

# ADM - 3000

## Analytical Digital Microscopes



- Super high resolution
- 3D topography /3D measurement
- 2D measurements
- Roughness
- Super depth of field
- Auto stitching and scanning
- Flexible

## ▶▶ **Product range**

### **Cameras**

Analytical camera range is intended for all kinds of microscopy users, for the basic routine use, to the advanced professional researcher, who needs to manipulate the working method of the camera and control every detail. The ATL cameras range is a series of easy to use cameras, with high resolution, high sensitivity and very low noise.

All Analytical cameras are manufactured to scientific standards with an extreme focus on the details; assembled in a dust-free environment, high-quality IR filters, high-grade sensors, lowtemperature design, and long durability. All Analytical cameras are equipped with the newest high-quality sensors.



## ▶▶ **Analytical Digital microscopes**

Digital microscopes are becoming a vital part of any well-equipped laboratory. Analytical aims to provide a high-quality digital microscope for a wide variety of industries and research labs, with a focus on providing reliable 2D and 3D measurements and material information like roughness, depth and height profiles. Offering a flexible solution for virtually any application and budget, ranging from a fully automatic 2D/3D microscope to a simple inspection microscope.



## ▶▶ Accessories

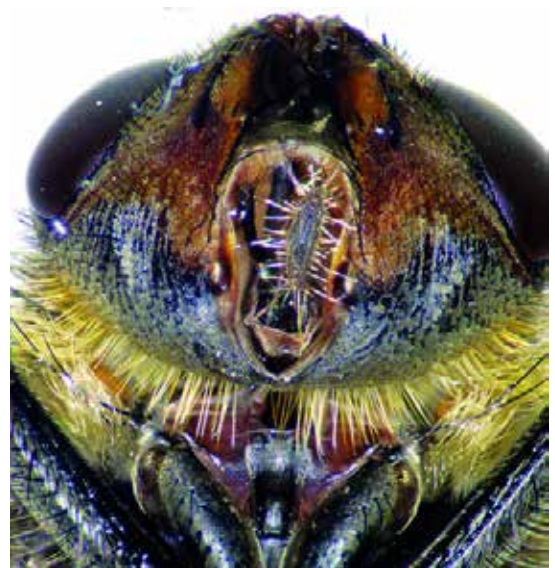
Inspection To support our range of microscope cameras, and digital microscopes, Analytical offers several accessories such as light sources, Microscope stands, manual stages, motorized stages, calibration sliders, mechanical adapters and much more. Every item offered is carefully selected by a highly skilled and experienced team, to ensure a high and reliable quality.

## ▶▶ High-resolution inspection and super accurate results

### Inspection / still images

Inspect the samples in full resolution and capture all the details for documentation with just a click of the mouse.

The images can be saved in various compressed or uncompressed formats like JPEG, JPEG2000, Tiff and BMP



### 2D measurements

Analytical microscopes offer accurate measurements in real-time, or in captured images. The software offers many powerful measuring tools including length, area, angle, diameter and much more. In addition, the actual dimension and measurement results can be saved on the captured image or exported to Excel, CSV or PDF files.

Export to Excel or PDF using the included templates or design a custom template.

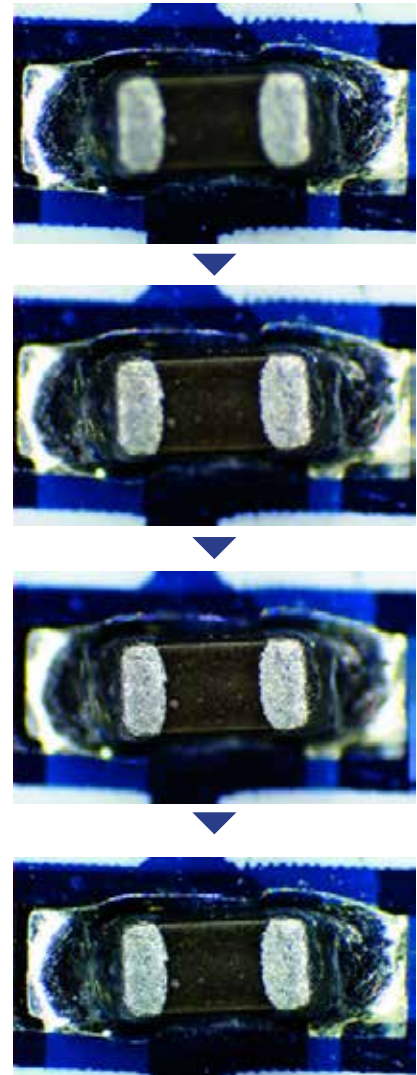
Measurements on multiple specimens can be exported to one CSV file for statistical purposes.



