





ERAFLASH S10



AD-F



CAV 4.2



TDC-320V



SFC 4000



SINIE



DECADE



GC-2010



NEX GC











era-analytics
 Committed to deliver Quality
 P.O. Box 203019, Dubai, UAE, Dubai Airport Freezone, LTU B-03
 Tel: 04 289 3335 Fax: 04 289 3391 Email: info@era-analytics.com
 Web: www.era-analytics.com



Committed to Deliver Quality



Physical properties



Chromatography



Elemental Analysis



Life Science

era-analytics
 Committed to deliver Quality

Era Analytics..... COMMITTED TO DELIVER QUALITY

Introduction

In the early 2012, two industry leaders with almost 40 years accumulative experience have got enthusiastic to form Era Analytics as a evolution in the petroleum industry laboratory-segment. Era Analytics is a dedicated platform to supply innovative Chromatography solutions, petroleum and elemental testing solutions, services, applications, Training, and support to the hydrocarbon process industry laboratories. With a clear goal of acting value proposition to petroleum analysts to make state of the art easier, faster and much more reliable!

Era Analytics Operates in the Middle East and Africa through a Head office in Dubai airport Free Zone. Satellite offices and channel partners around the entire region.

In the era of speed and competition where time is a major factor of reliability and quality in our work life in particular... complex data, Processes, Technology and equipment's demand a greater expertise from every one of us, combine with a measure of light assisting constructive as could lead to risk factor in the processes which might have a vital consequences on analytics, laboratory processes flow, Operation, material production or could lead to stock waste... here where we come. Era Analytics With a team of extensive diversified experience, high competency level in terms of interpersonal skills, comprehensive knowledge of industry and Products has been able to give our customer value by understanding their analytical elements and come up with an appropriate unique economic solution to resolve bottleneck, minimize error rates and help our customers to enhance their laboratory process flow!

With Era Analytics Innovation Center in Dubai, We come up with creative solutions to the Oil and Gas industry!

- At our innovation centers we carry out Variety of Innovative Activities:
- New applications developments
- Building and Quality Chromatography solutions to meet with the industry demands
- Performance Facility Accreditation (ISO 17025)
- Consulting customer training.....and much more

Era Analytics exclusively represents a group of well know principals who supply high quality and robust products to the Hydrocarbon Process Industry laboratories in the entire globe.

Era Analytics..... ONE STOP SHOP

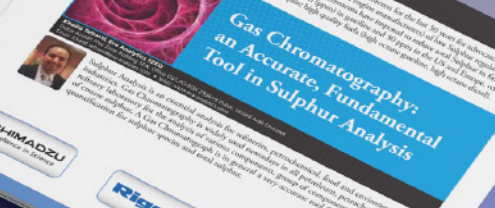
We Supply almost all laboratory products necessary to the Oil & Gas customers covering all range of physical properties, testing equipment's as well as chromatography analysis. With our team's experience and knowledge, Era Analytics has formed a Training Center located in Dubai providing a broad range of technical training courses to meet with the needs of different operator's levels starting from beginners to high caliber Operators but never end!



Era Analytics is simply committed to deliver quality, being an ISO 9001:2008, ISO 14001 and HSE 18001 certified Organization, Era gives more attention to Quality in terms of competency, Products, Services, work flow, Production as well as Quality Control Protocols and more important are Services provided to our esteemed customers.

Industry Insiders RELY on Era Expertise

PETRO Industry News is the most international well-known publisher and information provider of products in the petroleum related industry RELYING on Era Analytics expertise to publish serious articles!





ERAFLASH S10



AD-7



CAV 4.2



TOC-300V



SFC 4000



SINDIE 7039 G3



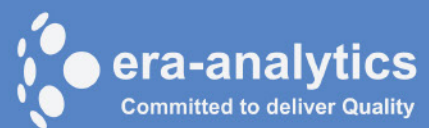
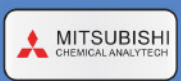
DECADE ELITE



GC-2010PLUS



NEX QC.



P.O.Box : 293619, Dubai, UAE Dubai Airport Freezone, LIU B-03,
Tel : 04 288 3385, Fax : 04 288 3381 Email : Info@era-analytics.com,
Web : www.era-analytics.com



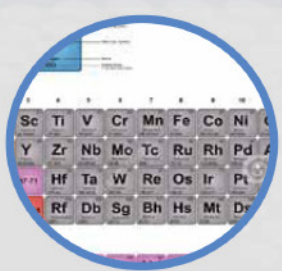
Committed to Deliver Quality



Physical properties



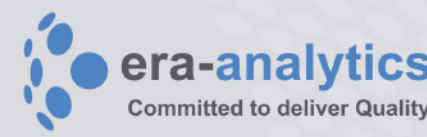
Chromatography



Elemental Analysis



Life Science



Era Analytics..... COMMITTED TO DELIVER QUALITY

Introduction

In the early 2012; Two Industry insiders with almost 40 years accumulative experience have got enthusiastic to form Era Analytics as a revolution in the Petroleum Industry laboratory supplies. Era Analytics is a dedicated platform to supply Innovative Chromatography solutions, petroleum and elemental testing solutions, services, applications, Training and support to the hydrocarbon process industry laboratories. With a clear Goal of adding value proposition to petroleum analyzers to make state of the art easier, faster and much more reliable!

Era Analytics Operates in the Middle East and Africa through a Head office in Dubai airport Free Zone, Satellite offices and channel partners around the entire region.

In the era of speed and competition where time is a major factor of profitability and supplies to our work life in particular... complex data, Processes, Technologies and equipment's demand a greater expertise from every one of us, combined with a pressure of tight deadline constrictions all could lead to bottleneck in the processes which might have a fatal consequences on analytics, laboratory processes flow, Operation, Industrial production, Profitability and stock value....here where we come; Era Analytics With a team of extensive diversified experience, high competency level in terms of inter-personal skills, comprehensive knowledge of Industry and Products has been able to grow our customer base by understanding their analytical dilemmas and come up with an appropriate unique economic solutions to obviate bottleneck, minimize error rates and help our customers to enhance their laboratory process flows!

With Era Analytics Innovation Center in Dubai, we come up with creative solutions to the Oil and Gas industry!

At our Innovation centers we carry out Variety of innovative Activities:

- New application developments
- Building and Testing Chromatography solutions to meet with the industry demands
- Performing Factory Acceptance Tests (FAT)
- Conducting customer training.....and much more

Era Analytics exclusively represents a group of well know principals who supply high quality and robust products to the Hydrocarbon Process Industry laboratories in the entire Globe.

Era Analytics..... ONE STOP SHOP

We Supply almost all laboratory products necessary to the Oil & Gas customers covering all range of physical properties testing equipment's as well as Chromatography analyzers.

With our team long experience and Knowledge; Era Analytics has formed a Training Center located in Dubai providing a broad range of technical training courses to meet with the needs of different operator's levels starting from beginners to high caliber Operators but never end!



Era Analytics is simply committed to deliver quality, being an ISO 9001:2008, ISO 14001 and HSE 18001 certified Organization, Era gives more attention to Quality in terms of manpower competency, Products, Services, work flow, Production as well as Quality Control Protocols and more important are Services provided to our esteemed customers.



Industry Insiders RELY on Era Expertise

PETRO Industry News is the most International well-known publisher and information provider of products in the petroleum related industry RELYING on

Era Analytics expertise to publish serious articles!



Analytical Instrumentation - Focus on Sulphur Analysis

Sulphur Analysis, a Downward Spiral of Detection Limits

Khalid Tafrezi, Era Analytics
Dubai Airport Free Zone, Building 70A, Office G041, PO BOX 203619, DUBAI, United Arab Emirates
Mob: +971 504521541 • Tel: +971 4 2320451 46 • Fax: +971 4 2320457
E-mail: khalid.tafrezi@era-analytics.com • Web: www.era-analytics.com

Sulphur in finished fuels has been the focus of interest for the last 50 years for advocates (environmentalists, governments, auto and engine manufacturers) of low Sulphur regulations. The environmental organisations and governments have imposed to reduce total Sulphur in finished fuels down to 10 parts per million (ppm) in gasoline and 50 ppm in the US and Europe, where improved engine designs require high quality fuels (high octane gasoline, high cetane diesel).

Gas Chromatography: an Accurate, Fundamental Tool in Sulphur Analysis

Khalid Tafrezi, Era Analytics FZCO
Dubai Airport Free Zone Building 70A, Office G041, PO BOX 203619 Dubai, United Arab Emirates
Email: khalid.tafrezi@era-analytics.com • Web: www.era-analytics.com

Sulphur Analysis is an essential analysis for refineries, petrochemical, food and environmental industries. Gas Chromatography is widely used nowadays in all petroleum, petrochemical and refinery laboratory for the analysis of various components, group of components, impurities and of course sulphur. A Gas Chromatograph is in general a very accurate tool for qualification and quantification for sulphur species and total sulphur.



Welcome to a New Era of Petroleum Testing

Era Analytics is simply committed to deliver quality, being an ISO 9001:2008, ISO 14001 and HSE 18001 certified Organization, Era gives more attention to Quality in terms of manpower competency, Products, Services, work flow, Production as well as Quality Control Protocols and more important are Services provided to our esteemed customers.



