



Experience The Benefits

Real-Time Automated H₂S and Wall Thickness Monitoring

INCREASED WELL PERFORMANCE

ENHANCED SAFETY

COST REDUCTION

MORE THAN
21
YEARS
EXPERIENCE



3

Regional Hubs – UK,
Malaysia, UAE



30+

Operators Worked with
Worldwide



10000+

Sensors Installed in The Oil
and Gas Industry



Sense.

Our dynamic technology redefines how sensory information is realised, combining state-of-the-art hardware, intelligent realtime data and secure global connectivity.



Understand.

We analyse integrated data using SMART software to provide award-winning visualisation, reporting and understanding – creating a truly interactive, immersive experience.



Perform.

We exceed expectation, provide trusted insight and make a genuine difference to our clients' operational performance – supporting informed decision-making and maximising value.

We serve a diverse customer base consisting of Independent and National Oil Companies, as well as Well Service Companies across more than 23 countries in our core regions of the North Sea, Africa, Southeast Asia, and the Middle East.



SMS TRULY CONTRIBUTES TO THE OPERATIONAL SUCCESS OF OUR CLIENTS, MAKING A TANGIBLE DIFFERENCE.

SMS has established a strong reputation for providing effective management and risk-mitigation strategies for its clients' operational and environmental risks. Our suite of Sand Management and Erosion-Corrosion products and services includes Acoustic Sand Monitoring, Sand Sampling, Erosion & Corrosion Probes, Real-Time UT Wall Thickness Systems, and Real-Time H₂S & CO₂ Monitoring Systems.

Our team is committed to driving our clients' operational efficiency by offering a comprehensive range of low-carbon solutions and leveraging our zero-manpower capabilities, which have been demonstrated to minimize carbon footprint and accelerate the path to net-zero.

Through the adoption of groundbreaking technologies and partnerships with multiple clients and industry players, we have experienced rapid growth over the years, facilitating the transition to a safer, more robust, resilient, cost-effective, and sustainable asset life cycle.

Sense. Understand. Perform

Industry Sectors



Renewable Energy

- Integrity & Offshore Services



Erosion & Corrosion Management

- Erosion Sand Monitoring
- Corrosion Monitoring
- Sand Management Strategy



Marine

- Integrity Services
- Manpower & Equipment



Midstream & Downstream

- Integrity Services
- Manpower & Equipment



Upstream

- Well Services
- Manpower & Equipment



Subsea

- Sand Monitoring

Market segments

Upstream

Exploration, production, well test and maintenance services

Midstream

FPSO maintenance services

Downstream

Refining, blending and maintenance services

EROSION & CORROSION MONITORING SOLUTION

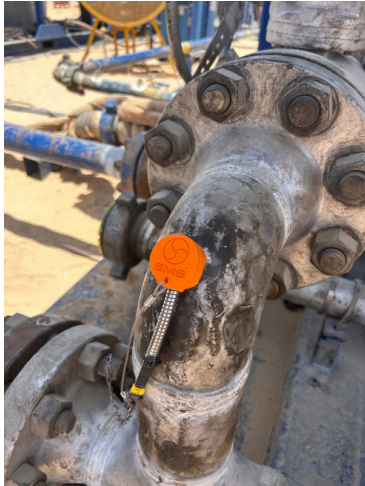
Periodic evaluations and assessment of erosion and corrosion activities in industrial process systems is essential in detecting metal loss and corrosion rate. This step is critical especially when it involves component that encounter sand-bearing liquids. SMS provides non-intrusive and direct method of monitoring the corrosivity of the fluid and evaluation of corrosion control towards safer and efficient operations.

Real-time erosion and corrosion readings can be acquired to predict wall thickness measurement - when the equipment most likely to become corroded and need to be replaced. The regularity of readings can be tailored to individual needs, depending on the severity of the corrosion and specific environmental circumstances.



EROSION & CORROSION SERVICES

Non- Invasive



Wired RTUT

Real-Time UT Wall Thickness Monitoring

- Repeatable reliable improved data accuracy and trending.
- Non-intrusive, ideal for HPHT and sour gas application.
- Intrinsically safe.
- Wired and wireless options.

Erosion Calculator

- Predict erosion in your pipeline & flowline using globally recognized standards from DNV, Salama or the University of Tulsa
- Data can be used to input into FEED study and for sand risk evaluation



Wireless
RTUT

Industry Applications:

1. Oil & Gas Upstream Operations (Exploration, Drilling and Production)
2. Power Generation
3. Chemical
4. Mining
5. Water Treatment Industry
6. Applicable to other related industries



TRADITIONAL CORROSION PROBES VS. SMS REAL-TIME UT SYSTEM

Traditional Corrosion Probes



- ✗ Result based on the change in resistance of the probe element
- ✗ Analogue data obtained via averaging or extrapolation
- ✗ System's pressure boundary must be breached to gain access
- ✗ Manual routine inspection and maintenance are necessary, which is costly, labour intensive, time consuming, and even impossible if there is no availability
- ✗ Sacrificial element deteriorates over time - need to be replaced
- ✗ Measurements are only collected on a regular basis (annually in some circumstances), resulting in a rough corrosion-rate calculation
- ✗ Intrusive - Possible shutdown during maintenance work

SMS Real-Time UT System



- ✓ Absolute, immediate results - verify the health of your asset in real-time
- ✓ Simple installation - UT sensors are mounted to the pipe wall
- ✓ Zero manpower - increase personnel safety for high risk area
- ✓ Flexible array - up to 16 sensors per location allows greatest coverage of high-risk areas
- ✓ Realtime data and alarming integration to end user acquisition or database
- ✓ Repeatable, reliable improved data accuracy and trending
- ✓ High accuracy - monitor corrosion rate to 0.001" (0.025mm) historically problematic locations
- ✓ Ideal for HPHT and sour gas application
- ✓ Non-intrusive

REAL-TIME GAS MONITORING SOLUTIONS

H₂S can corrode internal surfaces and create a hazardous atmosphere that threatens personnel safety. Early detection and monitoring of H₂S is crucial for preventing premature failure and responding to life-critical safety scenarios.

