PRODUCT GUIDE2014

OUR INSTRUMENTATION AT A GLANCE
OUALITY CUSTOMER SOLUTIONS

















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AMETEK LAND HAS BEEN BUILDING PRECISION MEASURMENT INSTRUMENTATION SINCE 1947.

We are specialists in non-contact temperature measurement and combustion monitoring with our products applied across diverse industries such as steel and glassmaking, electricity generation and cement manufacture.

As part of AMETEK Process & Analytical Instruments Division since 2006, our customers benefit from the worldwide AMETEK sales and service team.



ALUMINUM

APPLICATION **DEDICATED**

Single spot non-contact thermometers designed for specific applications. For extruders, the ABTS for billets, the ADTS for die preheating, the AETS at the extruder exit and the AQTS for the guench exit. In the strip mill, the ASTS at the mill entry and mill exit, and the ASPS for the Coiler.





Low temperature, rugged process thermal imager. Used in the cold rolling mill.



🔟 LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Generally used on steam boilers.



PLASTICS



High speed linescanner providing detailed thermal images. LSP-HD 60 used for thermoforming; LSP-HD 61 used for extruders and PET Preforms; and LSP-HD 71 used for thin plastics.



STEEL

APPLICATION **DEDICATED**

Single spot non-contact thermometers designed for specific applications. Systems used: Stove Dome, Ladle Safety, Ladle Monitoring, Spray Chamber Probe, Furnace Temperature System, Understrip Temperature System, Roll Nip System, Galvanneal Strip Thermometer, Slag Detection System (outside of the US).



🔯 IQ SERIES/SOLONET

Single spot thermometers with high accuracy and are cost efficient. IQ R and IQ 1 used at the caster exit, crop shear, rougher and finisher; IQ 2 used for continuous annealing lines.



🔯 SYSTEM 4

Single spot non-contact thermometers with high accuracy and quick response. M05 model is used for the blast furnace tap measurement; M1, R1, U1, V1 used for the caster exit, crop shear, rougher and finisher; M2 and M3 used at the coiler; M2 and U2 used at the continuous annealing line; and the M1 Target Orbiter used at the Stelmor coiler.

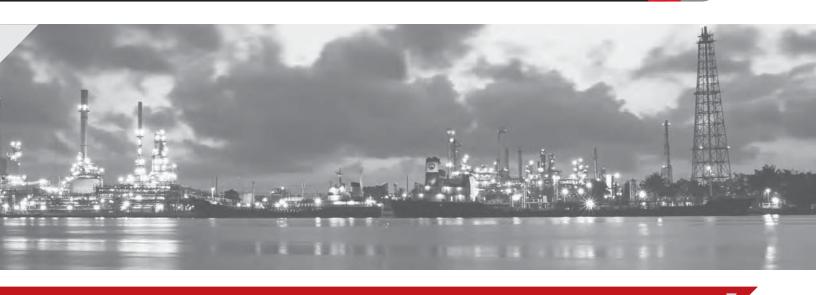


CYCLOPS

Handheld non-contact spot thermometers with high accuracy.

- · C100B used in coke oven battery flues;
- C055B used for the blast furnace iron stream;
- · C390B used for the reheat furnace using dirty fuels.







LSP-HD

High speed linescanner providing detailed thermal images. LSP-HD 11 used at the caster exit; LSPHD 10 used at the crop shear, rougher, and finisher; LSP-HD 21 used at the coiler, continuous annealing and hot dip galv line snout; LSP-HD 61 used at the top roll.





₩ NIR-b

Short wavelength non-contact borescope thermal imager with high resolution images and through-the-wall design to provide a wide 90 degree view. Used in natural gas fired reheat furnaces.





ARC

Low temperature, rugged process thermal imager. Used for ladles, refractory wear and safety.





3 4200

Accurate and stable opacity monitor for non-compliance applications. Used for stack gas emissions.





FTI-Eb

A Process thermal imager used in the reheat furnace using dirty fuels.





🗐 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216. Installed on the stack or on a duct leading to the stack.





High temperature process imager providing high resolution images. Used at the caster exit and crop shear.





UNIT LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Used for stack gas emissions.





PRODUCT GUIDE2014

PRODUCT KE

Fixed Spot

Thermometers



Calibration Services



Process Imaging Combustion &

Emission Monitoring

"THE CYCLOPS FAMILY IS THE INDUSTRY LEADING STANDARD FOR HIGH QUALITY PORTABLE NON-CONTACT THERMOMETERS."

GLASS

APPLICATION **DEDICATED**

Single spot non-contact thermometers designed for specific applications. Model FG for forehearths; FLT5A for floatline lehrs; Glass Mold Thermometer - GMT; Vapor Deposition Monitoring - VDT.



NIR-b

Short wavelength non-contact borescope thermal imager with high resolution images and through-the-wall design to provide a wide 90 degree view. Used in the melt tank.



❷ IQ SERIES/ SOLONET

Single spot thermometers with high accuracy and are cost efficient. IQ 5 used at the tin bath.



3 4200

Accurate and stable opacity monitor for non-compliance applications. Used for stack gas emissions.



SYSTEM 4

Single spot non-contact thermometers with high accuracy and quick response. M1 is used in the melt tank; M1 Fiberoptic is used at the refiner, canal and gob; M5 and U5 used at the tin bath



🗐 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216. Used for stack gas emissions.



CYCLOPS

Handheld non-contact spot thermometers with high accuracy. C100B used for the melt tank port arch and bridge wall.



LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Used for stack gas emissions.