• ERASPEC Spectral analysis in seconds

A portable mid-FTIR spectrometer developed for a fast as 60 second measuring time and fully automated stand alone operation of important parameters of gasoline and diesel fuel. Determine several important fuel properties like Octane and Cetane numbers, FAME, Density as well as distillation points. Analysis and comparison of fuel spectra as graphic chart directly on

Technical Specifications

Available test methods	ASTM D6846, D6377, D7806, EN 238, EN 14076, ISO15212, IP 559 Excellent correlation to ASTM D86, D323, D613, D976, D2699, D2700, D4814, D5191, D6378, ISO 3405, ISO 5163, ISO 5164, ISO 5165, EN 13016
Spectrometer type	NIR/MID-FTIR interferometer (patented laser and temperature controlled design), 16,384 data points.
Measurement cell	Optimized single or dual-position cell for gasoline, Diesel fuel and jet fuel
Calibration	Factory calibrated with a matrix of several hundred international fuels
Cleaning	Automatic rinsing with next sample solvent



• ERAVAP One Vapor Pressure for all application

A compact stand-alone analyzer for automated vapor pressure measurements of automotive gasoline, aviation gasoline, hydrocarbon solvents, LPG and crude oil as well as of fragrances, polymers and other liquids. Excellent correlation to ASTM D323, D2533, D4953, D5190, D5482 and D1267



• ERASPEC OIL Fingerprint Your Fuel in Seconds

A portable stand-alone infrared analyzer for high-speed lubricant oil analysis and condition monitoring in full compliance with ASTM, DIN and JOAP methods. Measures contaminants, degradation products, additive depletion as well as calculated properties like TAN, TBN, and viscosity within seconds.

Technical Specifications

Available test methods	ASTM E2412, ASTM D7112, D7414, D7415, D7418, D7624, JOAP DIN 51452, DIN 51453 Excellent correlation to ASTM D445 to ASTM D445, D684, D2270 and D2696
Spectrometer type	NIR/MID-FTIR interferometer (patented laser and temperature controlled design), 16,384 data points.
Sample introduction	Directly from the sample container by an integrated pump
Calibration	Factory calibrated with a matrix of international oils
Cleaning	Automatic rinsing with next sample solvent. Integrated filter of measurement cells

Technical Specifications

Available test methods	ASTM D5188, D5191, D6377, D6378, D6897, EN13016-1, EN13016-2, IP394, IP409, IP481, JIS K2259-2, SH 0769, GOST 52340, EPA/CARBUS Military & NATO reference methods.
Pressure Range	EV01 ERAVAP: 0 to 1000 kPa (0 to 145 psi) EV02 ERAVAP: 0 to 2000 kPa (0 to 290 psi)
Vapor/Liquid ratio	Variable from 4/1 to 0.02/1; single & multiple measurements; V/L Curve Measurement
Sample Introduction	Automated via built in piston, no external vacuum pump required
Temperature Range	0°C to 120°C (32 to 248°F); Peltier technology, no external cooling necessary

Welcome to a New Era of Petroleum Testing



• ERACHECK Analyze Oil in Water with Highest Precision

Fast and easy measurement of sub-ppm concentrations of Total Petroleum Hydrocarbons (TPH) and Total Oil and Grease in in water and oil.

CFC free extraction with low-cost solvent according to ASTM D7678. Measurements based on highly precise **Quantum Cascade Laser science**

Technical Specifications

Available test methods	ASTM D 7678-11
Applications	TPH and TOG contamination measurements
Measurement Range	0.5 to 2000mg/L (ERACHECK PRO) 1.5 to 200 mg/L (ERACHECK)
Extraction Solvent	Cyclohexane Cyclopentane (ERACHECK PRO only)
Cleaning Method	Simplified removal of polar substances over optional na2SO4 / Florisil cartridges
Extraction Method	External liquid-liquid (solid-liquid) extraction



• ERAFLASH S10 One flash point tester for All Applications

Unattended flash point testing of up to 10 samples per hour in full compliance with safest ASTM D6450 & D7094 methods.

ERAFLASH S10 offers the same extended measurement range from -25 up to 420°C (-13 to 788°F) as our standard ERAFLASH analyzer.



• ERAFLASH One flash point tester for All Applications

Fresh & used oils including fuel dilution measurements Diesel & jet, FAME (biodiesel), asphalt & bitumen Flavors & fragrances, paints & varnishes, solid & liquid waste Mobile laboratories, military applications, flash/no flash tests. All this with a single analyzer in full compliance with the safest flashpoint standards ASTM D6450 & D7094, with proven correlation to ASTM D93 & EN ISO 2719.

Technical Specifications

Available test methods	ASTM D6450 & D7094
PBT-Peltier Boost Technology™	High speed heating and cooling, -25 to 420°C (-13 to 788°F) with single analyzer
Temperature Range	0 to 200°C (32 to 390°F) stand alone. No external cooling is required. -25 to 0°C (-13 to 32 °F) with water cooling/chiller. 200 to 420°C (390 to 788 °F) with optional High Temperature Module (EFD1-HTM)
Combustion Graphics	Display of combustion characteristics for contamination analysis

Technical Specifications

Available test methods	ASTM D6450 & D7094
Pre-programmed Correlation methods	ASTM D93c, EN ISO 2719c, DIN51758c, IP 34c, JIS K2255c- Pensky Martens Closed Cup ASTM D56c- TAG Closed Cup ISO 13736c & IP 170c- Abel Pensky Closed Cup EN ISO 3679c & 3680c, ASTM D3820c - Small Scale Closed Cup Flash/No Flash methods
CPT-Contamination Technology™	ASTM D6450 & D7094
Speed Test	Fast screening test programs for unknown samples

TANAKA



AD - 7 (Automated Atmospheric Distillation analyzer.)

AD-7 is the next Generation to series 6 with all in one fully automatic atmospheric distillation tester – Advanced technology with more than 500 test Modes can be set. Windows based software, fully automatic determination of Initial Boiling Point (IBP), Final Boiling Point (FBP), Drying Point, Barometric and Residue correction. Just by selecting the program and setting the sample then pressing the start button, AD-7 carries out the distillation test process automatically and prints out the results by the built-in printer.

Technical Specifications

Test Methods:	ISO 3405, IP123/195, ASTM D86/D850/D1078, JIS K 2254
Display:	TFT-LCD 10.4" Color Touch-screen with universal design GUI
Test Ranges:	Selectable from 0°C to 300/450°C (fuel oil... or 0°C to 200/450°C (ASTM D850, D1078 with optional accessories) by PT-100 ±0.1 °C accuracy
Safety features:	Fire Containment system: Heater shuts down when ultraviolet sensor detects a fire, and CO2 gas flows into the heater room (if connected to CO2 source) Overheat protection: Heater shuts down automatically at the upper end of the temperature scale
Temperature Sensor:	Pt 100 for Vapor, Condenser, and Receiver room; Thermocouple for Heater; Heater 24 V 600 W Low Mass and Low Voltage Heater, Spiral Type

ABL-8A / ABL-8L

Abi-8 is an automated Abel Closed Cup flash point tester to cover flammable and combustible materials for shipping and safety regulation. Heating / cooling is by energy efficient Peltier modules attached to a metal block bath. Air cooled model abi-8a and liquid cooled model abi-8l are available for different ranges.



Technical Specifications

Test Methods:	ISO 13736, ISO 1516/1523, IP 170
Measuring Range:	+10°C to +110°C for abi-8a; -30°C to +110°C for abi-8l (with an optional chiller)
Ignition Source:	Gas flame or Electric Coil
Temperature Sensor:	PT-100 in stainless steel sheath
Flash Detector:	CRC Thermocouple
Safety Shutdown:	Automatically shuts off and the problem is reported by buzzer and display
Size / Weight:	230W x 470D x 385H(mm), approx.16kg

APM-8

apm-8 is an automated Pensky-Martens Closed Cup flash point tester. Three test methods are built in for varied samples: Procedure -A for homogeneous petroleum liquids such as distillate fuels, Procedure-B residual fuel oils and some other non-homogeneous liquids, and Procedure-C biodiesel.



Technical Specifications

Test Methods:	ISO 2719, ASTM D93, IP34 JIS K2265-3
Measuring Range:	Ambient to 370°C
Ignition Source:	Gas flame or Electric Coil
Temperature Sensor:	PT-100 in stainless steel sheath
Flash Detector:	CRC Thermocouple
Safety Shutdown:	Automatically shuts off and the problem is reported by buzzer and display
Dimension & Weight:	230W x 470D x 385H(mm), approx.17kg

ATG-8W / ATG-8L

Atg 8 is an automated Tag closed cup flash point tester. The model Atg-8w is with conventional water bath, model atg-8l with metal block bath is available for low temperature range. The cooling / heating for model atg-8l is by liquid cooled Peltier modules. Atg-8l requires an optional chiller.



Technical Specifications

Test Methods:	ASTM D56, IP 304, JIS K2265-1
Measuring Range:	Atg-8w: Ambient to +95° C; atg-8l: -20° C to +70° C at cooling medium of 10 ° C; 20 ° C to +95 ° C at cooling medium of 50° C
Ignition Source:	Gas flame or Electric Coil
Temperature Sensor:	PT-100 in stainless steel sheath
Flash Detector:	CRC Thermocouple
Safety Shutdown:	Automatically shuts off and the problem is reported by buzzer and display
Dimension & Weight:	230W x 470D x 385H(mm), approx.17kg

TANAKA

ACO-8 / ACO-8AS



ACO-8 is an automated Cleveland Open Cup (COC) flash & fire point tester. Gas test flame is ignited automatically. Fire point is determined automatically when sustaining combustion has been detected for 5 sec. Fire containment by a metallic lid covers the test cup automatically when a sustained fire is detected.

Technical Specifications

Test Methods:	ISO 2592, ASTM D92, IP 36, JIS K-2265-4
Measuring Range:	Ambient to 400°C
Ignition source:	Gas ignition with 2 pilot electric coils
Temperature sensor:	PT-100 in stainless steel sheath
Cooling Device:	Forced air cooling by sirocco fan
Flash detector:	Double ionization rings
Dimension and weight:	230 x 470 x 385 mm (WxDxH), approx. 16 kg
Power Consumption:	1000 W

ACO-T602

ACO-T602 automatically carries out Cleveland open cup fast point test up to 6 samples continuously. Equipped with fire containment lid which activates automatically to help putting out fire when it detects specimen is burning up heavily.



Technical Specifications

Test Methods:	ISO 2592, ASTM D92, IP 36, etc.
Measuring Range:	Ambient to 400°C
Safety:	Heater cut-off and fire containment lid
Type:	Programmable with 6-position carousel
Ignition Source:	Electric coils x 2
Dimension and weight:	Control unit: 230 x 455 x 110 mm (WxDxH), 6 kg
Test unit:	405 x 515 x 400 mm (WxDxH), 32kg
Power Consumption:	1,500 W

ASP - 6

Asp-6 automates softening point test by ring-and-ball for bitumen and other materials by utilizing photo-electric device with a wide light beam, which assures reliable detection.



