

# ASPHIRE SPECTRO

*We Believe in Service*



ACCURATE ■ PROFICIENT ■ CREDIBLE

An ISO 9001:2015

# ASPHIRE

# SPECTRO

## OVERVIEW

Established in 2016, Asphire System provides a wide range of Optical Emission Spectrometer, concomitant accessories & services to meet the Spectro-chemical needs of the metal industries. Our product portfolio covers Optical / Spark Emission Spectrometers, sample preparation machines, argon purifiers, small sample adapters, and magnetic holders for Spectrometers.

The company founder has a vast experience of over 16 years, serving the needs of industry & has a true experience spread across the globe.

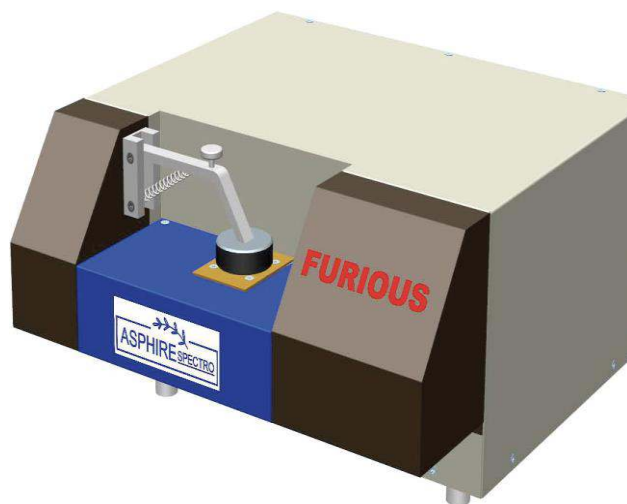
Asphire system is beneficial to the industry for Micro, Small & Medium Enterprises, and clusters. The company is working to ensure that every industry has a spectrometer to deliver the highest value for their specific applications for producing quality material & services. Our product philosophy is driven by the focus on offering a range of tailor-made models to meet specific customer needs – both analytical & economic. On the outset, we offer the world's widest span of high-end R&D grade models with wavelengths positioned to be best in class in terms with class & economic value.

On application front, Asphire System is having an in-house R&D & Application team, we routinely develop and upgrade software, hardware solutions & applications that are customized to meet the specific needs of specific clients.

We developed all our offerings – products, applications & services – with the commitment to deliver the highest standards of quality, reliability & uptime. We also offer the lowest life-cycles cost through low maintenance cost, backed with routine follow up on our installed machines & after-sales support to our esteemed clients.

Our solutions have helped clients improve the quality of their products & also provide cost competitive solutions w.r.t. the competition & save revenue through material cost savings, elimination of rework/rejections, drastic improvements in productivity & of course in the research & development processes.

Presently, our instruments are backed by several leading companies across the whole dimension of industries, both in private sector, public sector & geographical market. With the rapid increase of Asphire System footprints, we have expanded our installation base to 500+ customers in India & rapidly expanding to the international market.



## Asphire AS-S2 Technical Specifications

### CMOS/CCD

- High resolution CMOS/CCD Dual detectors

### Optics

- Stabilized against temperature fluctuations
- Effective wavelength range: 170-410 nm, the applicable and configured wavelength range is based on the customer's application requirements

### Analysis Modules

- Optimized to customer requirements

### Spark Stand

- Open spark stand for high sample throughput and various kinds of sample geometries
- Minimized argon consumption Controlled with Software
- Optimized argon flow
- Reduced cleaning intervals
- Spark stand plate easily exchangeable

### Excitation System.

Fully digitalized plasma generator with digital discharge definition, digital pulse generation and digital offline pulse control  
Max. spark frequency: 1000 Hz

### Readout System

Single board readout system  
Dedicated controlled System for each CCD detector

### Spectrometer PC (minimum configuration)

- Intel® Core™ i3/i5/i7
- 8 GByte RAM
- 500 GB SSD
- DVD +/- RW Drive
- Graphic adapter
- USB ports
- Audio sound card
- 2 Network adapters
- Windows 10/11™ 64 Bit Professional Operating System
- Keyboard and mouse
- Monitor
- Printer