## ▶▶ Super Depth of Field

Analytical microscopes have the ability to produce “Super depth of field”, by capturing images at different focal planes and using the state of the art algorithm which also works on stereo microscopes to stitch a full focus image from the captured images.

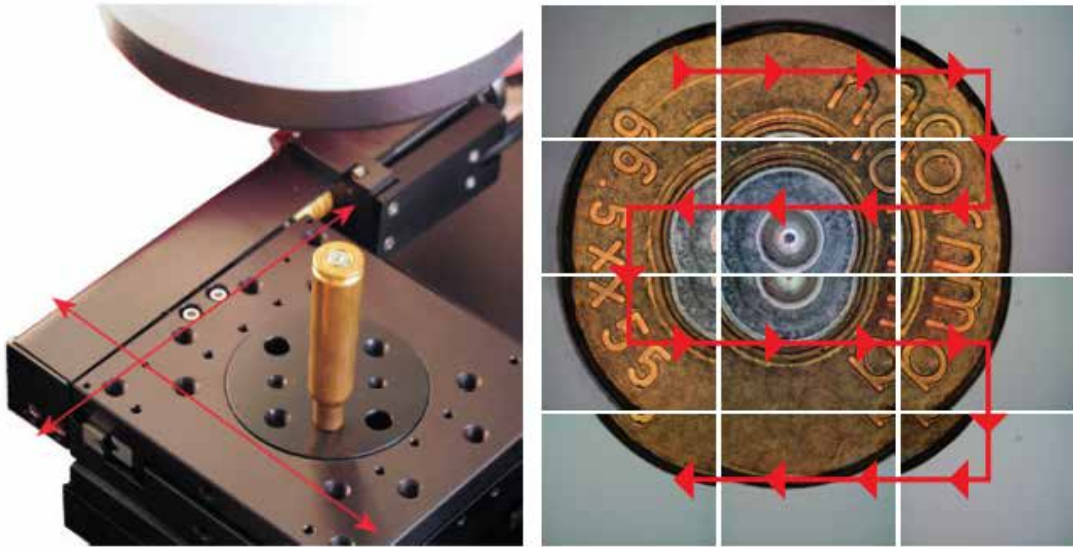
The number of images needed for each extended focus capture, can be automatically calculated from the depth of focus at the actual magnification.



## ▶▶ Extended Field of View / Auto stitching

By including a motorized XY stage with any microscope with a Analytical camera, the field of view can be extended significantly. This is done without involving the user in complicated calculations, the user just moves the specimen in real time with the joystick or keyboard to two opposite corners of the area of interest, then the software does the rest by itself. The resulting image combines the overview enabled by a large field of view with unmatched microscopic details. The automatic stitching can be combined with extended depth of field, extended image dynamics and auto focus.