Technical Specifications

Test Methods:	ASTM D36, ASTM E28, EN 1427, IP 58, etc.
Type:	Ring and ball, 2 test
Range:	ambient to 200°C (392°F)
Temperature Sensor:	PT-100 in stainless steel sheath
Detection:	by a photo transmitter / receiver
Dimension and weight:	230 x 470 x 440 mm (WxDxH) / 15kg
Power Consumption:	1,500 W

MPC - 102S

MPC-102s is designed for determination of Pour point (PP) and Cloud Point (CP) with small specimen size shorter test cycle time.

Ultra Low Temp Without Liquid Chiller

With a cryo block bath, model CB-80C manufactured by SCINICS®, MPC -102s works without an external liquid chiller.

Compact design & Energy Efficient

A compact and energy efficient cryo block bath model CB-80C is capable of cooling the samples to -65°C without a liquid chiller. Electricity consumption is only 20% comparing to MPC-120L with external liquid chiller.



Technical Specifications

Test Methods:	PP: ASTM D6749, ASTM D97, ISO 3016 CC: ASTM D7683, ASTM D2500, ISO 3015
Type:	Bench top, 1 position with cryo block bath
Measuring Range	+51°C to -65 °C
Automatic Pre-heating:	Automatic pre-heating at either +45 °C or EPP +10°C (EPP: Expected Pour Point)
Sample Cooling Rate:	As standard, 4°C/min till EPP +40°C, and 1°C/min. Thereafter cooling profile is programmable
Safety shutdown:	As hot side of TED reaches 60°C while preheating, warning buzzer beeps and heating stops
Dimension and weight:	300 x 460 x 320 mm (WxDxH) / 15kg; 222 x 407 x 238 mm (WxDxH) (CB-80C); 11 kg +13kg (CB-80C)

TANAKA

MPC – 102A / MPC – 102L

MPC 102 series has been designed for automatic determination of Pour Point by air pressure method (patented) and Cloud Point by photo-electrically, with a small specimen size and shorter cycle time.

Technical Specifications

MPC – 102A

Test Methods:	PP: ASTM D6749, D97, ISO 3016
Type:	Bench top, 1 position, with air cooled Peltier cooler
Measuring Range:	+51 to -25°C in 25°C ambient
Dimension & Weight:	230 x 480 x 385 mm, 20kg

MPC – 102L

Test Methods:	CP: ASTM D7683, D2500, ISO 3015
Type:	Bench top, 1 position, with air cooled Peltier cooler
Measuring Range:	+51 to -65 °C when used with 1 set of TCU40B chiller (opt)
Dimension & Weight:	230 x 480 x 385 mm, 20kg

AAP-6

Automatic Aniline point tester 6 is capable of covering a wide range of samples with the use of special infrared detector that gives the instrument its ability to see through dark/ opaque samples such as power generation fuels and marine diesel oils.



Technical Specifications

Test Methods:	ISO 2977, ASTM D611, etc.
Samples:	transparent or opaque / dark (< 8.0 on ASTM color scale) petroleum products
Range:	ambient to 170°C (338 °F), below RT with optional jacketed cell and external chiller
Measuring cell:	Modified U-tube type, vacuum jacketed glass cell with PTFE stopcock at the bottom
Aniline Point Detector:	Photo-electric cell, with special detection circuitry
Temperature Sensor:	Pt 100 in stainless steel sheath
Dimension & Weight:	230 x 470 x 490 mm (WxDxH); 14 kg

FXE-400S

Fxe-400s is Tanaka's latest EDXRF sulfur analyzer equipped with an optimized X-ray pa and a high precision preamplifier developed through collaboration with Japan Atomic Energy Agency (JAEA).

- High Precision: LOD=2mg/kg, conforming to ASTM D4294-10
- X-Ray Pass Optimization yields significant reduction in background noise
- User friendly software embedded in pc for more power and reliability while improving user interface.
- Use of paper cell minimizes the risk of oil leak and contamination with minimum effort.

Technical Specifications

Test Methods:	ASTM D4294-10, ISO 8754/20847, JIS K2541-4
Measuring Range:	15mg/kg to 6 mass % (when He purged)
X-ray Source:	Air cooled X-ray tube (rated 1W)
X-ray Detector:	Gas filled SPC (Sealed proportional counter)
Calibration Curve:	Up to 10 points, Linear, Quadratic curve or Broken line; 10 x Calibration Curve can be stored
Correction:	C/H Correction, Temperature Correction
X-ray pass:	He gas (>99.9%), N2 Gas (>99.9%)
Sample Volume:	5 ml
Sample Cell:	Disposable paper cell (double wall)
Dimension & Weight:	360 x 410 x 135 mm (WxDxH); 12.5 kg

MPC - 602

Mini Pour Point (PP) and Cloud Point (CP) tester with 6 test heads in Bench-top package. With sequential CP and PP measurement capability Sample cooling and pre-heating by Peltier modules with external cooling liquid



Technical Specifications

Test Methods:	PP: ASTM D6749/D97, ISO 3016; CP: ASTM D7683/ D2500, ISO 3015
Measuring Range:	+51°C to -65 °C with cooling liquid of -35 °C, + 51 °C to -60 °C with cooling liquid of -25 °C, +51°C to -40 °C with cooling liquid of -35 °C
Specimen Volume:	4.5 mL
Sensors:	Compound type sensor assembly for PP and CP. PP detected by air pressure method (patented). CP detected photo electrically. Pt100 sensors.
Dimension & Weight:	800 x 550 x 850 mm (WxDxH); 100 kg

TANAKA

EDXRF Sulfur Analyze RX-630SA

Operability improved by adoption of 5" color touch screen



RX-630SA determines total Sulfur in petroleum products using energy dispersive X-ray fluorescence method, which is an accurate, non-destructive, economical and yet quick method prescribed in , ISO 8754 and ASTM D4294-03.

Technical Specifications

Test standard	JIS K 2541-4, ISO 8754, ASTM D4294-03, etc
Sample	Kerosene, Naphtha, Gas oil, Crude oil, Base oil, etc
Measuring Range:	0 to 6 wt%
Measuring time	10 to 990 sec. 1 to 99 times
Sample Changer:	Carousel type 12-position (sample volume: approx. 3 ml)
X-ray source:	Small air - cooled X-ray tube rated 7 kv -0.2 mA
MX-ray detector	Gas-filled sealed proportional counter, long life type
Sample cell:	Reusable 2-piece PTFE cup with disposable cell sheet
Printer:	Built-in dot matrix type, paper width: 57 mm
Safety:	Cut-off X-ray tube power supply by interlock system when x-ray is leaked
Size, Weight:	555 x 555 x 262 mm, 27 kg

RX-360SH

RX-620SH is a single test version of X-ray sulfur meter taking the same measuring principle as that of RSX620SA. Compact design unit with carrying handle and 2-way power source (100-240VAC*1 or 12VDC battery*2) allows such applications as spot-checking in the field. The only consumable is small piece of Mylar film and printing paper, making the running cost at minimal.



Technical Specifications

Test Methods:	ISO 8754, ASTM D4294-03, etc.
Measuring Range:	0.003 to 6.00 mass%
Repeatability:	10mg/kg (as per ASTM D4294-desogantion) * at
Measuring time:	10-990 sec. 1-99 times
Sample Cell:	2-piece Teflon cup with disposable mylar film
Number of test:	One (1)
Dimension Weight:	420 x 350 x 140 mm (WxDxH) , 12.5 kg

ACL-2

ACL-2 was designed for automatic measurement of Saybolt/ASTM color of petroleum products utilizing the Tri-Stimulus method as prescribed in ASTM D6045, which correlates with the conventional D156 and D1500 respectively. Typical measurement takes a mere 9 seconds, which is considerably shorter than the time a spectrophotometer would require. (typically 25 seconds)



Technical Specifications

Test Methods:	ASTM D6045, JIS K2580
Type:	Tri-stimulus filter colorimeter (wavelength range: 380 - 780nm)
Color scales:	Saybolt, ASTM, Platinum-Cobalt, Gardner
Light Source:	Halogen bulb (12V 20W)
Sample Cells:	glass cells or optional flow cells
Printer:	Thermal Printer with 80mm paper width
Dimension & Weight:	400 x 400 x 190 mm (WxDxH), 12.2 kg

ACR-M3

ACR-M3 is a tester used for the determination of the amount of carbon residue formed after evaporation and pyrolysis of petroleum material under certain conditions and is intended to provide some indication of the relative coke forming tendency of such materials.



Technical Specifications

Test Methods:	ISO 10370, ASTM D4530, etc.
Measuring Range:	0.10 to 30 % (m/m)
N2 Gas flow rate:	automatically regulated, and displayed on the front panel
Coking oven:	with circular heating chamber, 85 mm diameter by 105 mm deep, made of stainless steel
Dimension & Weight:	350 x 390 x 460 mm (WxDxH), 21kg

TANAKA



ACR-6

ACR-6 automates the cracking / coking process of Conradson carbon residue test. The microprocessor controlled oven requires less experience to conduct the tedious process and therefore yields more consistent test result.

EASY OPERATION: Optimum heater output for prescribed burning process is programmed with ease prior to a test. Once a test starts, no further adjustment needs to be done.

Technical Specifications

Test Methods:	ISO 6615, ASTM D189, IP 13, etc
Process Control:	built in micro-processor
Heating Device:	Nichrome coil heater, side and bottom, 1.3kW@100V or 1.3kW@220V
Igniting Device:	Pilot burner system. LP gas or city gas. Pilot burner is ignited manually before each test
Cooling Device:	Forced air cooling by sirocco fan
Dimension/ Weight:	Control unit: 250 x 360 x 190 mm(WxDxH), 7.5 kg;
Heating unit:	190 x 260 x 440 mm(WxDxH), 5.5 kg

AVP-30D

AVP-30D automatically measures Reid vapor pressure (RVP) utilizing a miniaturized bomb. Compact size cylinders allow easier handling, yet yielding the same test results compared to the heavy full size cylinders. Semiconductor type vapor pressure sensor and reliable/efficient see-saw shaking mechanism are employed. The semiconductor sensor is extremely stable, yielding consistent test results.



