Tracerco

Insight through innovation

Insight through instrumentation

Precise measurement, unrivalled support

Strengthen your process operations with custom nucleonic measurement solutions.

We deliver reliable instrumentation solutions for accurate, repeatable measurements. Engineered to excel in harsh environments and installed in varied vessel types, our configurations provide easy-to-understand insights for lasting peace of mind. Backed by over six decades of heritage as radiation experts, our performance-boosting solutions are proven to maximise productivity and product quality and establish your unique controls for continued profitability.

Certainty through precision

Achieve clarity with accurate and dependable measurement solutions. Designed for usability and precision, our products provide trustworthy insights to help you run processes with confidence, even in harsh environments.

Performance-boosting insights

Optimise your processes with tailored solutions and real-time insights. Prevent downtime, minimise costs, and maximise production output with accurate, actionable data that ensures sustained profitability.

Peace of mind

Rely on our expertise for seamless project delivery and radiation safety. From transport to deployment, we ensure compliance, safety, and budget-friendly execution every step of the way.

Designed to specification

We specialise in bespoke measurement solutions tailored to your needs. Our in-house innovations improve efficiency, enhance safety, and protect the environment across global industries.

Use our augmented reality experience to visualise, in your real-world environment, how Tracerco's insights can allow you to make those critical process decisions with confidence.

1. Download our 'Insight through AR' application via the App or Play Store.
2. Open the App and point your camera at the image (right).
3. Visualise how our advanced nucleonic instrumentation provides reliable process measurement and control.

Tracerco Profiler™

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Clarity without compromise

Water limits oil and gas productivity. A primary production challenge is measuring how much water is present, where it is located and how it is combined. And what you cannot measure accurately, you cannot manage well.

The Tracerco Profiler™ is the best at measuring water in your production system. Sand, water, emulsions, oil, foam and gas are measured

- Over the largest possible distance
- With the smallest vertical resolution
- To the most accurate density

The technology is safe. And once installed, it lasts for decades without maintenance.

The Tracerco Profiler™ helps you keep oil out of your water and water out of your oil, increasing your production, reducing your chemical costs, and protecting you from environmental fines and reputation damage.

Key features

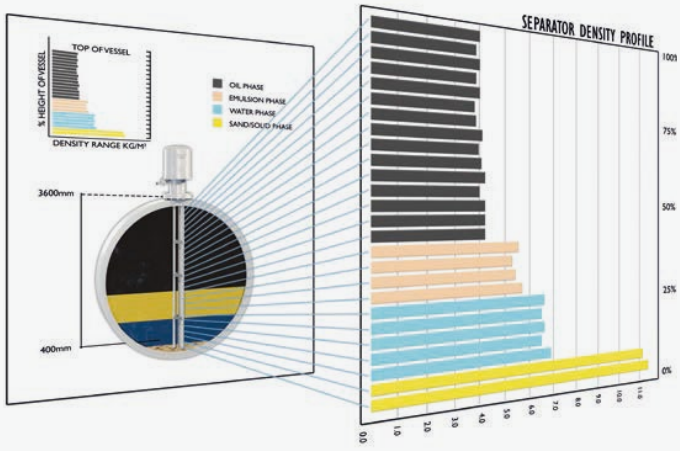
- Extremely reliable with zero moving parts
- Low maintenance

Upstream Profiler™ benefits

- Increases production throughput
- Measures and controls the distribution of fluids
- Determines the interface between water and oil or oil and gas
- Provides real-time process optimisation
- Minimises shutdowns and reduces chemical additives costs

Profiler™ Desalters benefits

- Reduces possibility of acid runaway
- Increases production throughput
- Optimises acid recirculation
- Provides real-time process optimisation
- Minimises shutdowns and reduces chemical additives costs
- Reduces the number of instruments/leakage paths
- Improves purity management



Level Measurement Instrumentation

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Includes products previously called Level System

A whole new level of reliable measurement

Tracerco™ Level Measurement Instrumentation provides accurate, repeatable non-contact level measurement to optimise process, reduce downtime, and improve product quality.