### Software

- Asphire Analytical Software for analytical operation and calibration
- Continuous automatic hardware diagnosis in the background
- Result Manager
- Maintenance Scheduler

### Environmental Conditions

- Room temperature: 18-28°C maintained with AC
- Relative humidity: <80 %, non-condensing
- Atmosphere: free of corrosive vapors and high dust pollution

### Spectrometer Data

- 220 V 50 Hz 1 Ph. Earthing below 1 V
- Max. 800 VA during sparking
- Version (Higher End):

#### Benchtop

Depth: 700 mm  
Width: 600 mm  
Height: 400 mm  
Weight: 60 kg

#### Floor model

700 mm  
600 mm  
1250 mm  
100 kg

Asphire Spectro Model AS-S2 is an Optimum Decision to the quick analysis with high accuracy and precision for the customer. These Laboratory Instruments can work due to the excitations of the electrons via the addition of energy which is in the form of some wavelength of the electromagnetic radiation which is usually light or ultraviolet.

AS-S2 is an advanced CCD based Optical Emission Spectrometer and have the single base and multi matrices (Ferrous, Aluminum, Copper, Nickel, Zinc, Tin, Lead, Titanium etc.) for Metal Analysis.

AS-S2 is one of the lightest ultra - compact spark Emission, Excellent performance, and competitive price. AS-S2 Model have 15+ elements .

# maximize productivity with reliable metals analysis

• Ferrous • Non-ferrous metals • Alloys

## Asphire AS-S1 Technical Specifications



### CMOS/CCD

- High resolution CMOS/CCD multi detectors

### Optics

- Stabilized against temperature fluctuations
- Effective wavelength range: 170-430 nm, the applicable and configured wavelength range is based on the customer's application requirements
- Automated profiling

### Analysis Modules

- Optimized to customer requirements
- Expansion of additional modules on-site possible

### Spark Stand

- Open spark stand for high sample throughput and various kinds of sample geometries
- Minimized argon consumption Controlled with Software
- Optimized argon flow
- Reduced cleaning intervals
- Spark stand plate easily exchangeable

### Excitation System.

Fully digitalized plasma generator with digital discharge definition, digital pulse generation and digital offline pulse control  
Max. spark frequency: 1000 Hz

### Readout System

Single board readout system  
Dedicated controlled System for each CMOS/CCD detector

### Spectrometer PC (minimum configuration)

- Intel® Core™ i3/i5/i7
- 8 GByte RAM
- 500 GB SSD
- DVD +/- RW Drive
- Graphic adapter
- USB ports
- Audio sound card
- 2 Network adapters
- Windows 10/11™ 64 Bit Professional Operating System
- Keyboard and mouse
- Monitor
- Printer

### Software

- Asphire Analytical Software for analytical operation and calibration
- Continuous automatic hardware diagnosis in the background
- Automatic alloy verification and identification
- Result Manager
- Maintenance Scheduler

### Environmental Conditions

- Room temperature: 18-28°C maintained with AC
- Relative humidity: <80 %, non-condensing
- Atmosphere: free of corrosive vapors and high dust pollution

### Spectrometer Data

- 220 V 50 Hz 1 Ph. Earthing below 1 V
- Max. 800 VA during sparking
- Version (Higher End):

#### Benchtop

Depth: 800 mm  
Width: 700 mm  
Height: 450 mm  
Weight: 70 kg

#### Floor model

800 mm  
700 mm  
1250 mm  
120 kg

Asphire Spectro Model AS-S1 is an Optimum Decision to the quick analysis with high accuracy and precision for the customer. These Laboratory Instruments can work due to the excitations of the electrons via the addition of energy which is in the form of some wavelength of the electromagnetic radiation which is usually light or ultraviolet.