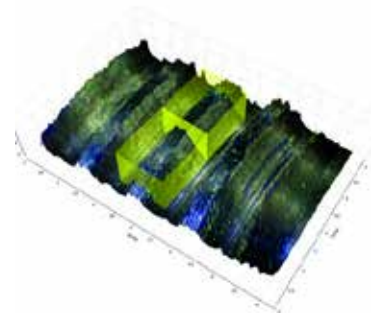




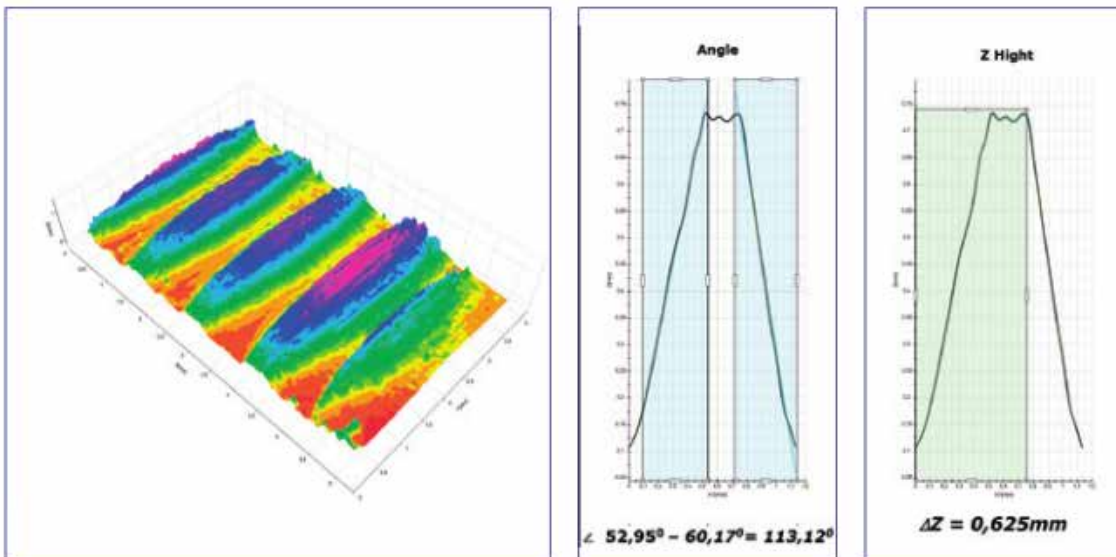
►► **3D Topography**

Extend the visualization and measurement from 2D to 3D.

With the 3D module in InSight, it is possible to display a 3D model of the specimen under observation. Displaying the 3D model in its true color or fake color to better illustrate the height difference in the specimen.

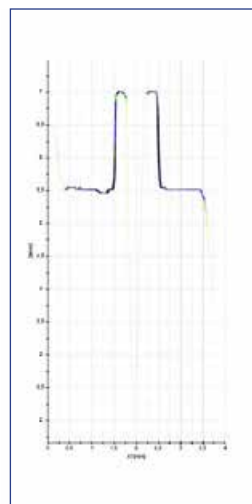
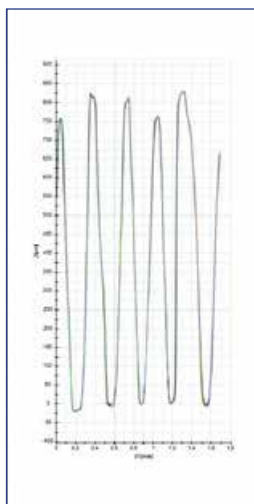
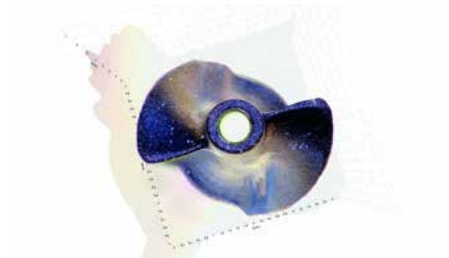
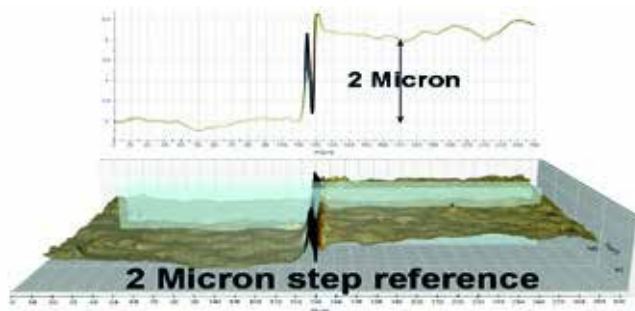
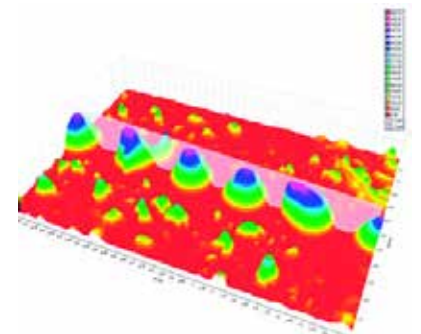
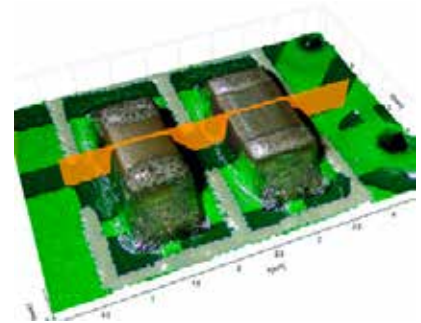