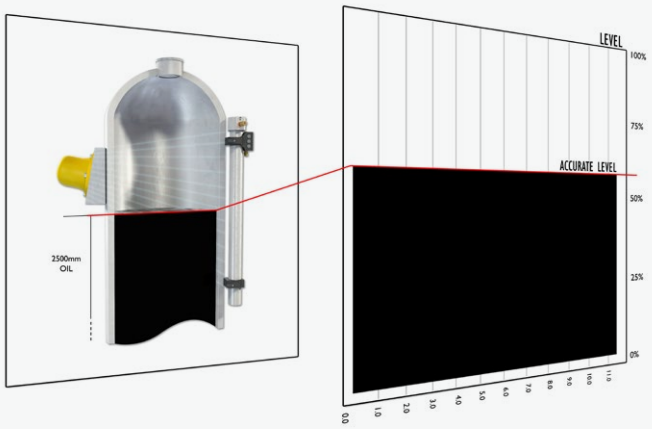
Tracerco™ Level Measurement Instrumentation delivers extremely reliable level measurements, regardless of process conditions. Its external modular design, with no moving parts, provides measurement redundancy as well as the ability to offer consistent and accurate level measurements. This allows operators to optimise their processes, leading to improved product quality and minimising the risk of unplanned trips or shutdowns.

Key features

- High accuracy and repeatability
- Large measurement range
- Highly configurable to suit any vessel size
- Configurable outputs and trip levels
- Certified for use in Safety Instrument Functions up to SIL 2 (IEC 61508:2010)
- Non-intrusive

Benefits

- Minimises unplanned shutdowns
- Improves product quality
- Enables process optimisation
- Provides operators with the confidence to increase production



Tracerco Level+

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Previously called Optimus™

Unparalleled insight into your process

Level+ is a breakthrough in level measurement. It is the only instrument to provide accurate and repeatable nucleonic-level measurement, even in the presence of process deposits, extreme temperatures and pressure changes. Unique algorithms provide unparalleled insight into vessel operating conditions, monitoring what occurs in the vapour space and allowing the extent of deposition to be identified.

The highly robust Level+ has no moving parts and does not have contact with the process – keeping process break-ins to a minimum. It has the ability to deliver consistent, accurate and repeatable level measurements, regardless of temperature and process conditions. Its many benefits include process optimisation, reduction in unplanned shutdowns and improved product quality.

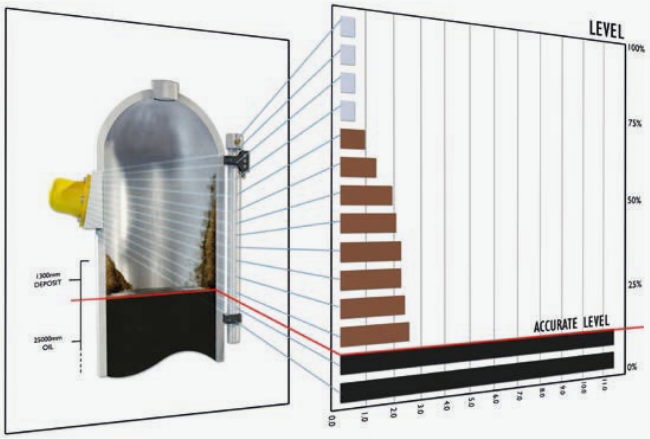
The Level+ provides operators with the confidence to run the process at the desired level to increase production, maximise throughput and avoid the negative impact of losing liquid or slurry levels. This innovative instrument is designed for liquid level, interface, density measurements and solids monitoring in upstream and downstream vessels.

Key features

- Advanced signal processing
- Interchangeable components for easy on-site maintenance
- Non-intrusive

Benefits

- Provides accurate level measurement even in the presence of deposition, fouling or process pressure changes
- Minimises unplanned shutdowns
- Improves product quality
- Enables process optimisation
- Monitors the extent of deposit build-up
- Provides operators with the confidence to increase production



Density Measurement Instrumentation

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Previously called Hyperion™

Measure your process with confidence

Tracerco™ Density Measurement Instrumentation delivers reliable, non-contact density measurement for improved reliability and proactive maintenance.