AS-S1 is an advanced CCD/CMOS based Optical Emission Spectrometer and have the multi base and matrices (Ferrous, Aluminum, Copper, Nickel, Zinc, Tin, Lead, Titanium etc.) for Metal Analysis.

AS-S1 is one of the lightest ultra - compact spark Emission, Excellent performance, and competitive price. AS-S1 Model have 25+ elements and we can also upgrade as per customer requirements

## maximize productivity with reliable metals analysis

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## Asphire AS-S3 Technical Specifications

### CMOS/CCD

- High resolution CMOS/CCD multi detectors

### Optics

- Stabilized against temperature fluctuations
- Effective wavelength range: 115-800 nm, the applicable and configured wavelength range is based on the customer's application requirements
- Automated profiling

### Analysis Modules

- Optimized to customer requirements
- Expansion of additional modules on-site possible

### Spark Stand

- Open spark stand for high sample throughput and various kinds of sample geometries
- Minimized argon consumption Controlled with Software
- Optimized argon flow
- Reduced cleaning intervals
- Spark stand plate easily exchangeable

### Excitation System.

Fully digitalized plasma generator with digital discharge definition, digital pulse generation and digital offline pulse control  
Max. spark frequency: 1000 Hz

### Readout System

Single board readout system  
Dedicated controlled System for each CMOS/CCD detector

### Spectrometer PC (minimum configuration)

- Intel® Core™ i3/i5/i7
- 8 GByte RAM
- 500 GB SSD
- DVD +/- RW Drive
- Graphic adapter
- USB ports
- Audio sound card
- 2 Network adapters
- Windows 10/11™ 64 Bit Professional Operating System
- Keyboard and mouse
- Monitor
- Printer

### Software

- Asphire Analytical Software for analytical operation and calibration
- Continuous automatic hardware diagnosis in the background
- Automatic alloy verification and identification
- Result Manager
- Maintenance Scheduler

### Environmental Conditions

- Room temperature: 18-28°C maintained with AC
- Relative humidity: <80 %, non-condensing
- Atmosphere: free of corrosive vapors and high dust pollution

### Spectrometer Data

- 220 V 50 Hz 1 Ph. Earthing below 1 V
- Max. 800 VA during sparking
- Version (Higher End):

#### Benchtop

Depth: 800 mm  
Width: 700 mm  
Height: 450 mm

#### Floor model

800 mm  
700 mm  
1250 mm

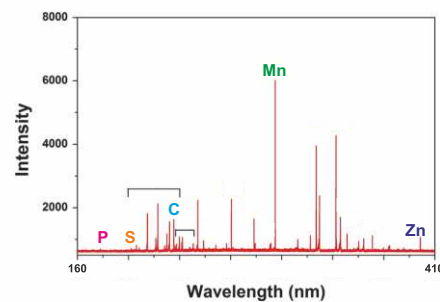
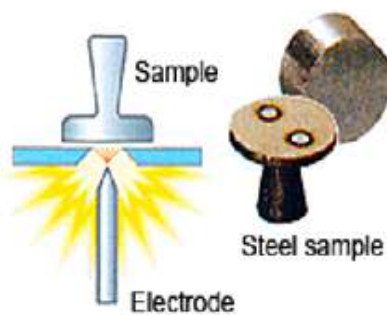
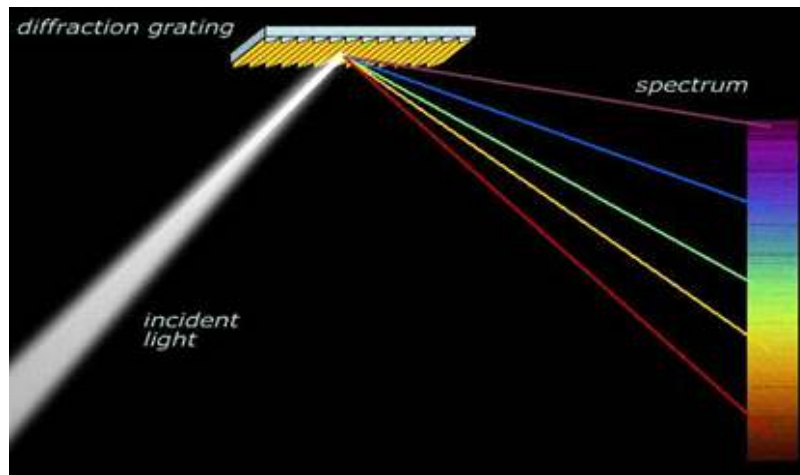
Asphire Spectro Model AS-S3 is an Optimum Decision to the quick analysis with high accuracy and precision for the customer. These Laboratory Instruments can work due to the excitations of the electrons via the addition of energy which is in the form of some wavelength of the electromagnetic radiation which is usually light or ultraviolet.