This is a 3D rendering of a chip



►► **3D Measurements**

The Modus systems is a fully capable 3D, surface analyzing, measurement system. 2D parameters like angle, distance, and area can be visualized and measured in 3D without limits as well, and as easy as if it was in only two dimensions. Because of the many options of light sources in combination with high-resolution optics with long working distances, many objects which are normally difficult to visualize in traditional 3D systems like Confocal and Scanning microscopes, the Analytical Modus 3D systems, display all complex details in true color, like not seen elsewhere. The 3D capabilities is also available in the XY-scanning function, so detailed 3D images can be captured automatically at pre-saved XYZ-positions for later analyzes.

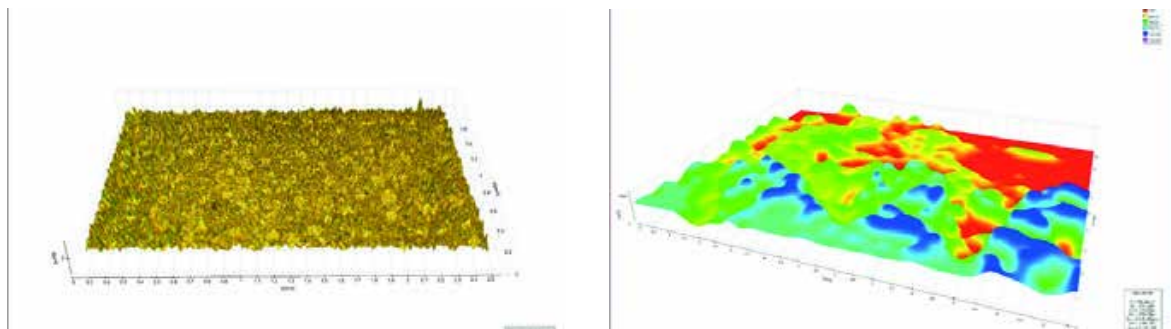


## ►► Roughness Measurement

### Analytical InSight offers a non-contact roughness measurement

The software can be applied in various applications where surface textures need to be analyzed. The implementation of surface roughness measurement is based on the data collected from topography analysis thus the need for a third party add on software is eliminated for most applications.

Roughness measurement of a sample, in 3D with fake coloring



The data shown in a panel in the lower right corner is the results of the Roughness 3D calculations.

**Sq:** Root mean square height of the scale-limited surface

**Ssk:** Skewness of the scale-limited surface

**Sku:** Kurtosis of the scale-limited surface

**Sp:** Maximum peak height of the scale limited surface

**Sv:** Maximum pit height of the scale limited surface

**Sz:** Maximum height of the scale-limited surface

**Sa:** Arithmetical mean height of the scale limited surface

## ►► Analytical Digital microscopes

**A simple and easy solution to convert an old microscope into a 3D microscope**  
Analytical provides solutions for automation of microscopes of all kinds, like motorized focus and motorized XY axis. With Analytical automation solutions, it is possible to turn most old microscopes into a modern 3D microscope.

Capture Extended Focus images with up to 250 slides with ease, create a 3D Topography of the sample surface, and allows for Roughness measurement.

With Analytical automation solution, there is no need for a new microscope, reuse the old microscope, and achieve the same results as with a new 3D microscope.





►► **Gallery**

Various images from Analytical image library.



►► **Specifications**

## 12ZS zoom Specifications

Camera model	Function	M12Z-0 .42	M12Z-1.25	M12Z-2.5	M12Z-4.16
	NA range	0.01-0.07	0.03-0.2	0.06-0.36	0.1-0.45
	Resolution	33.55-4.79mu	<1.5-11mu	<0.9-5.5MU	<0.7-3.4mu
	Focal depth	+/-2750-56.12mu	7-300mu	2-77MU	1.4-27mu
	Working Distance	45mm	46.2mm	35.25MM	14mm

<b>ATL 6EIII</b>	Magnification	29x-344x	83 - 1560x	166 - 3120x	305-5740x
	Field of View	21mm-1.772mm	7.2mm-384mu	3.6mm - 192mu	2mm-208mu