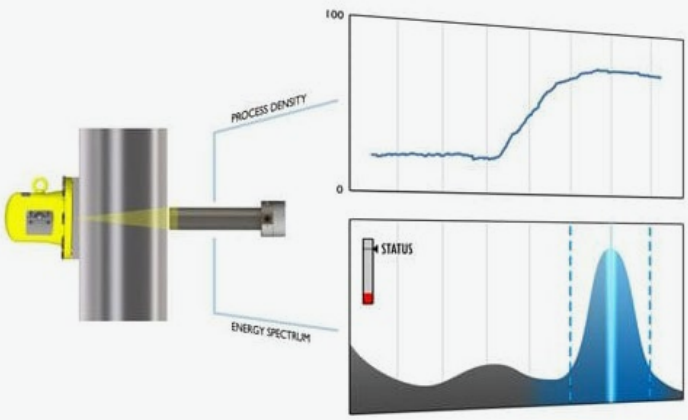
Designed using innovative scintillator-based technology, Tracerco™ Density Measurement Instrumentation is a non-contact, no moving parts measurement solution that provides accurate and extremely reliable density measurements. This enables operators in the oil, gas, petrochemical, refining pulp and paper and mining industries to solve the most challenging process measurement and control problems.

Key features

- Self-diagnostics
- Repeatable and accurate measurements
- Extended level measurement ranges up to 45m (148 feet)
- Advanced signal processing

Benefits

- Improved reliability – automatically compensates for ambient temperature changes, and scintillator and photomultiplier ageing
- Highly ruggedised for continuous operation
- Built-in condition monitoring to predict component failures and end-of-life estimations to increase production



Life Cycle Management (LCM)

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Tracerco's aftersales services

Tracerco provides tailored support contracts and lifecycle services to maximise uptime, ensure regulatory compliance, and extend asset life. From dedicated account management and 24/7 technical support to performance assessments, upgrades, and safe decommissioning, our solutions enable efficient, reliable, and sustainable operations.

Support contracts

To enable operators to increase uptime and maximise production, whilst also meeting the demanding needs of regulatory compliance, Tracerco offers both long and short-term support contracts that are tailored to a customer's assets and field requirements.

Key features

- Dedicated account manager
- Fast and effective aftersales technical support, programming, testing and research
- Scheduled onsite service to suit operational requirements
- An extensive network of offices, laboratories and calibration facilities around the globe
- 24-hour remote support via telephone and email
- Access to critical information anywhere at anytime
- A highly qualified and experienced engineer on standby for any immediate assistance

Equipment and radioisotope upgrades/replacements

Tracerco provides obsolescence reviews to identify any risks and ensure safe, uninterrupted operation. These include critical radiological examinations following installation of equipment, or following system changes, as well as with periodical function testing and inspection of measurement system components, ensuring continued full operability and regulatory compliance

Assessment of radioisotopes at, or near to, recommended working life will also allow operators to determine the viability of their asset, enabling continual production and use of nucleonic instrumentation. In addition to re-calibrations and trip testing of equipment, we can also establish present-day accuracy of your system through performance assessments, and non-intrusive validation services.

This information gives operators confidence to determine the position of level or interfaces within an application, and ensure existing equipment continues to meet requirements now and in the future. Regular performance assessments also provide operators with the ability to maintain equipment efficiently, cost-effectively manage spares or identify the need for upgrades to maximise asset life.

Decommissioning

If assets are found to be no longer viable, decommissioning must begin. Tracerco can help to mitigate risks, and carry out the process safely and cost effectively, with the least environmental impact.

Tracerco can remove any instrument during decomissioning. With a number of in-house radiation protection advisers, we can also manage and remove, recycle and replace radioisotopes, as well as provide advice on immediate and long-term radioisotope requirements.

For Tracerco installed equipment, operators also have the option to store radioisotope for short or long periods of time.

