



SAVE HUNDREDS OF THOUSANDS OF DOLLARS WITH REAL-TIME MONITORING

TAKE THE LAB ONLINE

The QualitySpec® 7000 delivers non-contact, above-the-conveyor-belt analysis of process material providing instant results to enable timely decision making, reducing waste and improving quality. The system is ideally suited for continuous measurement of solids and blended materials in a range of industries including mining and food processing. By providing multiple measurements from a single point, the QualitySpec 7000 yields more information quickly, to help make real-time decisions about the process as it changes.

Key Benefits:

- Safe, simple **light source**
- Fast, accurate process analysis
- Non-contact, non-destructive measurement
- Multiple constituent measurements from a single can
- Real-time measurement of process
- Easy maintenance



www.malvernpanalytical.com/ASD



**Malvern
Panalytical**
a spectris company

SETTING THE STANDARD FOR RAPID, NON-CONTACT PROCESS ANALYSIS

The QualitySpec 7000 is designed for rapid, accurate, non-destructive and non-contact spectral measurements for continuous analysis of material as it is being conveyed in the process. Time-consuming sampling and laboratory analysis is eliminated by measuring materials as they move through the process. Data from the analyzer is available for use by a process control system for real-time, closed-loop process control.

At the core of the QualitySpec 7000 is the spectrometer that uses a simple, safe quartz-halogen light source and leverages proprietary spectrometer technology with a highly sensitive detector array. When combined with chemometric modeling techniques that 'calibrate' the analyzer for the constituents of interest, the QualitySpec 7000 is a powerful tool for improved process and quality control.

To gain the full benefit of the QualitySpec 7000, ASD's SummitCAL Solutions Team provides the necessary modeling to fully calibrate the analyzer for the application. SummitCal provides the multivariate modeling expertise necessary to transform sample data into actionable process information.

Improve your process knowledge and increase quality control with the QualitySpec 7000

BENEFITS FOR THE INDUSTRY



Mining

- Decrease acid usage and save over \$250,000* in an operating mine per year
- Achieve optimal processing by real-time sorting of high- and low-quality ore
- Reduce production downtime by providing fast insight into the makeup of incoming material, which could save hundreds of thousands or even millions in machine maintenance and lost production time

*Mining - acid usage example savings	
Truckloads of acid used per day:	100
Acid volume per truck (gal):	3,500
Sulfuric acid density (lbs/gal):	15
Acid weight per truck (ton):	27
Sulfuric acid cost (\$/ton):	\$45
Acid cost per truck (\$):	1,215
Acid cost per day (\$):	121500
Acid cost per year (\$) (assuming four days per week):	25,272,000

Potential savings and payback on acid monitoring solution using the QualitySpec 7000

Reduction in acid usage	US\$ savings per year
1% reduction	\$252,720
0.5% reduction	\$126,360
0.25% reduction	\$63,180



Food

- Monitor moisture, proteins and other constituents in real time to sort grains in process
- Enabling optimal sorting and blending of in-process product
- Ensure best quality food for your customers

AUTOMATION SOLUTIONS GROUP

Malvern Panalytical, the world's leading supplier of analytical equipment, has a dedicated team of process control and automation experts. The automation team offers a complete spectrum of laboratory automation and information systems including sample transportation, preparation, analysis and results processing. Systems are controlled by the SamTracs control system whereas presentation and results processing are executed by the dedicated LIMS package SPARCS.



SPECIFICATIONS

Performance	
Wavelength Range	350-2500 nm
Wavelength Accuracy	1 nm
Sampling Spot Size	76-100 mm (3-4 in)

Output	
Fast Ethernet; 100 Base-T or 100 Base-FX (fiber optic for distance exceeding 100 meters)	
OPC Server connection to constituents in Microsoft Access® database	
Measure and record two values for up to 20 constituents	
Qualitative or quantitative data for each constituent	
Model Quality Index (MQI), a model quality indicator for each result	

Mechanical/Electrical	
Light Source	100 watt quartz-halogen
Optical head (see picture)	74 cm (29 in), from bottom of mounting distance optical head box to average material level on conveyor
Power	230 VAC ± 10%, 12 amps, 50/60 Hz
Weight	(Exclusive of mounting structures)
Optical head	22.6 kg (50 lbs)
Electronics cabinet	159 kg (350 lbs)
Dimensions	(H x W x D)
Optical head	43 x 41 x 46 cm (17 x 16 x 18")
Electronics cabinet	100 x 122 x 48 cm (39 x 48 x 19")

Environmental Considerations	
Temperature rating	-20 to 50 °C (-4 to 122 °F)
Humidity	5 to 95% non-condensing

Approvals	
CE Marked	





WHY CHOOSE MALVERN PANALYTICAL?

We are global leaders in materials characterization, creating superior, customer-focused solutions and services which supply tangible economic impact through chemical, physical and structural analysis.

Our aim is to help you develop better quality products and get them to market faster. Our solutions support excellence in research, and help maximize productivity and process efficiency.

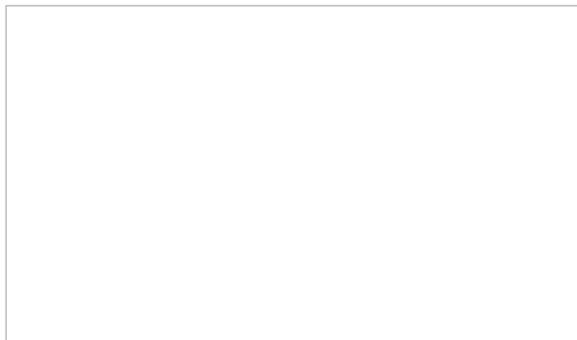
Malvern Analytical is part of Spectris, the productivity-enhancing instrumentation and controls company.
www.spectris.com

SERVICE & SUPPORT

Malvern Analytical provides the global training, service and support you need to continuously drive your analytical processes at the highest level. We help you increase the return on your investment with us, and ensure that as your laboratory and analytical needs grow, we are there to support you.

Our worldwide team of specialists adds value to your business processes by ensuring applications expertise, rapid response and maximum instrument uptime.

- Local and remote support
- Full and flexible range of support agreements
- Compliance and validation support
- Onsite or classroom-based training courses
- e-Learning training courses and web seminars
- Sample and application consultancy



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