IRmadillo™
FTIR Spectrometer

KEIT spectrometers

Fit for the **Process Environment**

Vibration proof for manufacturing floor

Compact, rugged & solid state

Certified for hazardous environments

In-line process monitoring

Distributed by

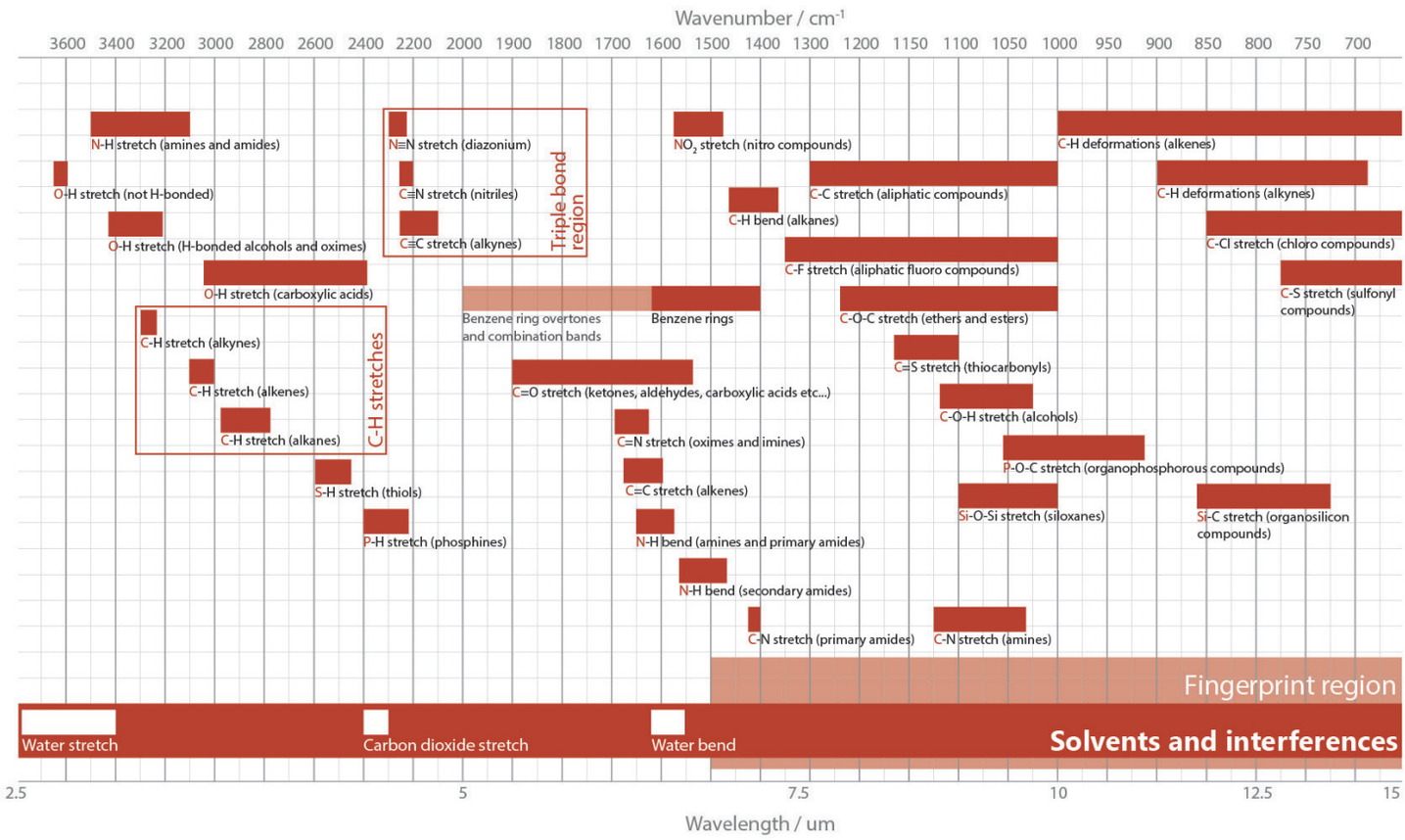
QUANTUM ANALYTICS

3400 East Third Avenue, Foster City, CA 94404
650-312-0900 LQA@LQA.com
www.LQA.com

IRmadillo™
FTIR Spectrometer

KEIT spectrometers

Power of Mid-Infrared



- **Compact**
- **Certified**
- **No MIR fibre optics**
- **Solid state**
- **Response time**
- **Drift free**
- **Sensitivity**
- **Stability**

