



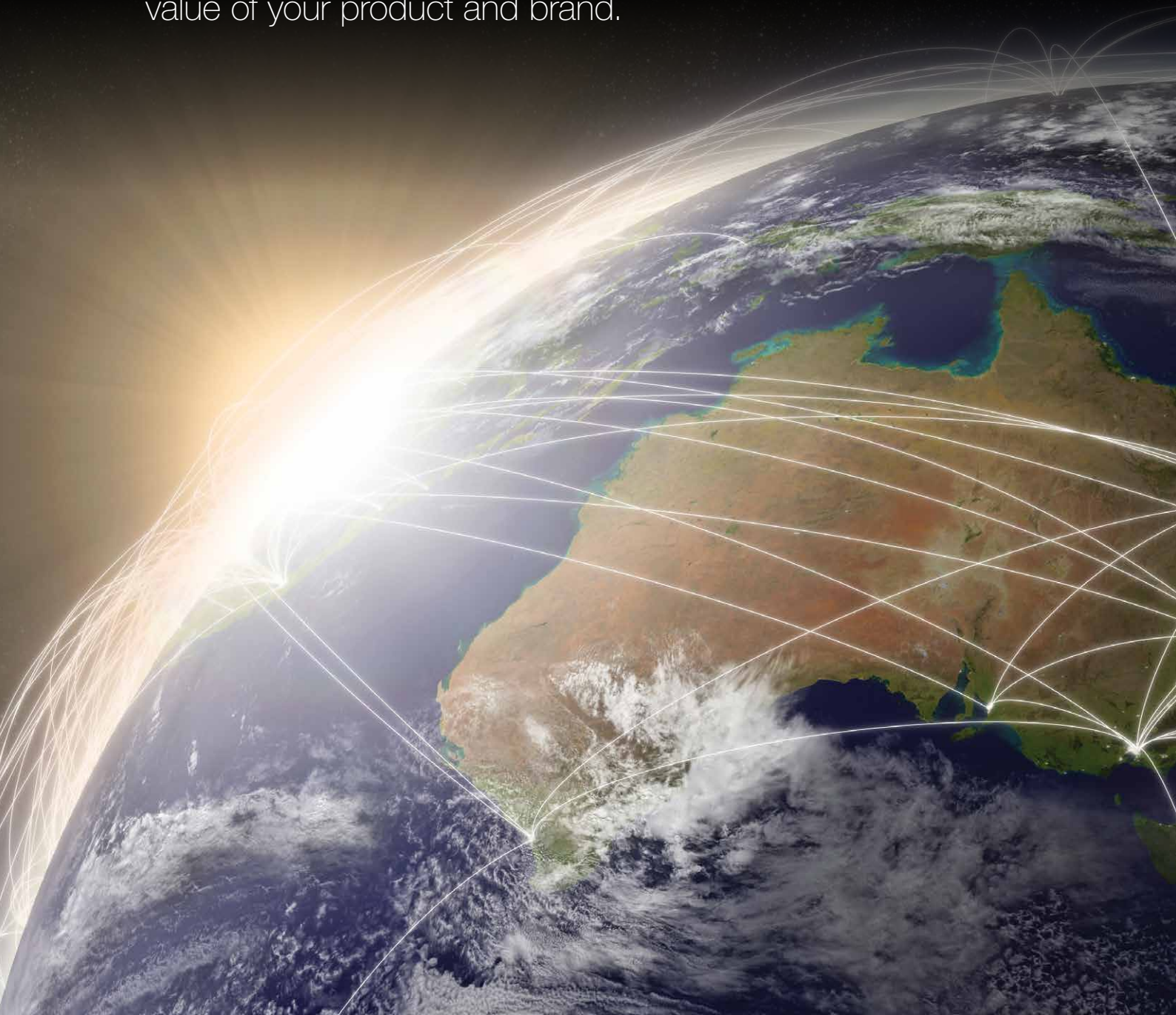
QA/QC Solutions

Quality assurance and quality control
product range guide

ThermoFisher
SCIENTIFIC

Trust Thermo Fisher Scientific for your quality assurance and quality control needs

Whatever your industry, we are focused on ensuring we have a solution for every step of your quality assurance and quality control process, protecting the value of your product and brand.