<b>ATL 12EIII</b>	Magnification	27.7x-329.5x	157 - 2964x	315 - 5928x	579-10906
	Field of View	22mm-1.85mm	7.2mm - 384mu	3.6mm - 192mu	2mm-208mu

<b>ATL 5SIII</b>	Magnification	36x-435x	104 - 1940x	208 - 3880x	382-14700x
	Field of View	16.9mm-1.4mm	5.7 - 306mu	2.8mm- 153mu	1.5mm-83mu

## 12ZN zoom Specifications

Camera model	Function	5x	10x	20x	50x
	NA range	0.14*	0.28*	0.42*	0.55
	Resolution	2	1	0.7	0.5
	Focal depth	14	3.5	1.6	0.9
	Working Distance	34mm	33mm	20mm	13mm

<b>ATL 6EIII</b>	Magnification	248x-1693x	495-3386x	999-6773x	3048-15240x
	Field of View	2.45 - 0.36	1.23 - 0.18	0.61 - 0.09	0.20 - 0.04

<b>ATL 12EIII</b>	Magnification	248x-1693x	495-3386x	999-6773x	3048-15240x
	Field of View	2.45 - 0.36	1.23 - 0.18	0.61 - 0.09	0.20 - 0.04

<b>ATL 5SIII</b>	Magnification	248x-1693x	495-3386x	999-6773x	3048-15240x
	Field of View	2.45 - 0.36	1.23 - 0.18	0.61 - 0.09	0.20 - 0.04

<b>ATL 10EIII</b>	Magnification	248-1244x	495-2438x	999-4689x	3048-12192x
	Field of View	2.45mm-0.49mm	1.23mm-0.25mm	0.61mm-0.13mm	0.2mm-0.05mm

## 6ZS zoom Specifications

Camera model	Function	
	NA range	0.069
	Axial Resolution	1 $\mu$ m
	Spatial Resolution	11.6 - 4.9 $\mu$ m
	Focal Depth	0.13 $\mu$ m
	Working Distance	92,3mm