Technical Specifications

Test Methods:	ISO 3007, ASTM D323, IP69, etc
Type:	Bench-top with 2,3, or 4 Demi-size cylinders
Measuring Range:	0 to 196kPa (2kgf/cm ²)
Bond:	stainless steel bomb with approx. 60% in length and 30% in volume of regular Reid bomb
Dimension/ Weight:	400 x 600 x 740 mm / 45 kg
Option:	Manometer, air compressor



AFP-102

The model AFP-102 automatically executes the Cold Filter Plugging Point (CFPP) test method. Use of Peltier cells for sample cooling/heating made this tester methanol free. No big chiller is needed; a small chiller with antifreeze suffices the cooling requirements.

Technical Specifications

Test Methods:	ASTM D6371, IP 309, etc
Type:	Bench-top, 1 position, with liquid cooled Peltier cooler
Measuring Range:	RT to -60°C when used with 1 set of TCU-40B chiller (opt)
Display:	By a fluorescence display(VFD) Temperatures displayed with 0.1°C increments
CFPP Detection:	By means of a photo-electric detector consisting of an LED, photo transistor, and light guide (fiber optics). Upper and lower light guides are mounted on sliding type holder.
Dimension/ Weight:	350 x 550 x 480 mm / 27 kg

AKV-202

AKV-202 has been designed for automatic determination of Kinematic Viscosity. Covers a wide range of Kinematic viscosity with the modified Lanz-Zeitfuchs viscometers. The reverse flow viscometer covers both transparent and opaque samples and also eliminates drainage error.



Technical Specifications

Test Methods:	ISO 3104, ASTM D445, IP71, etc
Type:	Bench top automatic KV measuring system with 2 viscometers in 1 bath
Viscometers:	Modified Lanz-Zeitfuchs viscometers
Measuring Range:	1 to 10,000 mm ² /s
Bath Temperature:	preset at 25, 40, 50, 80 and 100°C (+1 temp point available as option between 20-100°C)
Dimension/ Weight:	530 x 560 x 930mm / 75kg



Latest international standards for determination of olefin contents in gasoline and aromatics / poly nuclear aromatics in diesel aviation fuels by SFC according to ASTM D6550 & D5186



ASTM D6550 Olefins in Gasoline, ASTM D5186 Aromatics in Diesel

Split/splitless injection technique for capillary column analysis supercritical fluid chromatography is now simple and repeatable

The Selerity Series SFC 4000 series is designed specifically for ASTM D6550 and ASTM D5186 methods to achieve optimum performance and easy operation for the analysis of olefins in Gasoline; Aromatic, Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels.

- Directly injects the sample onto the column while eliminating the effects of dead volume.
- Higher loadability of analytes on capillary columns for greater sensitivity and better precision.
- Decreases solvent effects of early eluting peaks and improves the peak shape of all analytes in your sample.
- Separates volatile analytes from the solvent.
- Increased sensitivity allows resolution of compounds with a much higher molecular weight than heretofore possible.

What is supercritical fluid chromatography?

A chromatographic technique in which the mobile phase is neither a gas nor a liquid, but has properties of both: formally a supercritical fluid. At pressures and temperatures above its critical point, a gas becomes a supercritical fluid and it possesses densities and other properties that are intermediate between those of gases and liquids.



Fully integrated series 4000 supercritical fluid chromatograph rugged, reliable, reproducible, and easy to use

- Fully integrated software that controls pump, oven, autosampler, and data acquisition package
- Temperature-controlled pressure transducer for better reproducibility
- 10 mL syringe pump for pulse-free pressure-controlled flow and minimal CO₂ usage
- Innovative column technology to suit all of your application requirements
- Large capacity oven suitable for any column configuration
- A secondary independent column heater to improve peak shape and decrease analysis times
- Low dead volume injections and column switching with Secure-Fit

The series 4000 syringe pump provides essentially pulse-free, pressure-controlled flow

- The temperature-controlled pressure transducer is an exclusive design to Selerity Technologies. This design feature assures that the retention times are reproducible run after run, independent of changes in the laboratory temperature environment.
- Electronic cooling of the pump head assures maximum fills and accurate deliveries. Cooling the carbon dioxide also provides better pump control by decreasing compressibility of the fluid at temperatures near 0 °C.
- Small 10-mL syringe means less torque stress for longer pump life. Automatic refill after every run guarantees you will have a full syringe for every analysis
- Simple pump design with few moving parts means less downtime. The seals used in the Series 4000 SFC have demonstrated long lifetime resulting in low maintenance.
- Automatic shutdown when sensing low carbon dioxide pressure. The series 4000 will automatically stop when the limit switch is reached and triggers the pump to the default fill position. Consequently, pump burnout is eliminated.
- Delivers volumes sufficient for packed (1 mm ID) and capillary column analyses.



Large capacity oven suitable for any column configuration



- Stable oven provides accurate heating zones for both packed and capillary column operation.
- Large capacity for any anticipated column type used with SFC.
- Flame ionization detector is standard on the Series 4000. This general purpose, universal detector is stable to flow from capillary through 1-mm packed columns.
- Helium actuated valves for the fastest possible switching, giving you crisp, low dead volume injections and better confidence in your data. Because of its lower molecular weight and viscosity, helium provides actuation speeds approximately four times faster than possible using nitrogen or electronic driven actuation.

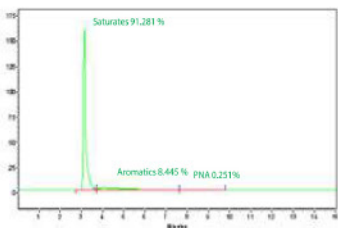
An easy-to-use software package that takes control of your analysis

Series 4000 system offers an operating software package which provides a smooth, seamless operation between pump, oven, autosampler and data collection.

All method parameters are conveniently built into the analysis method from the computer keyboard.

A sequence containing a series of different analysis methods can be set up and run by simply building and starting the sequence run. All method parameters will change according to the method commands.

Chromatogram Obtained from ASTM Method D5186



CHROMATOGRAPHIC RESULTS OF GASOLINE SEPARATED INTO ITS COMPONENTS: SATURATES, AROMATICS, AND DLEFINS.

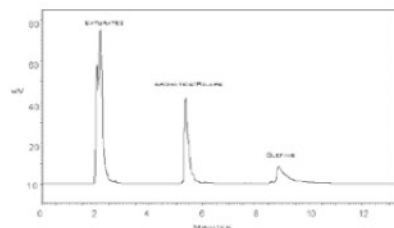


TABLE 2: RESULTS OF THE ANALYSIS OF DIESEL AND AVIATION FUELS					
	Run 1	Run 2	Run 3	Average Area (%)	STD
DIESEL A					
SATURATES	87.82	87.82	87.49	87.71	0.10
MONOSATURATES	28.23	28.16	28.12	28.10	0.19
POLYNUCLEAR AROMATICS	7.15	7.23	7.19	7.19	0.03
TOTAL AROMATICS	32.19	32.38	32.31	32.29	0.24
DIESEL B					
SATURATES	85.35	85.35	85.39	85.33	0.07
MONOSATURATES	28.08	28.16	28.03	28.09	0.09
POLYNUCLEAR AROMATICS	6.59	6.59	6.59	6.59	0.00
TOTAL AROMATICS	24.65	24.74	24.61	24.67	0.15
AVIATION FUEL A					
SATURATES	83.59	83.73	83.64	83.65	0.07
MONOSATURATES	14.32	14.30	14.30	14.30	0.11
POLYNUCLEAR AROMATICS	2.00	1.97	2.03	2.00	0.06
TOTAL AROMATICS	16.41	16.27	16.35	16.35	0.23
AVIATION FUEL B					
SATURATES	77.4	77.33	77.44	77.39	0.06
MONOSATURATES	19.80	19.97	19.89	19.86	0.15
POLYNUCLEAR AROMATICS	2.79	2.79	2.65	2.75	0.05
TOTAL AROMATICS	22.60	22.67	22.56	22.61	0.20

RESULTS OBTAINED FROM THE SERIES 3000 SFC COMPARED TO THE ASTM ROUND-ROBIN AVERAGE

Series 3000 Runs	Sample Number	7	2	3	4	5	6	7	8	9	10	11	12	13	14	15
System 1 Run 1	7.0	13	17.8	11.9	1.4	3.0	9.8	4.8	13.6	12.1	6.4	21.2	13.6	25.7	11.8	
System 1 Run 2	7.1	13	17.8	10.9	1.4	3.2	10.3	4.8	14.4	12.2	6.5	20.9	13.8	26.9	11.0	
System 2 Run 1	6.7	8.9	15.0	10.5	1.1	2.4	9.4	4.1	13.6	12.8	6.1	20.3	14.3	27.5	11.7	
System 2 Run 2	6.7	8.8	15.2	10.5	1.1	2.4	9.4	4.1	13.7	12.8	6.1	20.2	14.3	27.5	11.6	
W Average	6.8	12	16.3	10.5	1.3	2.7	9.1	4.1	13.8	12.5	6.0	19.3	13.5	25.9	11.1	

Chromatography Applications



era-analytics offers innovative Gas and Liquid chromatography chemical analysis systems and customer specific solutions based on the market-leading instrumentation platforms.

Era-Analytics understands the hydrocarbon processing industry specific needs and have designed innovative and unique products solutions to best serve our HPL. Era-Analytics offers a wide range of analytical solutions for the entire petroleum range, Gas analysis, naphtha, gasoline's, middle distillates, lubricant oil, crude oil and residuals.