Trusted technology for every application

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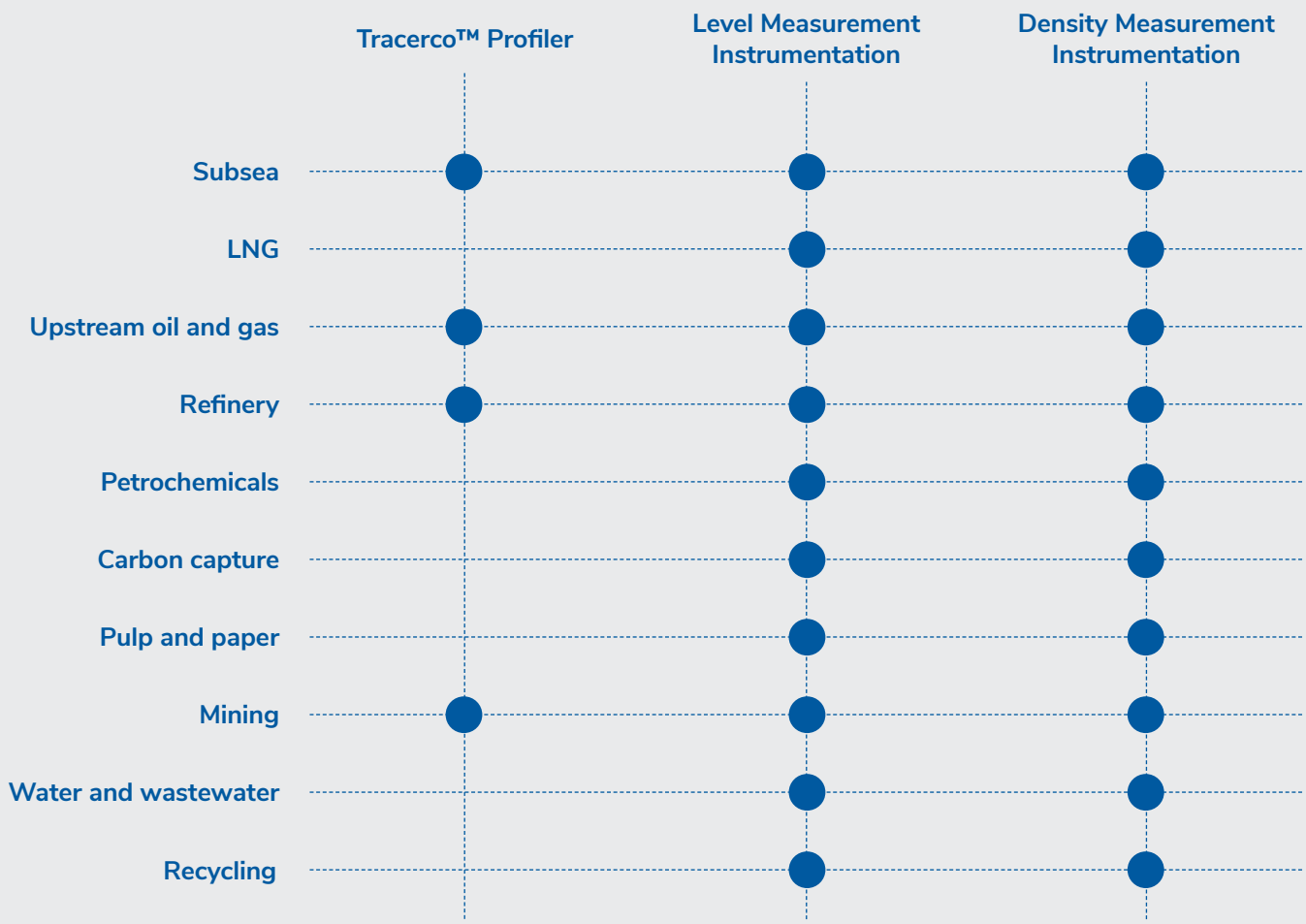
We are masters at understanding the unique requirements of every project, plant, and operation. By working closely with you, our team of experts tailors solutions to meet your goals, overcome challenges, and deliver measurable success. From inception to execution, our bespoke technologies are meticulously engineered to align with your needs.

Our innovations are trusted globally across essential industries. Designed, developed, and manufactured in-house, our measurement technologies not only optimise operations but also improve safety for your teams and protect the environment. Explore the table below to see how our solutions align with your sector's specific needs.