Fixed Probe

- AMTIR ATR crystal
- Inert Hastelloy
- Temp. (ambient) -15°C to +40°C
- FFKM O-rings (20 bar)
- Long-life optical source

Uniquely Rugged & Compact Body

- Solid-state sensor
- Compact body length (310 mm), probe length (25 mm)
- Certified safe for use in hazardous and potentially explosive environments
- Suitable for indoor or outdoor use
- Low maintenance, low power

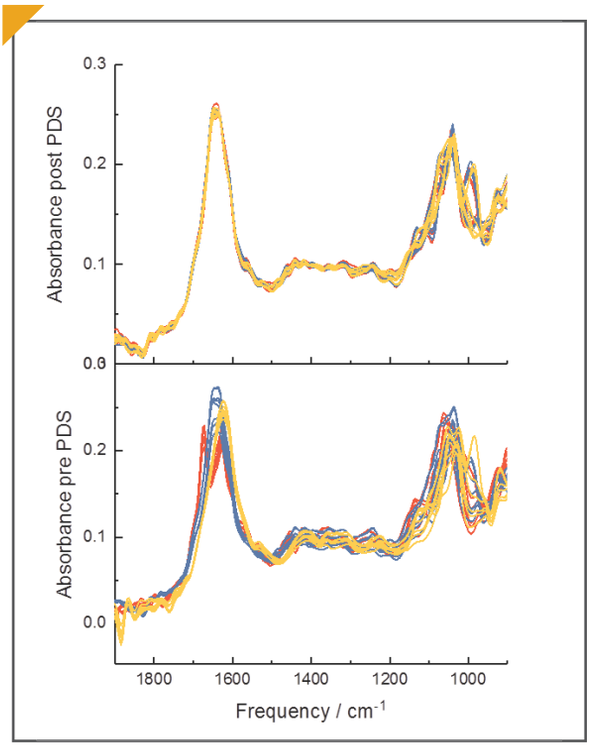
IRmadillo™

Fit for the **Process Environment**

Rugged On-line Quantification

The Keit IRmadillo™ FTIR spectrometer excels in the manufacturing environment due to its solid-state design and suitability for use in hazardous environments.

Industry	Chemical Analysis
Petro-chemicals	Water in glycol, aromatics (benzene, toluene and xylene), mono and poly-glycerides, alcohols (methanol, ethanol, glycerol), esters, fatty acids
Fermentation/Biorenewables	Sugar, alcohols (ethanol, butanol), carboxylic acids (ethanoic / acetic acid, butyric acid), ketones and aldehydes (acetone), proteins, esters, anhydrides and carbonates
Pharmaceuticals	APIs, reagents, reaction intermediates
Bulk Chemicals	Acetic acid, PPD
Agro-chemicals	Pesticides, fertilisers
Polymers & Plastics	Additives in hot melt
Food & Beverages	Sugars, proteins, acids, fatty acids, oils
Beer, Wine, Tea & Coffee	Alcohol, caffeine, sugars & polysaccharides, acids
Chocolate	Fats, proteins, sugars
Dairy	Fats, proteins, sugars
Tobacco	Nicotine, humectants
Municipal Solid Waste (MSW)	Soluble cellulose, organic matter