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Solutions at every step of your QA/QC workflow



Raw material testing

Packaging testing

Product manufacturing

Finished good analysis

Product failure analysis



Feature applications and industry solutions

Drug formulation and manufacturing for additional conformational information on active pharmaceutical ingredients and excipients

Petro-chemistry and energy for the characterisation of refined fuels, biofuels, biomass fuel, gasoline, coal, pet-coke, and lubricants

Environmental for the determination of the elemental content of compost, water, and particulate matter

Agronomy for the characterisation of soil, leaves, plants, fertilizers, sediments, algae or plankton

Material characterisation for quality assessment of rubbers, polymers, plastic, paper, metals and building materials

Food and feed quality as well as compliance with labeling requirements

Cosmetics and personal care products for measuring the flow and deformation of lotions, creams, gels and pastes

Contact us for a solution to your application

Incoming Raw Material Identification (RMID)

The identity, quality and uniformity of your raw materials has major implications on your manufacturing process and the quality of your end products. The physical and chemical characteristics of raw materials can be affected by factors such as natural or manufacturing variations, changes in suppliers, material age or storage conditions, and more.

- ✓ Test for identity
- ✓ Quality test
- ✓ Concentration
- ✓ Physical parameters
- ✓ Sample processing



Packaging testing

The packaging you use on your products not only provides protection of your products from the environment, alterations and contamination during transport and storage, it also provides a visual representation of the quality of the products contained inside. Inferior packaging can lead to product contamination, adulteration or reduced shelf life.

Our spectroscopy and microscopy tools allow you to test the quality and chemical makeup of multilayer packaging materials, adhesives, inks and dyes, as well as the identity and thickness of barrier coatings on metals.

- ✓ Test for identity
- ✓ Colour
- ✓ Physical parameters
- ✓ Detection of targeted and known Non Intentionally added substances
- ✓ Sample extraction
- ✓ Volatile/Non-volatile analysis
- ✓ Elemental impurities



Product manufacturing and finished goods analysis

Small changes can quickly lead to significant changes to the quality and uniformity of the products you produce. Regular testing of critical steps in your manufacturing process can proactively identify problems before product quality is compromised, saving on product reprocessing and wastage costs. Thorough quality control on finished products is vital to protect your brand and ensure defined quality, safety & performance standards are met.

- ✓ Contamination
- ✓ Colour
- ✓ Viscosity
- ✓ Particle size
- ✓ Uniformity
- ✓ Level of cure
- ✓ Additive content
- ✓ Chemical changes
- ✓ Degradation





Product failure analysis

Understand the reason for a product failure whether related to design, the manufacturing process, material property, storage, contamination or improper use. With the correct tools you can identify small physical or chemical changes in your products that will enable the improvement of your process and the quality of your goods and materials. The same tools can also help identify whether product failures or complaints are the result of improper use or adulteration, or whether a product is manufactured by a different supplier.

- ✓ Identity
- ✓ Thickness
- ✓ Colour
- ✓ Uniformity
- ✓ Viscosity
- ✓ Contaminants & defects
- ✓ Formulation
- ✓ Chemical and physical changes

Chemical Analysis

FTIR Spectrometer

Thermo Scientific™ Nicolet™ Summit

Use the Smart Background collection mode designed to cut your total analysis time by 50% on the Thermo Scientific Nicolet Summit FTIR Spectrometer. Generate fast, reliable answers with less effort even in busy, multi-user QC labs or teaching labs with this compact, powerful FTIR spectrometer.

- Enhanced productivity: revolutionary Thermo Scientific OMNIC Paradigm Software, integrated LightBar, optional touchscreen, and automatic background collection streamline your analysis
- Reliable performance: powered by the Thermo Scientific LightDrive Optical Engine with 10-year warranty on components
- Advanced connectivity: an integrated Windows® computer provides on-board data processing with full Wi-Fi and Ethernet networking capabilities



We also offer a full range of molecular spectroscopy equipment, including Raman, NIR and NMR as well as XRF/XRD analysers.

FTIR Spectrometer

Thermo Scientific™ Nicolet™ iN™ 5 FTIR Microscope

The Nicolet iN5 FTIR microscope features a robust design and an optical setup that allows you to simultaneously view your sample while collecting chemical information— which guarantees the data is from the area you are viewing. Its large field of view makes it easy to locate and target your contaminants and gives you the spatial resolution necessary to perform chemical analysis pinpoint accuracy. The microscope utilizes Thermo Scientific™ OMNIC™ software suite available which has an extensive set of libraries for fast, confident compound identification. Easily Identify contaminants in food products and help to assure product quality and avoid production line downtime.

We also offer a full range of molecular spectroscopy equipment, including Raman, NIR and NMR as well as XRF/XRD analysers.