Specifications

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	Tracerco Profiler™		Level Measurement Instrumentation		Density Measurement Instrumentation
			Level	Level+	
Performance					
Technology	Geiger-Müller		Geiger-Müller		Scintillator 2" NaI (Tl) crystal Scintillator Plastic PV (polyvinyl toluene)
Resolution	30mm (1.1")	60mm available	N/A	N/A	N/A
Configuration	N/A		Segmented, modular	Segmented	N/A
Accuracy level	±1% typical (application dependant)		±1% typical (application dependant)		±1% typical (application dependant)
Repeatability	±0.5% typical (application dependant)		±0.5% typical (application dependant)		±1% typical (application dependant)
Range (single/extended)	4500mm (177") / up 9000mm (29.5 ft)	4320mm (170") / up 34.5m (113.2 ft)	up to 18.24m (59.8 ft) – with two systems	up to 17.28m (56.8ft)	up to 45m (147.6 ft)
Electrical characteristics					
Supply voltage	24Vdc @ 100mA		24Vdc		18-27Vdc; 100-240Vac (50–60Hz)
Power consumption	<7W		<9W	<2W	0.5-18W; model dependant
Input	• Modbus RTU over RS-485 • Passive isolated 4-20mA		Passive 4-20mA		Auxiliary 4-20mA
Output	• Modbus RTU over RS-485 Modbus TCP/IP over Ethernet • 5 off isolated 4-20mA (active or passive) • N/O volt-free contact		2-wire, 4-20mA	2-wire HART* 7, 4-20mA	2-wire HART 7, 4-20mA N/O volt-free contact
Mechanical characteristics					
Active length	Customisable; 60-9000mm (2.3-354") in multiples of 60mm (2.3")	Customisable; 240-4320mm (9.4-170") in multiples of 240mm (9.4")	240-9100mm (9.4-358.2") in multiples of 240mm (9.4")	240-4320mm (9.44-170") in multiples of 240mm (9.44")	70mm (2.76"); 500-3000mm (19.7-118.1") in multiplies of 500mm (19.7")
Overall length	Customisable; model dependant		500-9500mm (19.6-374")	489-4542mm (10.5-178.8")	335-3193mm (13.2-125.7"); model dependant
Weight	Customisable; model dependant		7-80kg (15-176 lbs)	3.1-11.6kg (6.8-25.5lbs)	3.7-15.5kg (8.2-34.2lbs)
Cable entries	4; metric or imperial		2 off metric or imperial (M20*1.5 or ½" NPT)	One; metric M20*1.5	Up to 4; metric and imperial configurations available
Housing	316L, IP66		316L, IP66		316L, IP66
Pressure retaining part	Customisable; model dependant		N/A		N/A
Environment					
Approvals	ATEX, IECEx, CSA & FM		ATEX, IECEx & CSA	ATEX, IECEx, CSA & FM	ATEX, IECEx, CSA & FM
Method of protection	Intrinsic safety		Intrinsic safety		Flameproof (Ex db and Ex tb) Explosion Proof (XP))
Operating and storage temperature	-100°C to +195°C (-148°F to +377°F); model dependant	-40°C to +85°C (-40°F to +185°F)	-40°C to +85°C (-40°F to +185°F); model dependant	-40°C to +85°C (-40°F to +185°F)	-54°C to +60°C (-65°F to +140°F); model dependant
Storage temperature	N/A		-55°C to +85°C (-67°F to +185°F)	-40°C to +85°C (-40°F to +185°F)	N/A
Compliance	EMC: 2014/30/EU, EN61326-1:2013		SIL 2 IEC 61508:2010 EMC: 2014/30/EU, EN61326-1:2013	EMC: 2014/30/EU, EN61326-1:2013	Shock and vibration: ISO 13628- 6:2004 (Q1) 30g shock, 5g vibration EMC: 2014/30/EU, EN61326-1:2013
Additional information					
Spares	Signal processor (SA31/1 & SA31/2)	EHT module (SA-1), EHT module (SA-8/3), HART PCB (SA-4/1), Interface board (SA-5/4), Interface board (SA-6/4)	N/A	EHT module (SA-1), EHT module (SA-8/3), HART PCB (SA-4/1), Interface board (SA-5/4), Interface board (SA-6/4)	Electronics Stack sub-assembly (SA266-1)
Product codes	T240, T229	T218, PRI-150, T224, T229	T233, T234, T250	PRI 150, T221	T251
Accessories	N/A	N/A	Mounting bracket, connectors	Mounting bracket, connectors, HART modem*	Lid removal tool, mounting bracket, blanking plugs, connectors, HART modem
Software	Tracerco Toolbox		Tracerco Safety Toolbox	Tracerco Toolbox	Tracerco Toolbox

* Not registered with the FieldComm Group.

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Contact Tracerco now and discover how our instruments can provide invaluable insights into your operations:

Email: smenquiries@tracerco.com

Web: tracerco.com/products/nucleonic-instrumentation

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