SMS provides two types of H₂S gas analysers. One only measures H₂S, while the other measures both H₂S and CO₂. The analyser goes beyond standard measurements, offering precise detection of alkane gases including Metane, Ethane, Propane, Butane, Pentane, and Hexane with precision even during unmanned operations.

Highly portable and compact, the equipment is suitable for multiple field uses. Our integrated solutions provide customizable real-time data and zero-emission capabilities, supporting sustainable business practices while meeting specific well requirements.

REAL-TIME H2S ANALYSER SERVICES

The SMS system is an advanced real-time monitoring solution designed for measuring gas hydrocarbon flow streams. Its automated technology enables accurate and efficient detection of H2S gas levels.



- Real-time H2S monitoring up to 30% volume
- Zero emission sampling reduced environmental risk and personnel exposure to potentially harmful samples
- Provide immediate, real-time information
- Real-time integration to end user acquisition system or database
- Detects H2S gas concentrations as low as 0 ppm to 200 ppm

Industry Applications:

1. Natural Gas measurements including processing, transmission, storage and distribution
2. Power Generation (turbine, internal combustion engine, fuel cell)
3. Truck / Ship / Railcar / Unloading Terminals
4. Portable / Temporary analysis
5. Flare Gas Monitoring
6. Fuel Gas Monitoring
7. LNG / LPG / BOG
8. Process Industries
9. Pipeline Blending
10. Gas Plant Inlet
11. Acid Gas
12. Chemical
13. Mining
14. Applicable to other related industries

REAL-TIME MULTIGAS ANALYSER SERVICES

A multi-component gas analysis at unparalleled speed that measures methane, ethane, propane, iso-butane, iso-pentane and a combined measurement for (n-butane, n-pentane and n-hexane), as well as percent level H2S and CO2 gas.



- Remote monitoring
- Zero emission sampling reduced environmental risk and personnel exposure to potentially harmful samples
- Provide immediate, real-time information
- Seamlessly integrate with your current monitoring system
- Specific gravity for accuracy : $\pm 0.5\%$
- Detects H2S gas concentrations as low 200 ppm to 500,000 ppm.

Industry Applications:








1. Natural Gas measurements including processing, transmission, storage and distribution
2. Power Generation (turbine, internal combustion engine, fuel cell)
3. Truck / Ship / Railcar / Unloading Terminals
4. Portable / Temporary analysis
5. Flare Gas Monitoring
6. Fuel Gas Monitoring
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TRADITIONAL MANUAL GAS SAMPLING VS. SMS GAS ANALYSER

Traditional Manual Gas Sampling

-  Manual sample collection will have an impact on personnel health and safety
-  Personnel with specialised training and equipment (PPE & breathing apparatus) are required
-  Manual sampling
-  Equipment can only monitor H₂S concentration
-  Low sample accuracy :± 5 -10%
-  Measurement range up to 40% for H₂S
-  Data can only be provided at specified times, days, and dates - not on a continual basis

SMS Gas Analyser

-  Zero manpower - no personnel required onsite
-  Zero emission sampling - reduced environmental risk and personnel exposure to potentially harmful samples
-  Portable, ultra-compact features - easy to transport for multiple field usage
-  Fully automated real system, requires minimal maintenance, infield calibration
-  Multicomponent gas sample - options to monitor H₂S, CO₂ and C₁-C₄ gas simultaneously
-  High sample accuracy : ±1% at full scale
-  Specific gravity for accuracy: ±0.5%
-  Capable of measuring as low as 0ppm to 200ppm or 200ppm to 500,000ppm of H₂S gas
-  Eliminate blind spot between two sampling

ADDITIONAL SERVICES

SMS is dedicated to providing top-notch services and outstanding customer support, at competitive price. We prioritize reliability, efficiency and affordability to ensure that our customers always receive the best value

1 Installation, Maintenance & Troubleshooting

At SMS, we take pride in providing exceptional service to our valued clients, ensuring the operational integrity of their systems while helping to keep them in optimal condition. Our highly trained field engineers are passionate about ensuring the successful installation and operation of your system while meeting the necessary regulatory standards. We understand that supplying high-quality products is only part of the equation, which is why we also offer tailored maintenance programs and troubleshooting services to optimize the life and reliability of your system. With our support available both on-site and remotely, you can have peace of mind knowing that we're here to help you every step of the way - no matter where you are in the world.

2 Training

We recognised that every client has unique needs, which is why we offer flexible alternatives to tailor our services to match your requirements. Our convenient training programs are designed to help you get the most out of our solutions and maximize your return. Our team is dedicated to ensuring that you have the support and resources you need to succeed, and we are always available to help you find the perfect training solution to meet your specific needs. Contact us today to learn more about our customized services.

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