



DS2500 Analyzer

Boost the efficiency
of your quality control

**PEOPLE
YOU
CAN
TRUST**

 **Metrohm**

Quality control is a constant challenge



Good quality control faces many challenges. Time and cost pressure are constant companions of yours, alongside the call to become more efficient.

TIME-CONSUMING ANALYTICAL METHODS

can take from several minutes to hours to perform, which slows our lab down.

TOXIC REAGENTS

pose a risk to my employees. They require regular safety training and precautions for both use and disposal.

EXPENSIVE CONSUMABLES

and reagents as well as their disposal account for up to 25% of our budget.

TRAINING AND MAINTENANCE COSTS

are considerable, as we use a variety of analytical techniques to analyze our samples.

INSTRUMENT BREAKDOWNS

disrupt our operations and can cause production bottlenecks.

Near-Infrared Spectroscopy: Quality control made easy

If you want to make your routine analysis easier and safer with a less expensive alternative to your current wet chemistry methods, you should take a closer look at Near-Infrared Spectroscopy (NIRS).

45

seconds – that's how fast
I get results with my DS2500
Analyzer.

0

(zero) sample preparation,
which means there is no need
for solvents and reagents.

50

cents – the average cost per analysis
with my DS2500 Analyzer.

8

parameters or more can be deter-
mined simultaneously with the
DS2500 Analyzer.

IP65/54*

protection class – I can use my
DS2500 Analyzer at the production
line or in the lab without worrying
about spills or dust.

* IP65 = DS2500 Solid Analyzer
IP54 = DS2500 Liquid Analyzer

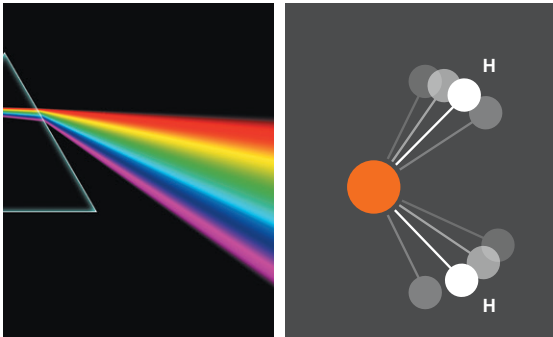
Light is the key to simplifying your routine QC

Wet chemistry methods require careful procedures, skilled personnel, and above all time. Near-Infrared Spectroscopy is different: NIRS relies on the immediate interaction of light with matter. This interaction can be used to perform routine analysis within a few seconds to provide accurate and reliable results without reagents or solvents.

Determine 8 parameters in just 30 seconds

1

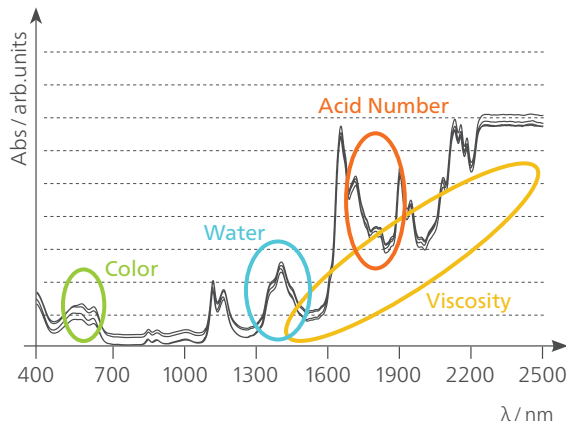
SPECIFIC INTERACTION
DS2500 Analyzers measure the non-destructive, specific interaction between light and the sample.



An optical element disperses the spectral components of the light. The molecules in the sample absorb and scatter the light based on their chemical and physical structure.

2

CHARACTERISTIC SIGNALS
The resulting spectrum provides information about both chemical and physical properties of the sample.



3

CLEAR RESULTS
This spectrum is interpreted automatically by Vision Air software, which calculates the results for each parameter and shows them clearly on the screen.

Time	Sample number	Viscosity [cSt]	Acid Number [mg/g]	Moisture [%]	Color number
11/27/2019 11:12 AM	Sample 8	26.31	3.97	0.69	2.74
11/27/2019 11:11 AM	Sample 7	26.36	4.14	0.86	2.91
11/27/2019 11:11 AM	Sample 6	26.72	4.38	1.10	3.15
11/27/2019 11:10 AM	Sample 5	26.55	4.21	0.93	2.98

A broad range of applications

If you are looking for a fast method applicable for various kinds of substances such as solids, powders, viscous substances, or liquids, NIRS is the method of choice. Our customers have boosted their quality control efficiency by implementing Metrohm NIR spectrometers. Why not you as well? With our pre-calibrated systems for the chemical, petrochemical, polymer, and palm oil industries, switching to NIRS is fast and easy.