Chemical Analysis

NIR Analysers

Thermo Scientific™ Antaris™ II FT-NIR Analyzer

Easily implement laboratory-based FT-NIR performance in a ready-for-plant package using the Thermo Scientific™ Antaris™ II FT-NIR Analyzer. With industry-leading method transfer performance, the Antaris II FT-NIR Analyzer provides robust and reliable data collection for at-line, online and in-line analysis. You can customize an Antaris II FT-NIR Analyzer for specific applications or choose the Antaris II MDS Method Development Sampling System, which includes transmission, fiber-optic and integrating sphere diffuse reflection analysis all in one turnkey system.



UV-Vis Spectroscopy

Thermo Scientific™ GENESYS™ 140/150 Vis/ UV-Vis Spectrophotometers

Perform quantitative measurements in routine industrial QA/QC or university chemistry labs with the automated and network-capable Thermo Scientific™ GENESYS™ 150 UV-Visible and GENESYS 140 Vis Spectrophotometers. Optimized for usability and performance, this platform features a high-resolution color touchscreen, optional Wi-Fi networking, and a rugged design built for repetitive, heavy use environments. Regarded worldwide for reliability, accuracy and reproducibility, GENESYS spectrophotometers meet today's expectations for advanced technology in a compact, robust package.



NanoDrop One Microvolume UV-Vis Spectrophotometer and NanoDrop QC Software

Improve your UV-Vis workflow with an instrument that eliminates the need for dilution, provides an easy-to-use instrument- or PC-control experience, and runs chemometric algorithms without the need for additional analysis. Rely on fast, accurate quantification of your samples using only 1-2 UL with the Thermo Scientific™ NanoDrop™ One Microvolume UV-Vis Spectrophotometer. No dilutions needed even for highly concentrated samples. Thermo Scientific™ NanoDrop™ QC Software runs chemometric algorithms and provides results within seconds. It is ideal for production quality control or R&D labs supporting polymer and chemical analysis solutions including adhesives and lubricants.



Physical Testing



Right colour? Right taste?

Be sure with BeerCraft™ Software.

Ensure batch-to-batch consistency with Thermo Scientific™ BeerCraft™ Software and GENESYS 50 or 150 UV-Vis Spectrophotometers. Pre-programmed tests provide fast, easy quality analysis - no technical experience necessary.

Colour Readers

Konica Minolta CR-20 Colour reader

The handheld CR-20 color reader, measures the color and whiteness of foods or raw materials in paste, solid, or powder form. It boasts an impressive LCD screen that displays measurement results from one of eight color spaces/colorimetric indexes including L*a*b*, L*C*h, Yxy, Munsell, WI (CIE/ASTM E 313-96), Tint (CIE/ASTM E 313-96), YI (ASTM E 313-96).



Konica Minolta CR-400/410 Chroma meters

The CR-400 and CR-410 are cost effective QC color measurement instruments with 8mm and 50mm measuring apertures for either regular or irregularly coloured or textured samples. Widely adopted in the food industry, the colour data is measured as the eye sees and is reported in simple Lab format. The CR-400, with its 8 mm measuring area is suitable for measuring reflected colour and colour difference in a wide range of industrial fields. It is able to meet the needs of various applications, from all sorts of ingredients, foods, raw materials and finished products to pharmaceuticals and dermatological applications. If samples are structured or uneven in surface, such as granulates, fabrics, wood, stones, bricks, then the CR-410 is the right choice. Its unique very large aperture of 50 mm is perfectly suited for such samples and thus avoids averaging of several measurements.



Physical Testing

Konica Minolta CM-5 Spectrophotometer

An advanced all-in-one system, the CM-5 Spectrophotometer is a bench-top measurement instrument designed to evaluate the color and appearance of opaque, transparent, and translucent samples. Its high precision and advanced capabilities allow users to effectively analyze, formulate, and control the color and appearance of solids, liquids, pastes, powders, pills, and granules in a more comprehensive, streamlined process. This makes the CM-5 ideal for color analysis within R&D and laboratory environments.