LSP-HD

High speed linescanner providing detailed thermal images. LSP-HD 50 used on the lehr and for tempering operations.



🕙 WDG 1200-1210

Insitu oxygen probe for combustion optimization, featuring integrated control and display electronics. Installed on the stack.





POWER GENERATION



Single spot non-contact thermometers designed for specific applications. CDA used for coal fired boilers.



HotSpotIR

High speed linescanner which detects small, not objects; high speed alarms. Used for detecting small hot inclusions on coal conveyors.



FTI-Eb

A process thermal imager used for coal fired boilers to check boiler tube and refractory deterioration and burner performance.



3 4200

Accurate and stable opacity monitor for non-compliance applications. Used in ducts leading to the stack.



🔟 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216. Installed on the stack or on a duct leading to the stack.



INCOMPLY SERIES

Compact CEMS for gas-fired and other low-sulphur applications. Used for stack gas emissions monitoring.



LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Used on the stack.



🗐 LANCOM 200

A portable sulphuric acid dewpoint temperature analyzer used to minimize acid corrosion in the stack or downstream of the air preheater in oil-fired boilers.



MILLWATCH/ **SILOWATCH**

Carbon monoxide monitors for early warning of possible fires in coal mills and storage silos.



🔟 WDG 1200-1210

Insitu oxygen probe for combustion optimization, featuring integrated control and display electronics. Mounted on the stack or downstream of particulate removal equipment.





PRODUCT GUIDE2014

PRODUCT KE

Fixed Spot

Thermometers

Portables

Calibration Services



Process Imaging

Combustion & **Emission Monitoring**

"THE LATEST TECHNOLOGIES UTILIZED IN SPOT MAKE NON-CONTACT TEMPERATURE MEASUREMENT ACCURATE, FLEXIBLE AND EASY TO USE." – SPOT R100

FORGING/HEAT TREATMENT

IQ SERIES/ SOLONET

Single spot thermometers with high accuracy and are cost efficient. IQ 1 used at the forging press.



MINERALS



Accurate and stable opacity monitor for non-compliance applications. Used for stack gas emissions.



🔞 SPOT R100

Single spot non-contact thermometers with multiple operating modes and outputs. Used at the forging press.



🗐 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216.



SYSTEM 4

Single spot non-contact thermometers with high accuracy and quick response. M1 and R1 thermometers used at the forging press; the R1 and U1 used in the reheat furnace.



APPLICATION **DEDICATED**

The Critical Vessel Monitoring System detects rapidly developing hot areas for plant safety.



CYCLOPS

Handheld non-contact spot thermometers with high accuracy. The C100B is used at the forging press and reheat furnace.



LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Used for gas stack emissions.



😡 NIR-b

Short wavelength non-contact borescope thermal imager with high resolution images and through-the-wall design to provide a wide 90 degree view. Used in natural gas fired reheat furnaces



MILLWATCH/ **SILOWATCH**

Carbon monoxide monitors for early warning of possible fires in coal mills and storage silos.





POLYSILICON



Single spot non-contact thermometers with high accuracy and quick response. The R1 Fiberoptic used for monitoring ingot growth.





High temperature process imager providing high resolution images. Used for monitoring ingot growth.



INCINERATORS



Single spot non-contact thermometers designed for specific applications. The CDA Thermometer is durable and long-lasting for furnace atmosphere measurements.



FTI-Eb

A process thermal imager used to see through combustion products inside the furnace atmosphere.



PETROCHEMICALS



Short wavelength non-contact borescope thermal imager with high resolution images and through-the-wall design to provide a wide 90 degree view. Used for tube measurement in heaters and reformers.



USTAIR STATE OF STAT

Handheld non-contact spot thermometers with high accuracy. Cyclops 390B used in heaters and reformers for tube measurement.



😡 FTI-Eb

Process thermal imager. Used for tube measurement in heaters with dirty fuels.



APPLICATION DEDICATED

The Critical Vessel Monitoring System detects rapidly developing hot areas for plant safety.



(CONTINUED ON NEXT PAGE)

PAPER/NON WOVENS

HotSpotIR

High speed linescanner which detects small, not objects; high speed alarms. Used for supercalender roll cover monitoring.



■ LSP-HD

High speed linescanner providing detailed thermal images. LSP-HD 60 used at the dryer exit and for supercalender roll cover monitoring.







PAPER/NON WOVENS



3 4200

Accurate and stable opacity monitor for non-compliance applications. Used in the stack



HotSpotIR

CEMENT

High speed linescanner which detects small, hot objects; high speed alarms. Used Clinker on conveyors.





🔟 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216. Used for stack gas monitoring.





■ NIR-b

Short wavelength non-contact borescope thermal imager with high resolution images and through-the-wall design to provide a wide 90 degree view. Used in the kiln burning zone.





🔁 FGA 900 SERIES

Compact CEMS for gas-fired and other low-sulphur applications. Used for stack emissions measurement.





SYSTEM 4

Single spot non-contact thermometers with high accuracy and quick response. R1 and M1 models used in the kiln burning zone. RT8A model used for Clinker measurement on conveyors.





LANCOM 4

Portable gas analyzer featuring up to 9 sensors for emissions measurement and combustion optimization. Used for stack emission monitoring.





🗐 4500 MkIII

The best opacity monitor for compliance measurements to PS-1 and ASTM D6216.





🔟 WDG 1200-1210

Insitu oxygen probe for combustion optimization, featuring integrated control and display electronics. Can be installed on the stack or downstream of particulate control equipment.





Carbon monoxide monitors for early warning of possible fires in coal mills and storage silos.





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