Applications Chromatography Solutions

Gas Analysis:

- Natural Gas Analysis
- Refinery Gas Analysis
- Liquefied Petroleum Gas Analysis

Naphtha Analysis:

- Detailed Hydrocarbon Analysis
- Olefins in Naphtha, Gasoline
- Aromatics in Naphtha, Gasoline
- Oxygenates in Naphtha, Gasoline
- Trace Oxygenates in Naphtha, Gasoline
- Trace Sulfur, Nitrogen in Naphtha, Gasoline
- Simulated Distillation of Naphtha, Gasoline

Refinery Gas Analysis

- UOP 539
- DIN 51666/EN 15984/ISO7941 & D2163(Mach-RGA)
- ASTM D1945
- Liquefied Petroleum Gas Analysis D2163
- Sulfur Analysis SCD detector D5504
- Sulfur Analysis FPD/FPD detector D6228

Natural Gas Analysis

- GPA 2261 - 1 Valve/3Valves
- GPA 2286
- ISO6974 (1 to 6)
- ASTM D1946
- Sulfur Analysis SCD Detector D5504
- Sulfur Analysis FPD/FPD detector D6228
- Elemental Analysis AED detector

Crude Oil residue Analysis

- Simulated Distillation of crude oil and residues D6352
- D7500, D7169, IP408, IP545, EN15199-2, IP507
- Detailed Hydrocarbon Analysis of crude oil D5134, IP344
- Methanol in crude oil D7059
- Sulfur and nitrogen in crude oil with SCD/AED

Customized Solutions

- All applications can be customized to the customer need.



Middle Distillates Analysis:

- Simulated Distillation of Diesel and Gasoline
- Aromatics in Diesel and Naphtha
- n-paraffin's in Jet Fuel
- FAME's in Jet Fuel (GC-MS method)
- Trace Sulfur, Nitrogen in Diesel & Jet Fuel

Lubricants Analysis:

- Simulated Distillation of Lub oils
- Fuel Dilution in Lub Oils

Lubricants Analysis:

- Simulated Distillation of crude oil and residues
- Detailed Hydrocarbon Analysis of crude oil
- Methanol in crude oil
- Sulfur and nitrogen in crude oil

Naphtha Analysis

- Detailed Hydrocarbon analysis
- D5134/D6729/D6730/D6733
- Oxygenates D4815, D 5599 & EN1601 (O-FID)
- Oxygenates EN13132, IP408
- Aromatics D5580, D3606, EN12177
- Trace Oxygenates in Naphtha, Gasoline UOP960, DD7423
- Trace Sulfur, Nitrogen in Naphtha, Gasoline D5623
- Simulated Distillation of Naphtha and Gasoline
- D3710/D7096

Middle Distillates Analysis

- Simulated Distillation of Diesel and Gasoil
- D2887/D7398/D86*/D1160*
- Aromatics in Diesel and jet fuel D6591, D6379, IP391, EN12916
- n-paraffin's in Jet Fuel UOP915
- FAME's in Jet Fuel (GC-MS method) IP585
- Trace Sulfur, Nitrogen in Diesel and Jet Fuel

Lubricant Oil Analysis

- Simulated Distillation of Lub oils D7213/D6352/D7500/D6417*
- WAX SIMDIS D5442
- Fuel Dilution in Lub Oils D3524/D3525
- Sulfu Simdis (Sievers SCD or Atomic Emission Detector)



Parker Balston® H2PEMPD Hydrogen Generators

- Proton Exchange Membrane (PEM) cell eliminates the need for liquid electrolytes.
- Maintenance-free palladium purifier removes oxygen to <0.01 ppm and moisture to <1.0 ppm.
- Produces continuous supply of 99.99999+% pure hydrogen gas.
- Does not require downstream gas filters. Maximum outlet pressures of 100 or 175 psig (690 or 1,200 kPa). Automatic safety feature shuts the generator down if a hydrogen leak is detected.
- Compact unit, requires only one square foot of bench space.



Dual-Stage Ultra-High Purity Chrome-Plated Brass Gas Regulators

- Oxidation-resistant, chrome-plated.
- Most stable outlet pressure control.
- Secondary pressure regulation not needed.
- Most widely used regulator.
- Less internal volume than stainless steel gas regulators.
- Also available with international fittings.



Stabilwax® Columns (fused silica)

- Most stable polyethylene glycol (PEG) column available.
- Rugged enough to withstand repeated water injections.
- Lowest-bleed PEG column on the market; long column lifetimes.
- Temperature range: 40 °C to 260 °C.
- Equivalent to USP G14, G15, G16, G20, and G39 phases.



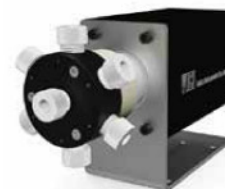
Stabilwax® Columns (fused silica)

- SGE syringes are designed and tested to meet critical autosampler performance needs.
- Needle point styles are designed to withstand multiple, rapid injections through a septum.



Era— Analytics has a supply Agreement with VICI® which is an acronym for Valco Instruments Company Inc. Era Uses the highly reputed and heavy work stuff of VICI like Valves, Injectors, fittings, Detectors, Valves actuators, etc. in building our different Chromatography analyzers supplied to the Hydrocarbon Process Industry customers.

Examples of the robust VICI hardware used in Era Analytics Chromatography analyzers.



Cheminert injectors and selectors

- Pressure ratings from 100 psi to 20,000 psi.
- Easy field service.
- Automated operation — pneumatic or electric.
- 4, 6, 8, and 10 port and internal sample two position models.
- Multiposition stream selectors with up to 26 positions.
- Integrated motor/injector or selector for OEM apps.

Pulsed Discharge Detectors

VICI PDDs (pulsed discharge detectors) utilize a stable, low powered, pulsed DC discharge in helium as an ionization source. Eluants from the column, flowing counter to the flow of helium from the discharge zone, are ionized by photons from the helium discharge. The bias electrode(s) focus the resulting electrons toward the collector electrode, where they cause changes in the standing current which are quantified as the detector output. Performance is equal to or better than detectors with conventional radioactive sources.



Valco injectors and selectors

- 1/32", 1/16", 1/8", or 1/4" Valco ZDV fittings.
- 3, 4, 6, 8, 10, 12, and 14 port and internal sample two position versions.
- Five multiposition flowpath configurations with as many as 16 positions.
- A variety of materials for hostile environments and continuous use at elevated temperatures.
- Can be configured for use at temperatures up to 350°C or pressures up to 10,000 psi.





CAV® 4.2 Dual-Bath Kinematic Viscometer

CAV® 4.2 is a dual-bath, bench top viscometer with two 14-position sample handlers for unattended D445 processing. An on-board computer with user-friendly touch-screen allows the CAV 4.2 to operate without the need for an external PC, although up to 4 units can be connected to a single PC via the included powerful VISCPRO software

Technical Specifications

Method:	ASTM D445, ISO 3104, IP 71, ASTM D446, ISO 3105
Viscosity range:	0.5 mm ² /s (cSt) to 10,000 mm ² /s (cSt) in 100-fold increments
Maximum Throughput:	24 tests per hour
Automated Sample Capacity:	28 (2 x 4 positions)
Power:	100 VAC, 50/60Hz, 115 VAC, 50/60 Hz; 230 VAC, 50/60 Hz; 1,200 watt power consumption
Minimum sample	8 mL sample*/15 mL solvent per test
Dimension/Weight:	360 x 660 x 720 mm(W x D x H), 63 kg

CANNON CAV 2000 Series Automatic Viscometers

CAV 2000 series a completely automatic viscometer designed for unattended operation.

The CAV-2100® features a single-bath modular construction with two viscometers per bath.



Technical Specifications

Test Method:	ASTM D 445, D446
Viscosity Range:	0.5 to 5,000 cSt depending on viscometer tube
Bath temperature:	Variable from 20°C to 100°C with an accuracy better than ± 0.01°C. High temperature bath option (up to 150°C, ± 0.03°C) available by request.
Service Unit Dimensions:	305 x 727 x 1245 mm / 178 x 508 x 356 mm



MiniAV-X®

CANNON® miniAV-X ® is an Automatic Viscometer with 10 place auto sampler.

The miniAV-X® performs in tandem with the proven VISCPRO® II software for Windows® 98/NT®/XP.

Technical Specifications

Test Method:	ASTM D445, D446, ISO 3104, 3105, IP71
Bath Temperature:	20°C 100°C with an accuracy better than ± 0.01°C.
Sensor:	Thermistor sensors
Bath Temperature:	20°C – 100°C with an accuracy better than ± 0.01°C.
MiniAV-X® Dimensions:	254 x 437 x 526 mm
Power Supply Dimensions:	330 x 396 x 172 mm
Weight: Bath Unit:	18kg; Power Supply: 1kg; Waste Receiver: 6kg

MiniAV®- LT

Developed Specifically for Low Temperature (Sub-Zero) KinVis Measurement.

Meets ASTM D2532 with 3 hour or 72 hour Thermal Soak of Aviation Turbine Lubricants down to -40°C

Also applicable to -40°C Testing of Hydraulic Fluids, Turbine and Transformer Oils up to 20,000 mm²/s



Technical Specifications

Test Method:	ASTM D445, D1655, D446 DEF STAN 91-91, ISO 3104, 3105, IP71
Temperature Range:	-20°C to +30°C
MiniAV®-LT Dimension:	254 x 305 x 534 mm
Weight: Bath Unit:	27kg ; Power Supply: 12kg ; Waste Receiver: 6kg
	AWHE: 14 kg



SimpleVIS® Portable Automated Kinematic Viscometer

For Direct Kinematic Viscosity of Transparent & Opaque Liquids with Near ASTM D445 Precision ASTM D7279

SimpleVIS® is a single sample, field-portable viscometer.

Available viscometer tubes cover a viscosity range of 1 mm²/s (cSt) to 700 mm²/s (cSt) at two selected temperatures between 40 °C and 100 °C.