<b>ATL 10EIII</b>	Magnification	90 - 543x
	Field of View	16.33mm - 2.54mm

<b>ATL 5SIII</b>	Magnification	85 - 553x
	Field of View	10.18mm - 1.59mm

## 6ZN zoom Specifications

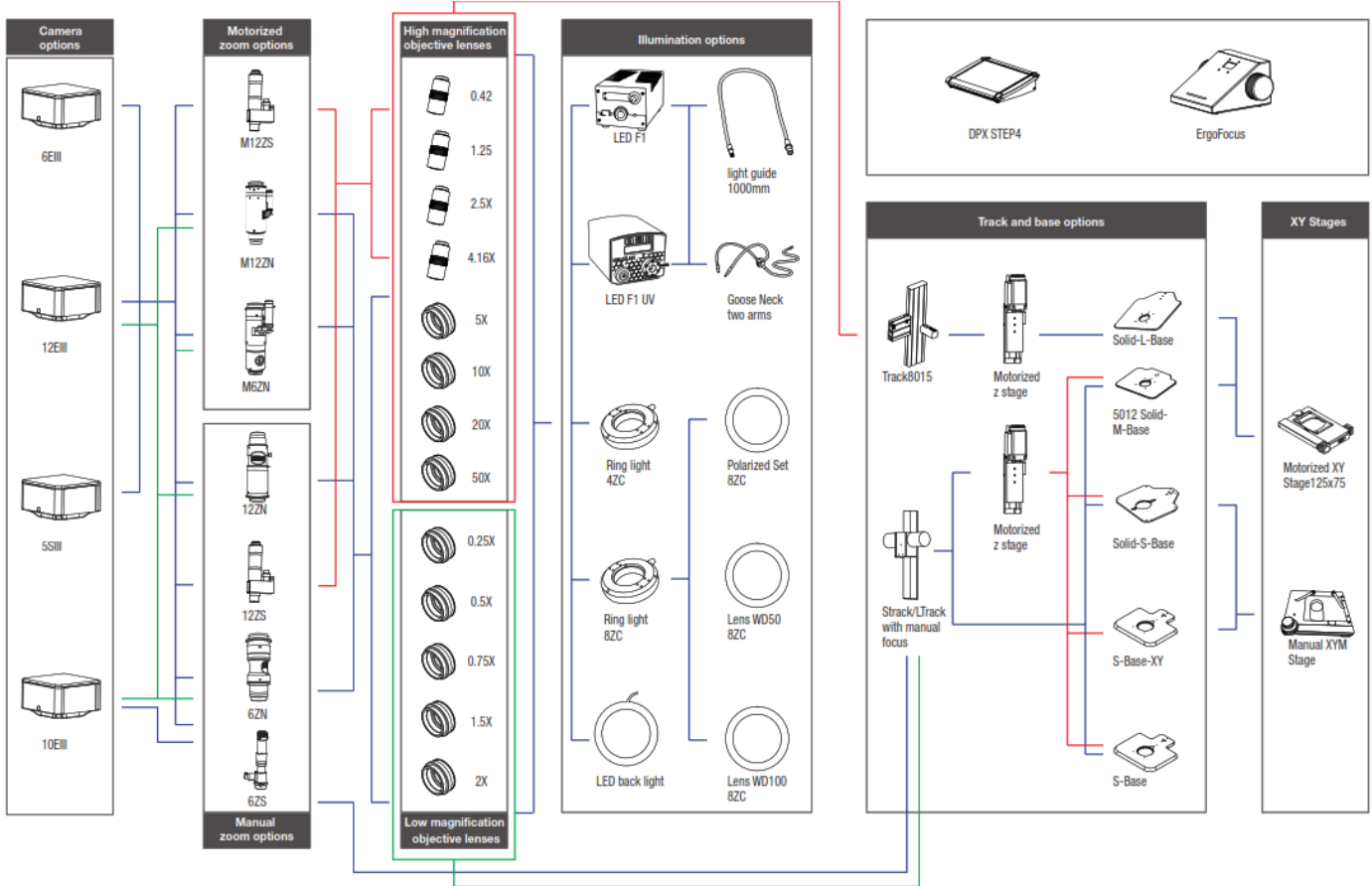
Camera model	Function	5x	10x	20x	50x
	NA range	0.14*	0.28*	0.42*	0.55
	Resolution	2	1	0.7	0.5
	Focal depth	14	3.5	1.6	0.9
	Working Distance	34mm	33mm	20mm	13mm

<b>ATL 6EIII</b>	Magnification	175x-1128x	352-2257x	708-4354x	2032-12192x
	Field of View	3.48 - 0.54	1.73 - 0.27	0.86 - 0.14	0.30 - 0.05
<b>ATL 12EIII</b>	Magnification	175x-1128x	352-2257x	708-4354x	2032-12192x
	Field of View	3.48 - 0.54	1.73 - 0.27	0.86 - 0.14	0.30 - 0.05

<b>ATL 5SIII</b>	Magnification	175x-1128x	352-2257x	708-4354x	2032-12192x
	Field of View	3.48 - 0.54	1.73 - 0.27	0.86 - 0.14	0.30 - 0.05

<b>ATL 10EIII</b>	Magnification	152-823x	290-1647x	609x-3208x	2032-8708x
	Field of View	4.00 - 0.74mm	2.10 - 0.37mm	1.00 - 0.19mm	0.30 - 0.07mm

►► **Microscope diagram**



## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**HPLC Servicing** :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

**Trainings** :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

**AMC's/CMC** :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

**Instruments** :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



## About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

## Our Products & Technologies

						
UV/VIS Spectro 2080+ Double Beam	Infra FTIR	Optima Gas Chromatograph 3007	Optima Gas Chromatograph 2979 Plus	Flash Chromatograph	Atomic Absorption Spectrophotometer	Liquid Partical Counter
						
Optical Emission Spectrophotometer	DSC/TGA	Semi Auto Bio Chemistry Analyzer	HEMA 2062 Hematology Analyzer	Micro Plate Reader/Washer	URINOVA 2800 Urine Analyzer	Total Organic Carbon 3800
						
Fully Automated CLIA	NOVA-2100 Chemistry Analyzer	PCR/Gradient PCR/ RTPCR	TOC Analyzer	Laser Particle Size Analyzer	Ion Chromatograph	Water purification system

## Regulatory compliances



## Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



# Analytical Foundation

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [Info@analyticalfoundation.org](mailto:Info@analyticalfoundation.org)

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## Reach us @



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