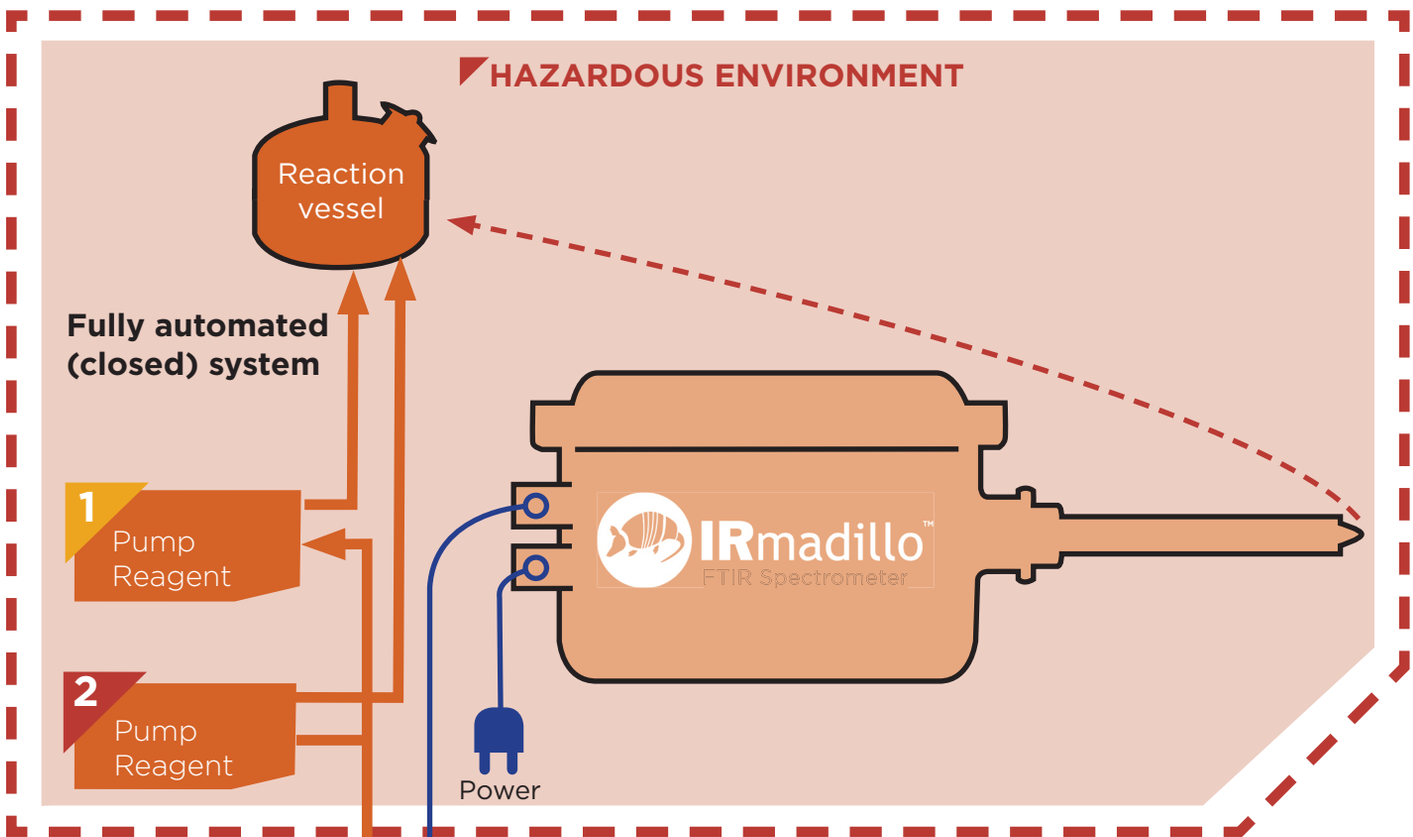
Universal Calibration Transfer

Multiple instruments can be programmed to behave the same regardless of location, environment or age.

The patented solid-state design of the IRmadillo makes calibration transfer a reality. The robust optical arrangement within the spectrometer does not drift or change with time.

The figure on the left shows spectra before (bottom) and after (top) a calibration transfer algorithm was applied. This means you only need to build the model once.

Fit for the **Process Environment**



Sensor for Production Environment

Certified safe for use in hazardous environments, the IRmadillo™ FTIR spectrometers works directly in your process environment to provide real-time, continuous information.