Technical Specifications

Sample capacity:	1
Max. throughput:	12 tests per hour
Temperature range & accuracy:	20 °C to 100 °C ± 0.01 °C* Down to 15 °C, ± 0.03 °C* *temperatures within 5 °C of ambient and below require bath cooling
Minimum sample/ solvent volume:	5 mL sample*/15 mL solvent per test *as little as 3 mL with fast run tubes
Electrical specifications:	100 VAC, 50/60 Hz; 115 VAC, 50/60 Hz; 230 VAC, 50/60 Hz; 1,000 watts power
Dimensions, Weight:	Unit: 25.4 cm x 30.5 cm x 59.8 cm, 12.5 Kg
Power Supply:	33.0 cm x 39.6 cm x 17.2 cm, 11 kg
Waste Receiver:	33.0 cm x 39.6 cm x 17.2 cm, 6 kg

MiniAV® Single-Bath Kinematic Viscometer

For Kinematic Viscosity of Transparent and Opaque Liquids

miniAV® is a fully automated, single sample, benchtop viscometer for D445 testing. The Ubbelohdestyle tube covers a 100fold viscosity range at values between 0.5 mm²/s (cSt) and 10,000 mm²/s (cSt) from 15 °C to 100 °C (with available options).



Technical Specifications

Test Method:	ASTM D 445, D446
Viscosity Range:	0.5 to 5,000 cSt depending on viscometer tube
Bath temperature:	Variable from 20°C to 100°C with an accuracy better than ± 0.01°C. High temperature bath option (up to 150°C, ± 0.03°C) available by request.
Service Unit Dimensions:	305 x 727 x 1245 mm / 178 x 508 x 356 mm



PolyVISC

The CANNON® PolyVISC® Automatic Glass Capillary Viscometer combines automatic sampling, viscosity measurement, viscometer washing, and polymer solvent compatibility to provide a convenient benchtop unit ideal for dilute solution polymer viscosity analysis. PolyVISC Viscometer utilizes a unique "air bath" technology to maintain excellent temperature control. The carousel accepts eleven vials, each containing 10 to 15 mL of sample.

Technical Specifications

Test Method:	ASTM D 2857/D 1628/D 4603 (PET), D789, ISO307(Nylon), ASTM D 243/D 3591, D 4603 (PVC)
	ASTM D 871/D 1795 (Cellulose), ASTM D 1601 (Ethylene Polymers)
Viscosity Range:	0.3 to 20,000 cSt
Temperature Range:	20 to 100°C (135°C High-Temperature Option available)
Temperature Stability:	±0.01°C at calibrated temperature
Dimension:	515 x 756 x 520 mm



NSX-2100H

Trace Elemental Analyzer Horizontal System

NSX-2100H:4 different detectors can be connected to 1 furnace depending on requirement.
Gas Absorption unit for Ion Chromatography analysis can be added for Measurement of Halogens such as S, F, Cl, Br, I.



Detector	Measuring Range	Dimension/Weight
UVFL-Sulfur: SD-210	Solid 0.05 – 10,000µg/g, liquid: 0.05 – 5,000µg/ml	220 x 375 x 500 mm / 21 kg
CLD-Nitrogen: ND-210	Solid 0.5 – 5,000µg/g, liquid: 0.2 – 5,000µg/ml	220 x 375 x 500 mm / 22 kg
Microcoulometry for Chlorine & Sulfur:MCD-210	Cl: 0.01 – 50µg (0.05-5,000µg/ml) S: 0.02 – 50µg (0.1-5,000µg/ml)	220 x 375 x 500 mm / 14 kg
Horizontal Furnace HF-210		320 x 430 x 500 mm / 25 kg

Element	Sulfur	Nitrogen	Sulfur
Method of Detection	Ultraviolet Fluorescence (UVFL)	Chemiluminescence (CLD)	Coulometric Titration
ASTM	D5453, D6667, D7183, D7551	D4629, D5176, D6069, D7184, D5762	D4929, D5808, D6721, D7457
UOP	987, 988	936, 971, 981	779, 910
ISO/EN	ISO 20846, EN15486	ISO 11905-2, EN 12260	ISO 16591.2

ABC-210 Auto Boat Controller



Sample:	Solid, Liquid
Amount of sample:	Solid 150 mg; Liquid 100µl
Boat:	quartz, disposable ceramic
Boat Cooling:	Peltier
Dimension/Weight:	445 x 250 x 180 mm, 9 kg

GA-210 gas absorption unit for Ion Chromatography analysis

Element:	Sulfur and Halogen Compounds
Function:	gas absorption of pyrohydrolytic combusted sample
Sample introduction to analyzer:	loop, 6-way valve
Absorption tube:	10, 20 ml
Dispenser:	5ml gastight syringe pump
Drain:	peristaltic pump
Dimension/ Weight:	250 x 430 x 500 mm, 22 kg



ASC-240S Solid Sample Changer



Sample:	Solid, liquid
Amount of sample:	Solid 150 mg; Liquid 100µl
Boat, number of sample:	ceramic, 40 pos
Boat cooling:	Peltier
Dimension/Weight:	480 x 460 x 520 mm / 31kg

ASC-250L liquid sample changer

Sample:	liquid (non-aqueous, aqueous)
Injection:	max 150µl (depend on sample)
Inj. Speed:	0.4 – 50µl/sec (depend on sample)
Number:	50 pos. in each 2, 4, 6ml vial tray
Dimension/weight:	46 x 320 x 470 mm / 16 kg



NSX-2100V

Trace Elemental Analyzer Vertical System

The NSX-2100V can simultaneously measure Nitrogen and Sulfur from 20 ppb to 10,000 ppm. Microcoulometric Detector (MCD) and measure both Sulfur and Chlorine by Oxidative Combustion Microcoulometry. By adding any of the five Gas Injector Systems Nitrogen, Sulfur and Halogens (Chlorine) in Gases and LPG can be measured.

Trap & Release Unit can enhance the performance of UVFL sulfur analysis. TRU-210 unit enables measuring limit down to 5 ppb with essential separation of nitrogen.



Detector	Measuring Range	Dimension/Weight
UVFL-Sulfur: SD-210	Solid 0.02 – 10,000µg/g	220 x 375 x 500 mm / 21 kg
CLD-Nitrogen: ND-210	non-aqueous: 0.01 – 5,000 µg/ml	220 x 375 x 500 mm / 22 kg
Microcoulometry for Chlorine & Sulfur:MCD-210	Cl: 0.01 – 50µg (0.05-5,000µg/ml) S: 0.02 – 50µg (0.1-5,000µg/ml)	220 x 375 x 500 mm / 14 kg
Vertical Furnace VF-210		320 x 430 x 500 mm / 25 kg

Element	Sulfur	Nitrogen	Sulfur
Method of Detection	Ultraviolet Fluorescence (UVFL)	Chemiluminescence (CLD)	Coulometric Titration
ASTM	D5453, D6667, D7183, D7551	D4629, D5176, D6069, D7184	D4929, D5808, D6721, D7457
UOP	987, 988	936, 971, 981	779, 910
ISO/EN	ISO 20846, EN15486	ISO 11905-2, EN 12260	ISO 16591.2

CRI – 210V Constant Rate Injector

Sample:	Liquid (non-aqueous)
Injection:	max 200µl (depend on sample)
Injection speed	0.4 – 1.6µl/sec (depend on sample)
Syringe:	gastight, 25, 50, 100, 250µl
Dimension/ Weight:	150 x 250 x 240 mm, 5.6 kg



GI-220 Gas Injector

Sample:	Non-pressurized gas, Volatile liquid
Injection:	1 – 10 µl liquid 2– 25 ml gas (max 999 ml)
Carrier:	Argon
Heat:	80°C for liquid
Dimension/ Weight:	180 x 360 x 500 mm / 13kg



GI-210 Gas Injector

Sample:	Non-pressurized gas, Volatile liquid
Injection:	10 µl for liquid, 10 ml for gas
Carrier:	Argon
Heat:	80°C for liquid
Dimension/ Weight:	220 x 200 x 110 mm / 4kg



GI-250 Gas/LPG Injector (Sulfur, Nitrogen)

Measurement Sample:	1) Gastight syringe port: Gaseous or volatile liquid 2) LPG port: Liquefied Petroleum Gas
Heater:	max. 105°C: ASTM D6667
Injection Volume:	1) Gastight syringe port: 10ml(gas), 10µl(volatile liqd), 2) LPGport: 30µl fixed
Dimension/weight:	280 x 300 x 410 mm / 13 kg



Total Organic Carbon Analyzer TOC-300V

The TOC-300V is equipped with an autosample changer and the all new direct injection feature to enable direct measurement of suspended matter in sample..

Combustion oxidation: ISO8245 (EN1484), EPA 415.1, EPA 9060A, Standard methods 5310, ASTM D7573, and JIS K0101, JIS K0102, JIS K0557

Technical Specifications

Methods:	Oxidative Combustion / NDIR Detection
Samples:	Water samples (Drinking, Industrial waste, environmental)
Furnace:	Maximum 900°C
Measurement items:	TC, IC, TOC, NPOC (Optional TN)
Measurement Range:	0.1 to 1000mg/L (TC, IC), Auto dilution for >3000mg/L

Measurement Time:	< 4 min. (depends on sample amount and parameters
Autosampler:	60 positions
Gas:	High purity air or standard air. Oxygen necessary for optional TN measurement (O2>99.7%)
Power:	Main Unit: AC100 to 240V, 500VA
Autosampler:	AC100 to 240V, 80VA
Dimension:	700 x 530 x 1003mm (LxDxH), 66 kg

Total Organic Halogen TOH-300V

Samples are burned in an Argon/Oxygen atmosphere. The resulting chloride is lead into a titration cell where it is automatically titrated by silver ions generated coulometrically.