Regulated industries

- Water content
- API content
- Filler content
- Functional end groups
- Alcoholethoxylate content
- Raw material identification
- And many more

Polymer industry

- Intrinsic viscosity
- Relative viscosity
- Melt flow index
- Water content
- Carboxyl end groups
- Amine end groups
- And many more

Chemical industry

- Density
- Viscosity
- Particle size
- Solid matter content
- Solvent purity
- Color index
- And many more

Petrochemical industry

- RON/MON
- Total acid/base number (TAN/TBN)
- Flame point, pour point, cloud point
- Cetan index
- API
- Viscosity
- And many more

Palm oil industry

- Free fatty acids (FFA)
- Deterioration of bleachability index (DOBI)
- Iodine value
- Color
- And many more

The DS2500 Analyzers with Vision Air software

Simple to use, reliable results – these are the key benefits of the DS2500 Analyzers and our Vision Air software for spectroscopy. Users, SOPs, and results are easy to manage, either locally or in a global client-server network.



DS2500 Liquid Analyzer

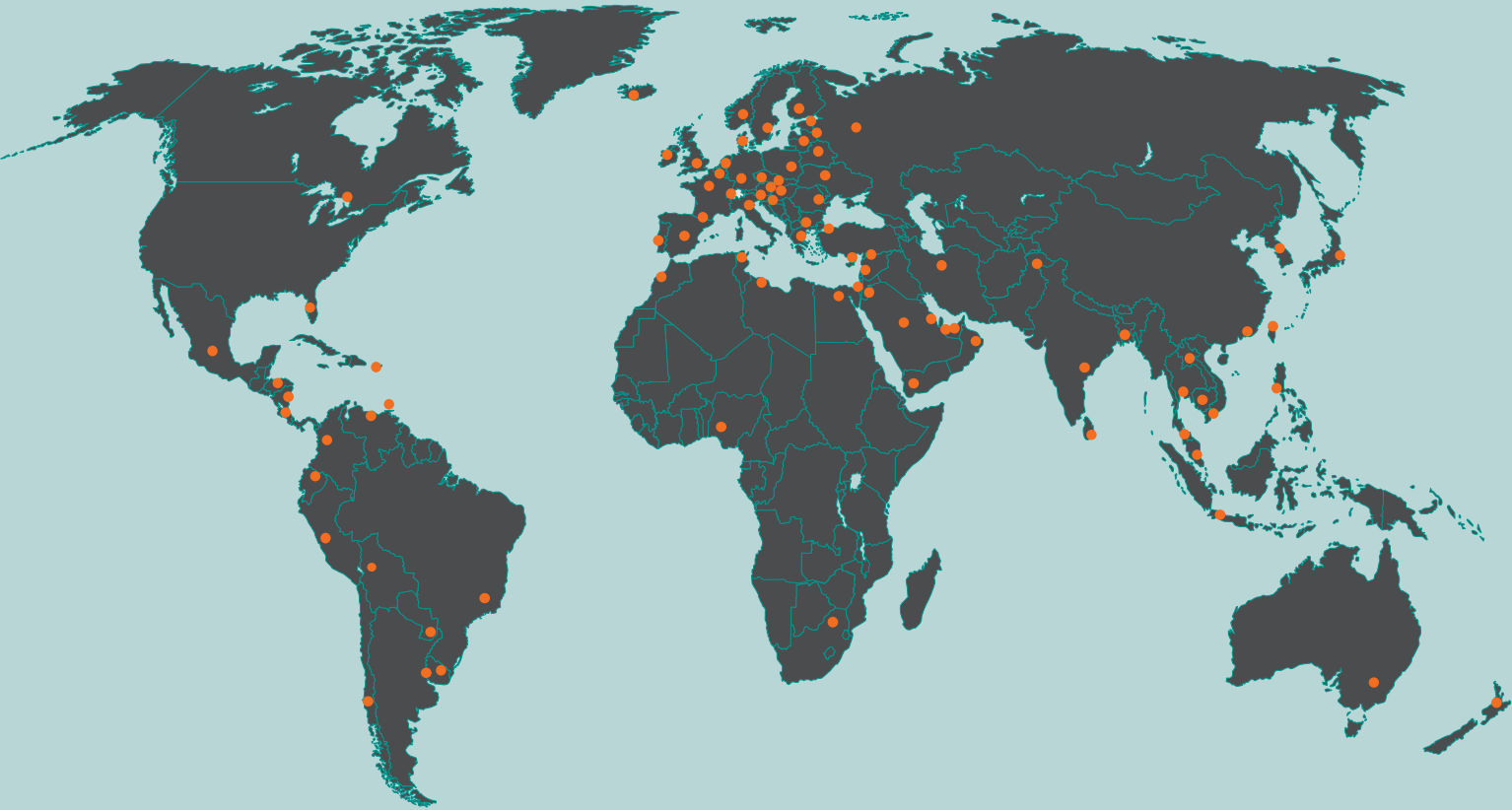
- 2.929.0010 DS2500 Liquid Analyzer
- 2.929.1000 NIRS DS2500 Polyol Analyzer
- 2.929.2000 NIRS DS2500 Petro Analyzer

DS2500 Solid Analyzer

- 2.922.0010 DS2500 Solid Analyzer
- 2.922.1000 NIRS DS2500 Polymer Analyzer

We are a strong partner

We are present in more than 80 countries globally. Our local specialists make sure our NIRS technology is smoothly implemented at your company. Please feel free to contact us and we can work together on your application to develop an ideal solution that meets your individual requirements.



Visit our website
for more information
www.metrohm-nirs.com

and request a demo
how we can help you boost
the efficiency of your
QC laboratory.

