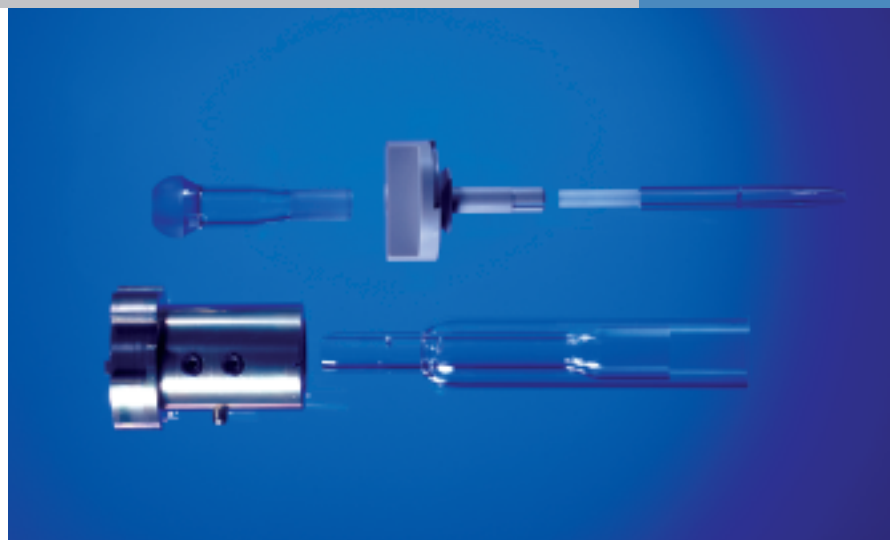


Thermo Electron Corporation's iCAP 6000 Series of ICP Emission Spectrometers utilize innovative new technologies to create the world's most compact system capable of outstanding performance and productivity.

iCAP 6000 Series Radial Sample Handling Kits

Produce the very best performance, whatever the sample type.



The performance heart of any ICP instrument is its sample handling system. Although it is possible to use a single configuration for most types of analysis, this may result in sub-optimal performance for certain sample types. In addition, some sampling systems are difficult and time-consuming to clean, re-assemble and align.

The iCAP 6000 Series overcomes these problems by offering optimized sample handling kits for the main application types. These are all plug and play, self-aligning modules that make routine cleaning and alignment operations extremely simple. The semi-demountable torch module does not require the manual making and breaking of gas connections during maintenance as the torch base clips into place while automatically making gas-tight connections. A software controlled torch aligning routine completes the process.

The standard sample handling kit is the one fitted to all systems and optional kits for organics, volatile organics, HF-based and high solids solutions are available to fit Radial view systems.

Radial view systems are the preferred type for some organics analysis, such as used lubricating oils. Also, in situations where high interferences may be encountered, it is likely that the Radial view type will minimize their effect.

Two types of pump tubing are available, one for use with aqueous-based solutions and one for organics-based solutions.

Whatever the sample, the iCAP 6000 Series has the answer.

Standard kit

For normal aqueous sample solutions containing relatively low acid contents (except for hydrofluoric acid) or up to 3 % m/v dissolved solids. The concentric glass nebulizer is not suitable for solutions containing large particulates due to the risk of blockages.

Organics kit

For sample solutions containing relatively non-volatile organic solvents, such as xylene, toluene, white spirit and kerosene. These solvents are the ones most likely to be used for lubricating oils analysis, both of additive compounds in fresh oil and wear metals in used oil. Radial view ICP systems are better suited to this type of analysis.

Volatile organics kit

For sample solutions containing the more volatile organic solvents, such as some ketones, alcohols and aldehydes. These are often found in petrochemical analysis, both for by-products such as plastics and for petrol itself. An additional cold water supply or chiller will be required to cool the spray chamber.

HF resistant kit

For sample solutions containing un-complexed hydrofluoric acid. These are typically obtained during the analysis of geological samples, soils, sediments, ceramics, bricks and cement together with some types of high temperature alloys.

Components in contact with the solutions are made from resistant fluoro plastic and alumina ceramic.

High solids kit

For the purposes of ICP analysis, high solids is defined as up to 20 % m/v solutions, especially samples such as sea waters, brines and ground waters, geochemical samples and fusion mixtures. Used in conjunction with the argon humidifier (Part number 8423 120 51301) allows for extended analysis time.

STANDARD KIT FOR RADIAL ICP SYSTEMS, PART NUMBER 8423 120 51191, CONSISTS OF:

Radial quartz torch	8423 120 51141
Quartz centre tube, 1.5 mm ID	8423 120 51351
Radial spray chamber adaptor	8423 120 51151
Glass spray chamber	8423 120 51411
Concentric glass nebulizer	8423 120 51431
Ball joint clip	8423 120 51421
Pump sample tubing, aqueous	8423 120 51511
Pump drain tubing, aqueous	8423 120 51521

ORGANICS KIT FOR RADIAL ICP SYSTEMS, PART NUMBER (8423 120 51101) CONSISTS OF:

Radial quartz torch	8423 120 51141
Quartz centre tube, 1 mm ID	8423 120 51341
Radial spray chamber adaptor	8423 120 51151
Spray chamber, organics	8423 120 51311
V-groove nebulizer	8423 120 51321
Ball joint clip	8423 120 51421
Pump sample tubing, organics	8423 120 51531
Pump drain tubing, organics	8423 120 51541

VOLATILE ORGANICS KIT FOR RADIAL ICP SYSTEMS, PART NUMBER (8423 120 51111) CONSISTS OF:

Radial quartz torch	8423 120 51561
Quartz centre tube, 1 mm ID	8423 120 51561
Radial spray chamber adaptor	8423 120 51561
Spray chamber, jacketed organics	8423 120 51441
V-groove nebulizer	8423 120 51321
Ball joint clip	8423 120 51581
Pump sample tubing, organics	8423 120 51531
Pump drain tubing, organics	8423 120 51541

HF RESISTANT KIT FOR RADIAL ICP SYSTEMS, PART NUMBER (8423 120 51121) CONSISTS OF:

Radial quartz torch	8423 120 51141
Ceramic centre tube, 2 mm ID	8423 120 51361
Radial spray chamber, HF	8423 120 51451
Mira Mist nebulizer	8423 120 51471
Pump sample tubing, aqueous	8423 120 51511
Pump drain tubing, aqueous	8423 120 51521

HIGH SOLIDS KIT FOR RADIAL ICP SYSTEMS, PART NUMBER (8423 120 51131) CONSISTS OF:

Radial quartz torch	8423 120 51141
Quartz centre tube, 2 mm ID	8423 120 51371
Radial spray chamber adaptor	8423 120 51151
Spray chamber organics	8423 120 51311
Aerosalt nebulizer	8423 120 51331
Ball joint clip	8423 120 51421
Pump sample tubing, aqueous	8423 120 51511
Pump drain tubing, aqueous	8423 120 51521