Technical Specifications

Methods:	Oxidation decomposition / Coulometric titration
Oxidation decomposition:	Quartz tube combustion method Oxidation
Samples:	Liquids, solids and gaseous (Use the gas injector Model GI-210.)
Sample Insertion:	Automatic insertion by the sample boat (Use ABC unit.)
Sample volume:	Liquid sample: 100µl or less, Solid sample: 30mg or less
Measurement Time:	Within 10 minutes/ One measurement (At 2g measurement)
Dimension:	TOX-300 main unit:550(W) × 360 (D) × 437 (H) mm ABC-210 unit:440(W) ×250(D) ×180(H) mm

Karl Fischer Moisture Meter CA-31



The CA-31 is equipped with a 5.7-inch colour LCD touch panel, which enables the user to operate practically manual-free, and all necessary information visible in one view. Users can choose between a conventional 2-solution setup with fritted cathode solution cell, or a single solution configuration with fritless cathode

Technical Specifications

Methods:	Coulometric Karl Fischer Titration
Electrolysis Control:	Constant Current Pulse Time Control
End Point Detection:	Constant Current Polarization Potential Difference
Electrolysis Current:	430mA
Titration Rate:	Average 2.2mg H2O/min (36µgH2O/sec)
Measurement Range:	10 µg to 999.9999mg H2O
Power Supply:	AC 100/120/220/240V (50/60Hz) 60VA
Dimension/ Weight:	Main Unit (without cell and battery) Approx. 220 x 350 x 360 mm/ 3.6 kg



AQF-2100H

Automatic Quick Furnace Combustion Ion Chromatography

Advanced, developed to the second generation.
Powerful, fast solution for Sulfur and Halogen (Chlorine, Fluorine, Bromine, Iodine) Analysis

Equipped with newly developed SCP (Secure combustion Program) that can transfer the moderately, sample can be increased up to 150 mg. Combustion monitor can be optimized as short as 5 min.

*SCP is equipped in standard without extracost.
*combustion Monitor (CM-210) is option

New software, full automatic operation and shutdown.
Fully automatic operation is available from calibration, boat prebake, sample analysis, until auto shutdown.

Technical Specifications

Test Methods:	ASTM D5987 and D7359, JIS K7392, JIS R9301 (ISO 2828), JIS R1616, JIS R1603, JIS Z7302, JEITA ET-7304A and KS M0180
Test Methods:	ASTM D5987 and D7359, JIS K7392, JIS R9301 (ISO 2828), JIS R1616, JIS R1603, JIS Z7302, JEITA ET-7304A and KS M0180
Sample Introduction:	Automated boat control
Amount:	1–150 mg (solid), 5–100 µl (liquid)
Combustion:	Two split electric furnace, max. 1100°C. Temperature individually controlled
Gas:	Argon (≥99.98%, 0.2–0.4 MPa), Oxygen (≥99.7%, 0.2–0.4 MPa)
Absorbent tube:	10 ml (20 ml option)
Injection to IC	Loop 100µl (5, 20, 50, 200 µl option)
Absorbent Dispensing	5ml syringe pump
Tube material	Fluoro-resin, PEEK
Signal output	Contact signal to start Ion Chromatograph
Power	HF-210 100–240VAC, 50/60Hz, 1000VA GA-210 100–240VAC, 50/60Hz, 50VA
Dimension, mass	HF-210 320 x 430 x 500mm, 25kg

COMBUSTION ION CHROMATOGRAPHY (CIC) APPLICATION

- 3,5-dichloro-2-hydroxybenzenesulfonic acid sodium salt
- Solder materials
- Toner
- Resin for circuit board
- Dried kelp_r2
- Toothpaste
- Fluorite
- Phosphate rock_r2
- Fly ash
- Coal Standard BCR182
- Coal Standard BCR460
- Clay Standard BCR461
- Pigment_r2
- Fuel Oil
- Lubricant
- Wood chips
- Plastic
- PVC resin
- Polyethylene Standard EC-680k_r2
- Polyethylene Standard EC-680k(e)
- Waste Oil
- Waste water
- AOC standard_r1
- and much more...

Rigaku



Rigaku NEX QC+

Energy Dispersive X-ray Fluorescence (EDXRF)
The Rigaku NEX QC+ complies with ISO 13032 for the measurement of ultra-low sulfur between 8–50 mg/kg in diesel fuels and gasoline.

Technical Specifications

Excitation:	50KV X-ray tube, 4 W max power, 6 tube filter positions w/ shutter
Detector:	Silicon drift detector (SDD)
Sample Chamber:	6 (32 mm) or 5 (40 mm) position sampler
User interface:	Embedded computer, Internal thermal printer, USB & Ethernet connections
Power:	Single phase AC 100/220V 1.4 A 950/60Hz
Dimensions/ Weight:	331 x 432 x 376 mm (WxDxH) / 16 kgs

Rigaku NEX QC

Rigaku NEX QC is equipped with Silicon Pin Diode Detector.



Technical Specifications

Excitation:	50KV X-ray tube, 4 W max power, 6 tube filter positions w/ shutter
Detector:	Silicon Pin Diode Detector
Sample Chamber:	Large 190 x 165 x 60 mm sample chamber, Single position 32 mm sample aperture, Analysis in Air or optional helium
Power:	Single phase AC 100/220V 1.4 A (50/60Hz)
Dimensions/ Weight:	331 x 432 x 376 mm (WxDxH) / 16 kgs

Rigaku NEX DE

High-resolution elemental analysis of Na through U

NEX DE has an optional automatic changer for analysis in air or under helium.

Powerful QuantEZ Windows®-based software



Technical Specifications

Excitation:	60 KV 12 W Ag X-ray tube, 7 tube filter positions, 10 mm collimator
Detection:	High performance FAST SDD detector, peltier thermo-electric cooling
Sample Chamber:	15-position 32mm auto sampler, 10-position 40 mm autosampler, 9-position 50 mm autosampler
Power:	Single phase AC 100/220V 1.4 A (50/60Hz)
Dimension:	356 x 356 x 260 mm (WxDxH)

Rigaku NEX CG

Rigaku NEX CG measure ultra low sulfur under ASTM D7220 NEX CG was engineered with a unique close-coupled Cartesian Geometry (CG) optical kernel that dramatically increases signal-to-noise. Sensitivity is improved by using the monochromatic secondary target excitation



Technical Specifications

Excitation:	X-ray tube with Pd anode, 50W max power, 50KV max voltage, Four standard polarization and secondary targets depending on application, for optimum excitation
Detector:	High performance semiconductor detector, Peltier thermo-electric cooling, large detection area, Optimum balance of spectral resolution and max count rate
Sample chamber:	15-position auto sampler, Analysis in Air or optional helium
Power:	Single phase AC 100/220V 1.4 A (50/60Hz)
Dimensions/ Weight:	600x 600 x 400 mm (WxDxH) , 80 kg

Sindie ® 7039 M-Series Bench-Top Analyzer



Sulfur Analysis in Petroleum and Bio Fuels

Sindie 7039 M Series analyze total sulfur from ultra low sulfur fuels to crudes. With one calibration curve it can run both diesel and gasoline up to 3000 ppm

Technical Specifications

Test Methods:	ASTM 7039, ISO 20884
Measuring Principle:	Monochromatic Wavelength Dispersive X-ray Fluorescence (MWD XRF)
Dynamic Range:	Standard: 0.4 ppm to 3000 ppm XR package: 0.4 ppm to 10%
Sample Cup Volume:	10 ml
Ambient Temperature Requirements:	5–40°C (40–104°F)
Measurement:	User selectable: 30–900 s
Calibration:	8 calibration curves. Automatic and Manual Calibration functionality.
I/O Ports:	Ethernet 10/100 base T, RS232
Dimension:	370 x 500 x 340 mm

Clora M-Series

Clora ® analyzers provide chlorine analysis in liquid hydrocarbon, aqueous solution liquid hydrocarbons such as aromatics, distillates, heavy fuels and crude oils, as well as aqueous solutions



Technical Specifications

Test Methods:	ASTM D7536
Limit of Detection:	0.06 ppm wt. for aromatics.
Dynamic Range:	Standard 0.06 ppm wt. Up to 3000 ppm wt.
Sample Cup Volume:	10ml
Measurement:	30 – 900 s
Ambient Temperature Requirements:	5–40°C (40–104°F)
X-Ray Tube Setting:	50 kv @ 1.5 mA max
Power:	100–120 VAC, 47–63 HZ at 6.0 Amps/200–240 VAC, 47–63 HZ at 6.0 Amps
Dimension / Weight:	370 x 500 x 340 mm

HD Maxine

Fast, Precise, Multi-Element Analysis



HD Maxine ® assures precise determination of trace metals in crudes, lubricants and used oils without extensive sample preparation or expensive consumables. The analyzer enables the direct analysis of metals from Phosphorus to Lead, at unprecedented detection limits in a robust analyzer configuration designed to perform in demanding petroleum and industrial environments.

Technical Specifications

Measuring Principle:	High Definition X-Ray Fluorescence (HD XRF)
Analysis Range:	Up to 5000 ppm
Measurement Time:	300 s or 600 s
Ambient Temperature:	5 – 35° C
Sample cell volume:	1 ml
Tube Voltage:	20–50 kV
Tube Current:	0.2 – 2 mA
User Interface:	Touch Screen
Dimension / Weight:	410 x 390 x 530 mm / 23 kg

Phoebe M-Series



Phosphorus Determination in Hydrocarbon and Aqueous Matrices

From crude oil to bio-fuels, in additives or water, the PHOEBE Bench-top Analyzer delivers unprecedented precision and accuracy for qualification of phosphorus. Based on XOS's MWD XRF analytical platform, (as is found in SINDIE and CLORA Analyzers) PHOEBE offers a LOD of 0.4 ppm in hydrocarbon matrices in a ten minute measurements cycle. The analyzer's extreme easy of use with straightforward touch screen operation allows for use in a broad range of industrial environments. PHOEBE is a plug-it-in and measure analytical solution and does not require extensive sample preparation, consumable gasses or sample conversion.

Technical Specifications

Measuring Principle:	Monochromatic wavelength-dispersive X-ray fluorescence spectroscopy
Dynamic Ranges:	0.4 ppm – 3000 ppm
Sample Cup Volume:	10 ml
Measurement Time:	user selectable: 30s–900s
Calibration:	5–point calibration, capacity for 8 calibration curve
Ambient Temperature:	5 – 40°C, (40 – 104°F)
Operating Temperature:	17°C to 25° C
I/O Ports:	Ethernet 10/ 1000 baseT, RS 232
Dimension / Weight:	370 x 500 x340 mm / 34 kg

Signal M-Series

Silicon Analysis in Petroleum and Bio Fuel

From gasoline to ethanol and toluene, the Signal bench-top analyzer delivers unprecedented precision and accuracy in quantitative analysis of silicon. The analyzer is based on XOS' MWD XRF technology platform (as applied in Sindie and Clora analyzers) ensuring a robust analysis solution for demanding petroleum and industrial environments.



