable data ranges through the graphic interface allow direct modelling for BET, t-Plot, Langmuir, DFT interpretation and much more.

Particle & Surface Sciences Pty Ltd
www.pss.us.net



Optical measuring devices

SIGRIST is a developer of optical measuring devices that monitor the quality of process variables in numerous industries. The devices feature a true, non-contact, free-fall measuring system which ensures that maintenance is kept to a minimum.

The company's range of photometers — which measure turbidity, dissolved substances, colour, oil or particulates — are used in water treatment, the food industry, industrial processes, environmental protection and the monitoring of air quality in roads and rail tunnels. The ProDetec range of photometers includes oil trace monitors, single- and multiparameter turbidity meters, and colour- and phase-monitoring instruments.

The SIGRIST OilGuard measures mineral oils in water. Based on the fluorescence principle, the device uses a free-fall measuring system that eliminates contact between the sample and the flow cell. Various types of oil can be detected by the product's calibration curves. The equipment is suitable for use in the chemical and pharmaceutical industry, crude oil production, machine and metal industry, petrochemical and refinery industry, power plants, the ship industry and wastewater treatment.

SIGRIST turbidity meters measure turbidity and other parameters in water and liquids, including DOC levels, colour and oil concentration. The meters detect any impurities or flaws in the treatment process so they can be rectified. Specifically, the SIGRIST AquaScat HT Online Turbidity meter measures the turbidity of potable water according to IEC 27027 in a free-falling water stream. The device features a contactless design which eliminates foiling and minimises servicing. It is suitable for monitoring turbidity in the food and brewing industries, chemical and pharmaceutical industry, crude oil production, dairy industry, drinking water treatment, machine and metal industry, petrochemical and refinery industry, power plants, pulp and paper industry and wastewater treatment.

Prodetec Pty Ltd
www.prodetec.com.au



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