- Aperture size options of 3mm, 8mm, and 30mm allow measurement of very small to large samples.
- Top port for measuring opaque samples and transmittance chamber for transparent and translucent samples.
- Pass/fail assessments for immediate target colour comparison.
- Auto-calibration at each start up ensuring high accuracy and performance is maintained.
- The large colour LCD screen allows interpreting results, displaying data and graphs, including colour difference graphs, spectral graphs and colour values



Viscometers

Fungilab V-Series VPAD Rotational Viscometer

Perform quantitative measurements in routine industrial QA/QC or university chemistry labs with the automated and network-capable Thermo Scientific™ GENESYS™ 150 UV-Visible and GENESYS 140 Vis Spectrophotometers. Optimized for usability and performance, this platform features a high-resolution color touchscreen, optional Wi-Fi networking, and a rugged design built for repetitive, heavy use environments. Regarded worldwide reliability, accuracy and reproducibility, GENESYS spectrophotometers meet expectations for advanced technology in a compact, robust package.



Refractometers

Bellingham + Stanley RFM300-T Series

Refractometers Incorporating wide beam optics and one of the flattest prism platforms on the market, RFM300-T Series refractometers are capable of measuring nonhomogenous samples such as fruit juice with pulp, opaque chemical compounds and emulsions that are normally difficult to read with optical refractometers or those digital refractometers that do not address the need to measure “difficult samples.”

- Flat prism surface for easy-cleaning
- Wide beam scan for non-homogenous samples
- Three decimal place Brix precision* (6 d.p. RI)
- USP/EP/BP/JP compliant
- Supports FDA regulation 21 CFR Part 11



Polarimeters

Bellingham + Stanley ADP400 Series Polarimeters

Capable of measuring up to 3.0 OD at 589nm over a maximum tube length of 200mm, ADP400 Series polarimeters offer three decimal place precision to an accuracy of ± 0.01 °Angular, making them ideal for general purpose use in food, flavors, fragrance, pharmaceutical and chemical industries as well as within academia and research. Calibration and configuration can be password protected, accessible by keypad entry or, for convenience, using a fully configurable RFID tag. This, together with the audit trail, facilitates operation in environments conforming to FDA regulation 21 CFR Part 11 or GLP.

- Patented XPC Technology
- Up to 3.0 OD measurement
- Tube lengths up to 200mm
- High definition 4" full color display
- US/EP/BP/JP compliant
- Supports FDA regulation 21 CFR Part 11
- PHR-MEAN Method with continuous or single-shot measurement modes



Product and application selection table

		Applications			
		Incoming Raw Material Identification	Packaging testing	Product manufacturing and finished goods analysis	Product failure analysis
Technology	Solution				
FTIR Spectrometers	Nicolet Summit	x	x	x	x
FTIR Spectrometers	Nicolet iN 5 FTIR Microscope		x		x
NIR Spectrometers	Antaris™ II FT-NIR Analyzer	x		x	
UV-Vis Spectrometers	GENESYS™ 140/150 Vis/UV-Vis Spectrophotometers	x		x	
Colour Readers	Konica Minolta CR-20 Colour reader	x	x	x	
Colour Readers	Konica Minolta CR-400/410 Chroma meters	x	x	x	
Colour Readers	Konica Minolta CM-5 Spectrophotometer	x	x	x	x
Viscometers	Fungilab Cone & Plate Viscometer	x		x	x
Viscometers	Fungilab V-Series VPAD Rotational Viscometer	x		x	x
Refractometers	Bellingham + Stanley RFM300-T Series Refractometers	x		x	
Polarimeters	Bellingham + Stanley ADP450 Polarimeter	x		x	



Have you also considered?



Water activity meters*

Determining moisture content has never been more important in today's laboratories and industries. Our moisture analysers and water activity meters are designed to meet all your quality control needs whether in food and beverage, pharmaceutical, or industrial environments.



Particle analysis equipment

Efficient and accurate particle size analysis can be achieved with our range of high quality test sieves and sieve shakers from Fisherbrand and Endecotts.



Water quality

Our water quality testing products cover both field and laboratory applications in the market segments of potable and wastewater treatment - from pH, ISE, conductivity and dissolved oxygen meters, electrodes and solutions, to colorimetry, titration and on-line process monitors.



Product Inspection

From the sensitivity of our metal detectors, to the detection performance of our X-ray systems, and the consistent accuracy of our checkweighers, we are committed to helping you eliminate errors and ensure the integrity of your brand.



Fluke thermal imaging & process test tools

From industrial electronic installation, maintenance and service, to precision measurement and quality control, Fluke tools help keep business and industry around the globe up and running.

*Available in Australia only



In Australia:

For customer service, call 1300-735-292

To fax an order, use 1800-067-639

To email an order, ordersau@thermofisher.com

Find out more at

thermofisher.com.au

In New Zealand:

For customer service, call 0800-933-966

To fax an order, use 0800-329-246

To email an order, ordersnz@thermofisher.com

Find out more at

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