Technical Specifications

Test Methods:	ASTM D7536
Dynamic Range:	0.5 ppm at 3000 ppm
Limit of Detection:	0.5 ppm at 600 s
Sample Cup Volume:	10 ml
Measurement Time:	user selectable: 30s–900s
Calibration:	8 calibration curves. Automatic and Manual Calibration functionality
Other Utilities:	Helium (10 psi maximum inlet pressure)
Ambient Temperature Requirements:	5–40°C (40–104°C)
I/O Ports:	Ethernet 10/100 base T, RS232
Power:	100–120 VAC, 47–63 HZ at 6.0 Amps/200–240 VAC, 47–63 HZ at 6.0 Amps
Dimension / Weight:	370 x 500 x340 mm / 34 kg

Sindie OTG

Plug-It-In & Measure. Results with One Touch Unrivaled Precision

The Sindie OTG is the only PORTABLE sulfur analyzer and provides reliable quality results from ULSD and gasoline to marine fuels and crudes. The analyzer uses Monochromatic WD XRF per ASTM D7039 and is compliant with ISO 20884. No need for gasses, no high temp operating conditions.



Technical Specifications

Method:	ASTM D7039, ISO 20884
Dynamic Range:	up to 10% (wt)
Sample Introduction:	Max. sample cup vol. 1mL
Ambient Temperature Requirement:	5–40°C (40 – 104°F)
Limit of Detection:	0.6 ppm (at measurement time: 900 s.)
User Interface:	Touch screen
Dimension / Weight:	330 x 300 x 230 mm / 15 kg

Antec®
Proven Performance!



ROXY™ Potentiostat controls redox reactions

- Stand alone or on-line EC/MS
- Fully programmable, direct control, scan and activation mode
- Large voltage range, ± 4.9 V
- Multiple cell control (standard 2, optional up to 4)
- Compatible with Reactor™ and μ -PrepCell™

With more than 20 years of experience in Electrochemistry (EC), Antec introduces a new, dedicated Potentiostat for on-line EC/LC/MS. The ROXY™ Potentiostat generates metabolites of drugs or xenobiotics, similar to those generated during in vivo metabolic processes, in a significantly shorter time span (seconds vs. days or weeks) without any interfering components (no isolation steps required). The ROXY™ Potentiostat is based on state-of-the-art electronics with a large voltage range of ± 4.9 V, and a push button electrode regeneration program. Operational parameters and external equipment can be controlled through programmable timed events.

ALEXYS UHPLC/ECD UHPLC with Electrochemical Detection

- Optimised in every detail
- Designed for performance
- Parallel analysis with multiple flow cells
- Micro volume sample handling



The ALEXYS is a HPLC system with electrochemical detection that has been designed to meet the highest demands for detection sensitivity and performance. The ALEXYS is easily upgradeable to micro-bore and capillary LC-EC. The system uses Clarity, a fully featured data acquisition software with all the tools for automated data acquisition, calibration, processing and reporting. Guaranteed applications have been developed for the analysis of neurotransmitters such as noradrenaline, dopamine, serotonin and metabolites in microdialysates. Typically, picomolar concentration detection limits have been obtained in only a few microliters of sample. Parallel detection schemes using multiple flow cells have been developed for time, sample and experimental cost savings! The ALEXYS™ has proven its performance in routine analysis in clinical, food & beverage, environmental and pharmaceutical laboratories as well.



New Electrochemical Detector Decade Elite

- Real UHPLC Electrochemical Detector
- The perfect ECD for Ultrafast HPLC
- Replacement for Decade II

Drivers for Clarity, Labsolutions & Open lab will be developed

- LAN, USB
- 100 Hz
- 4 step potential waveform
- 1–4 cells
- Superior workstation concept up to 60C
- ADF
- Analogue output

Antec®
Proven Performance!



Schematics Synthesis and Reaction Monitoring

The ALEXYS Analyzers are built for highest performance, versatility and ease of use. They are consisting of pump(s), organizer, autosampler and detector. An analyzer comes with the appropriate kit that is optimized for a specific application. These kits are tailored for the specific application to guarantee highest performance or to fulfill the regulatory requirements (f.e. European Pharmacopeia, USP).

SynthesisCell™ - Bulk Cell for mg Quantities

- Rapid electrosynthesis of mg quantities of difficult to synthesize compounds
- Complete electrolysis of electroactive species in solution
- Various large surface-area working electrodes
- Use for small-scale electrosynthesis studies (up to 80 mL)



The SynthesisCell is designed for small-scale electrosynthesis of mg quantities of compounds that are difficult to synthesize by other methods, e.g., wet chemistry. Typical compounds that can be synthesized are metabolites, intermediates and Redox products. The large surface-area of the working electrode and active stirring of the bulk solution assures for complete electrolysis of any electroactive compound and the generation of Redox products in approximately 1 hour. Various working electrodes such as carbon (reticulated or smooth glassy carbon), Magic Diamond™ (Boron Doped Diamond) or platinum based are available for increased selectivity and maximum yield. The cell is controlled via the ROXY Potentiostat. The progress of the reaction and as well as the concentration of synthesis products can be monitored by taking aliquots over time and analyzing them by flow injection MS or LC/MS.

Environmental	Analytes	Documentation
ALEXYS Polyphenol analyzer	Basic system extendable with kits	
ALEXYS Cool	Basic system extendable with kits	
ALEXYS Basic	Basic system extendable with kits	
ALEXYS Cool, Micro		
Neuroscience		
OFF-LINE ANALYZERS FOR MICRODIALYSATES AND BRAIN TISSUE		
ALEXYS Monoamines Analyzer	Monoamines & metabolites	213_017, 22_004
ALEXYS GABA and Glutamate Analyzer	Gaba/Glutamate	213_019, 221_009
ALEXYS Choline/ Acetylcholine	Choline/ Acetylcholine	213_022
ALEXYS Acetylcholine	Glutathione/Disulfides	211_004
ON-LINE ANALYZER FOR MICRODIALYSATES		
ALEXYS OMD High throughput	Monoamines & metabolites	221_011, 221_012
ALEXYS OMD Time resolution	Monoamines & metabolites	221_011, 221_012
ALEXYS OMD Monoamines Analyzer		
MODULAR ALEXYS CONFIGURATION		
ALEXYS Flex SCC	Neurotransmitters, add kit to this configuration	All neurotransmitters applications
ALEXYS Flex DCC	Neurotransmitters, add kit to this configuration	All neurotransmitters applications
Pharmaceutical & Biotech		
ALEXYS Aminoglycosides Analyzer	Neomycin/Framycin/Tobramycin/Spectinomycin	
ALEXYS Kanamycin/Amikacin/ Analyzer	Amikacin and Kanamycin	217_010, 217_014, 217_018, 221_005
ALEXYS Gentamicin Analyzer	Gentamicin	217_015
ALEXYS Spectinomycin/Lincomycin Analyzer	Spectinomycin and Lincomycin	217_013
ALEXYS Azithromycin analyzer, USP	Azithromycin	217_019
ALEXYS Disulfides analyzer	Glutathione and Disulfides	217_011, 217_017
		211_004
Clinical & Diagnostics		
ALEXYS Clinical Analyzer	Catecholamines	
	Serotonin	214_001, 214_002
	Metanephrines	214_003, 214_004
	VMA, HVA, 5-HIAA	214_005
ALEXYS Disulfides Analyzer	Homocystein	214_006
ALEXYS Iodide Analyzer	Iodide	211_003, 221_003
ALEXYS Vitamins Analyzer	Vitamins	212_003
Food & Beverage		
ALEXYS Bisphenol A Analyzer	Bisphenol A (from polycarbonate bottles)	
ALEXYS Polyphenols Analyzer	Catechin, Flavonoids and other Polyphenols	216_005
ALEXYS Carbohydrates Analyzer	Carbohydrates	216_006, 221_019
ALEXYS Iodide Analyzer	Iodide	220_002, 221_007
		212_004, 221_022
Environmental		
ALEXYS Polyphenol analyzer	Phenols	216_001, 216_002



Era analytics conducts technical training programs for the laboratory technicians at their levels and in their own mother Arabic language. Stay up to date or learn the latest Modern Petroleum laboratories instrumentation techniques at Era Analytics Training sessions and workshops.

Era Analytics provides training at their Training facility in Dubai, United Arab Emirates on most of the critical Petroleum testing Training Sessions include all aspects to understand, Operate, Troubleshoot and results interpretation for your applications including:

- Basics & Theory
- Detailed Hardware demonstration
- System Start up
- Day to Day usage
- Software
- Results interpretation & Reporting
- Troubleshooting
- System maintenance

Training Courses Conducted on different languages (ARABIC-ENGLISH)

Training Program Objectives:

- The objectives behind these training programs are to grow and develop the knowledge level of ordinary laboratory technician not only to operate instruments but also to:
- understand the basic principal of each technique
 - Grasp International Standards and regulations of every analysis (ASTM, ISO, IP, DIN, EN, etc.).
 - Percept the Cautions and safety aspects necessary for every technique / analysis & measurement.
 - Troubleshoot major simple analysis dilemmas
 - Minimize the instruments down time and improve the laboratory performance.

Training Features :

- Training has combined closer techniques to each other.
- Every Training session period is 5 working days (8 working hours per day)
- No of attendees per session 6–8 people
- Training given by Certified Instructor
- Training given in Arabic language
- Training Materials & Certificates are included
- Training conducted at Era Analytics Training facility in Dubai, UAE.

For any further information / clarifications, please contact us @ Tel : +971 (4) 2533045/6 Fax: +971 (4) 2533047

Or contact our sales support @info@era-analytics.com

