

Elzone II 5390



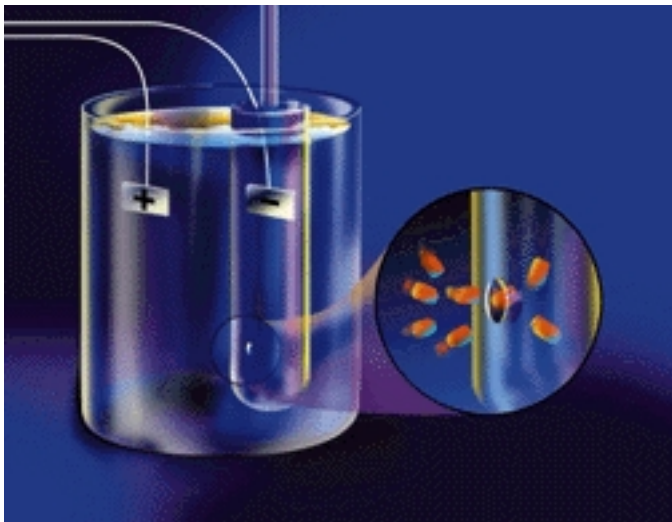
The Elzone[®] particle analyzer delivers fast, accurate, reproducible data on a broad spectrum of

Description

Widely accepted as a primary particle characterization technique, the electrozone sensing principle is recognized as a highly effective method of counting and sizing a wide variety of

organic and inorganic materials. Unlike other measurement techniques, electrozone sensing can be utilized to analyze samples that have mixed optical properties, densities, colours and shapes. The Elzone uses this powerful particle characterization technique to quickly and accurately determine size, number, concentration and mass of a wide variety of finely divided materials. It can measure particles from 0.4mm to 1200mm, a typical size range for a great number of industrial, biological and sedimentary specimens. The Elzone's high level of accuracy and resolution, speed and its ease of use make it equally suitable for industry, quality control and research and development laboratories.

Typical Elzone applications include bio-cells, abrasives, emulsions, toner and inks, filtration, pigments and sediments. Applicability specifications cover an analysis time of typically 10 to 100 seconds, sensing rate from below 1 to over 5000 particles per second. Concentration up to 1000 ppm (0.1%) by volume and electrolyte : aqueous, organic or solvating organic. Electrical 100/120/220/240 VAC 50/60 Hz. Elzone II Advantages also feature the 21 CFR part 11 software option, extensive statistical analysis, counts as well as sizes organic and inorganic materials.



Software

The Elzone 5390 is operated via a separate control module running in a Windows^a environment.

Orifice Tubes

Orifice tubes are available in 22 sizes with orifices ranging from 1900 to 12µm in diameter.

Options

All models are available with a choice of sample dispersing options including propeller and magnetic stirrers, and hydropulsors.

Applications

The electrozone system is currently being used in the following applications:

Foods and related material - dairy products, beverage contaminants, emulsions and flavours, flours and powders, and condiments

Particles in nature - marine micro life, marine sediments, crude oils, minerals, clays and soils, pollens, environmental contaminants

Coatings and graphic arts materials - toners, photographic film emulsions, paper coatings, textile sizing, pigments, dyestuffs, fillers

Ceramics and metals - ceramic ingredients, catalysts, refractories, metal powders, magnetic powders

Combustibles, and chemicals - explosives, propellants, solid fuels

Processing operations - grinding and crushing, classifying and separating, crystallizing, polymerizing, emulsifying, encapsulating, filtering

Specifications

Applicability

Electrolyte Aqueous, organic, or solvating organic
Concentration Up to 1000 ppm (0.1%) by volume
Sensing rate From below 1 to over 2000 particles per second
Diameter 0.4 to 120 μm
Greys 256 levels:
Analysis time Typically 10 to 100 seconds

Utility

Electrical 100/120/220/240 VAC 50/60 Hz

Physical

Height 33.3 cm (13.1 in.)

Width 29.1 cm (11.5 in.)

Depth 40.8 cm (16.1 in.)

Weight 18 kg (40 lbs)