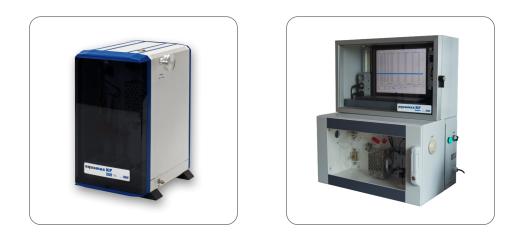
Karl Fischer Titrators



1 ppm to 100 % water content in liquids, solids and gases











In-lab and on-site water determination

Features

Analysis conform to standards of ASTM, EN, ISO Case for on-site use available Integral printer and battery

Applications

Petroleum products Hydrocarbons Lubricating oils Motor oils Hydraulic oils Insulating oils Mineral oils Crude oils Transformer oils Solvents



Water content of gases

Features

According to standard ASTM D 7995 – 19 Sulfur removal cartridge eliminates side reactions Automated process with up to 250 measurements in 48 h

Applications

<u>LPG, LNG:</u> Propane, propene, butane, butene, butadiene Ethylene oxide Chlorinated hydrocarbons, e. g. methylene chloride, ethylene chloride, vinyl chloride

<u>Analysis of refrigerants:</u> Halogenated hydrocarbons

Analysis of permanent gases: Natural gas Technical gases and mixtures



Water determination in oil samples

Features

According to standard ASTM D 6304 Additive and Sulphur side reactions minimized No blank value

Applications

- Petroleum products Transformer oil Hydraulic oil Engine oil Gear oil
- Crude oil Gasoline Diesel Jet fuel Bio fuel
- Insulating oils Silicone oil Lubricating oils Biopetroleum Biological oils



Water content of all types of samples

Features

Variable heating programs up to 300 °C Analysis of samples in closed vials with septum cap Suitable for various vial sizes (2 R to 50 R), plates easy exchangeable

Applications

Pharmaceutical productsPoBiological substancesHyFreeze-dried products, e. g. lyophilizedFoculturesPlaOils and lubricants, creams, pastesMeViscous materials (bitumen, tar, sludges)Mo

Powder and pellets Hygroscopic compounds Food Plastics Metal powder for 3D-printer Moulded parts



Heating at high temperatures

Features

Sample heating at temperatures up to 1300 °C Sample dosing into the oven without an interruption of the gas flow Internal drying of carrier gas

Applications

Inorganic salts Building materials Cement Metals and alloys Molecular sieves Oxide/hydroxides



Online measurement of water in oils

Features

Connecting with sample lines for automatic sampling Contamination-free transfer of the sample Return of oil sample into system possible

Applications

Transformer oil regeneration Oil treatment Preparation of oil products Pipeline monitoring Crude petroleum specification

Karl Fischer Titrators

made by **ECH**

Flexibility, cost efficiency and easy operation without sample preparation

For use in-lab, on-site and on-line High sample throughput Low reagent consumption - meaning less solvent waste Robust and accurate to 1 ppm No external gases required No blank values ensuring ppm accuracy Robust and alarm style safety features on all ECH titrators Closed loop circulation - meaning no hazardous emissions

Book your online demo in the ECH Studio

ECH Scientific have a state of the art laboratory fitted with online presentation capabilities, allowing us to bring product demonstrations live and in full HD, with multiple camera angles and software sharing capabilities enabling us to deliver a full demo experience remotely. Please contact info@echscientific.com to book your session.









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