AS-S3 is an advanced CCD/CMOS based Optical Emission Spectrometer and have the multi base and matrices (Ferrous, Aluminum, Copper, Nickel, Zinc, Tin, Lead, Titanium etc.) for Metal Analysis.

AS-S3 is one of the lightest ultra - compact spark Emission, Excellent performance, and competitive price. AS-S3 Model have 55+ elements and we can also upgrade as per customer requirements.

## maximize productivity with reliable metals analysis

• Ferrous • Non-ferrous metals • Alloys



## A TYPICAL ANALYTICAL RESULT RESULT OF ASPHIRE OES

AsphireApp V 1.0							
Main Analyse Function Implement Help							
New Sample From SD File Save Burn Delete Burn To Excel Setting Report							
Base : Fe   Matrix : MS/CS/LAS   Sample Name : Brammer BS 68 E							
Select Channel	Elements	Scan1	Scan2	Scan3	Scan4	Mean	SD
	C	0.4229	0.4118	0.4043	0.4014	0.4101	0.0096
	Si	0.2884	0.2933	0.2890	0.2924	0.2908	0.0024
Standardisation	Mn	0.5547	0.5554	0.5561	0.5493	0.5539	0.0031
	P	0.0047	0.0050	0.0050	0.0050	0.0049	0.0001
	S	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0000
Scan	Cr	1.5118	1.5093	1.5104	1.4960	1.5069	0.0073
	Mo	0.3222	0.3140	0.3117	0.3067	0.3137	0.0064
Retrieve Data	Ni	0.1446	0.1446	0.1433	0.1416	0.1435	0.0014
	Al	1.0907	1.1066	1.0996	1.0724	1.0923	0.0148
	Cu	0.1360	0.1336	0.1345	0.1342	0.1346	0.0010
Stop Initial Purge	Ti	0.0090	0.0091	0.0090	0.0089	0.0090	0.0001
	V	0.0024	0.0044	0.0030	0.0037	0.0034	0.0008
	Co	0.0072	0.0070	0.0070	0.0071	0.0071	0.0001
Exit	B	0.0002	0.0002	0.0002	0.0002	0.0002	0.0000
	Sn	0.0058	0.0058	0.0059	0.0060	0.0059	0.0001
	N	0.0033	0.0031	0.0032	0.0030	0.0032	0.0001
	Mg	0.0002	0.0002	0.0002	0.0002	0.0002	0.0000
	Fe	95.4563	95.4590	95.4817	95.5383	95.4838	0.0381

# ASPHIRE

# SPECTRO

## OUR PRESENCE





customer satisfaction

## SOME OF OUR ESTEEMED CUSTOMERS



# ASPHIRE SPECTRO

## Asphire System OPC Pvt. Ltd.

Manufacturing Plant: 999, Gandhi Colony, NIT Faridabad - 121001

Asphire Tower: NH, 5/51, Opp. Hotel Miraj, NIT, Faridabad-121001(HR.)

Contact: 0129-4042225, +91 9311816521

Email: [info@asphirespectro.in](mailto:info@asphirespectro.in) | [sales@asphirespectro.in](mailto:sales@asphirespectro.in)

Website: [www.asphirespectro.in](http://www.asphirespectro.in)