

# **ABOUT US**

RusselSmith is a leading integrated energy services provider with a focus on asset integrity management, operations and production, technology solutions and engineering.

Our services ensure that our customers have access to a wide range of value-added solutions which are designed to Operate, Manage, Optimize and Extend the useful productive life of their assets reliably and safely, through our cutting-edge technologies.

At RusselSmith, we have a passion for building effective technical solutions to problems in our industry. We also have an unwavering commitment to safety, world-class quality service delivery, innovation, and customer satisfaction, and this is reflected in every aspect of our operations.



# **OUR DIVISIONS**

#### **OPERATIONS & PRODUCTION**

- Oil & Gas Field Production Management
- Oilfield Operations and Maintenance
- Oilfield Development and Construction
- Rig Stacking and Activation
- Drilling Equipment Maintenance
- Well Completion

- Asset Leasing
- Oilfield EPC Projects
- OEM Product Supply
- Workover Operations
- Slickline Services
- Production Enhancement
- Waste Management (Sludge & Contaminated Water)
- Rig Inspection (CAT IV) and Certification



#### SUBSEA

#### **Maintenance**

- Anode Replacement
- Marine Growth Removal and Measurement
- Valve Operations

## Survey

- Route Surveys
- Seabed Surveys

## Repair

- · Pipe Repair Solutions
- Subsea Equipment Repairs

## **Inspections**

- Non-Contact Magnetometric Inspection
- Pipeline Survey/Inspection
- Underwater Inspection in Lieu of Dry-docking
- Mooring Chain Inspection and Cleaning
- Flooded Member Detection
- •CP Measurement/Surveys
- Subsea ACFM & Pulsed Eddy Current Inspections
- Scour Assessment
- Structural Assessment
- Chain Catenary Measuring

#### **UAV & DIGITAL SOLUTIONS**

- Visual & Thermal Inspections
- Drone Mapping
- Confined Space Inspections

- Gas Leak Detection
- Laser Scanning & 3D Modelling
- Pipeline Right-of-Way Monitoring
- Digitalization Solutions



- Offshore & Onshore Construction Support
- Survey & Data Verification
- Advanced & Custom Mechanical Integrity Solutions





#### **TOPSIDES**

- Structural Integrity Assessment
- Asset Life Extension
- Pipeline Integrity Management

# OUR COMMITMENT TO

# QUALITY, HEALTH, SAFETY, AND THE ENVIRONMENT

RusselSmith is committed to providing and maintaining a safe and healthy work environment at all times, and at all locations where we work.

Over the years, we have consistently promoted safety and have entrenched it in our culture. We believe in doing it right or not doing it at all.

We are aware of our responsibility toward environmental sustenance, and so we ensure that our operations do not negatively affect the environment.

We promote adherence to best practices and continuous improvement of our Quality Management System, as a means to ensure the efficiency of our internal processes and to deliver a consistently high quality of service to our customers.





# **OPERATIONS & PRODUCTION**DIVISION

Our team's global experience in managing production and delivering operations and maintenance solutions makes us the ideal choice.

RusselSmith's oilfield operations and production management solutions cover a broad range of operations. We have the right mix of talent and access to technology from global partners to deliver the right kind of results.

#### **Our Solutions**

Our Operations and Production Management services include the following:

- Oil & Gas Field Production Management
- · Oilfield Operations and Maintenance
- Oilfield Development and Construction
- Rig Stacking and Activation
- Drilling Equipment Maintenance
- Well Completion
- Asset Leasing
- Oilfield EPC Projects
- OEM Product Supply
- Workover Operations
- Slickline Services
- Production Enhancement
- Waste Management (Sludge & Contaminated Water)
- Rig Inspection (CAT IV) and Certification



# **SUBSEA DIVISION**

Our Subsea Services help our customers unlock maximum value from their subsea assets by ensuring that they are maintained and operated safely and optimally.

We have a pool of highly-trained subsea engineers, ROV pilots, divers, technicians and specialists with extensive experience in handling critical projects in various conditions and environments.

#### **ROV Services**

#### Maintenance

- Anode Replacement
- Marine Growth Removal and Measurement

## Survey

- Route Surveys
- Seabed Surveys

#### Repair

- Pipe Repair Solutions
- Subsea Equipment Repairs

## Inspection

- •Non-contact Magnetometric Inspection
- •Pipeline Survey/Inspection
- Underwater Inspection in Lieu of Dry-docking (UWILD)
- Mooring Chain Inspection and Cleaning
- Flooded Member Detection
- •CP Measurement/Surveys
- Subsea ACFM & Pulsed Eddy Current Inspection
- Scour Assessment
- Structural Assessment
- Chain Catenary Cleaning

# **SUBSEA DIVISION**

# **Our ROV Fleet**





Quasar



**Triton XLS 43** 







**MSS Defender** 

Pro 4

# **UAV & DIGITAL SOLUTIONS**

# **UAV Inspection & Survey Solutions**

Our UAV Services offer you the opportunity to inspect your assets in areas that are usually deemed dangerous or inaccessible.

They are carried out safely and efficiently using state-of-theart unmanned aerial vehicles (UAVs), implementing proven systems and procedures from commercial aviation into our operations to ensure incident-free-operations.

Our services cover the following areas:

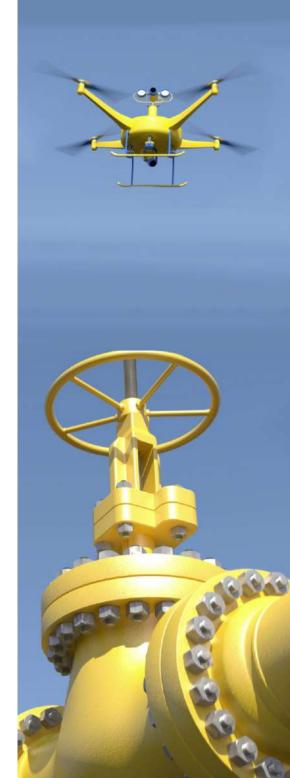
- •Visual & Thermal Inspections
- Gas Leak Detection
- Drone Mapping
- Confined Space Inspection s
- Laser Scanning & 3D Modelling
- Pipeline Right-of-Way Monitoring

# **Digitalization Solutions**

Our digitalization solutions help our customers to optimize their operations. By collecting and interpreting data from critical parts of their operations, they are able to make better decisions and improve performance.

Our solutions cover the following areas:

- Condition Monitoring
- Analytics





# **TOPSIDE DIVISION**

# **Onshore & Offshore Construction Support Services**

Our construction support services include:

- Base shop facilities, complete with fabrication machines and other equipment
- •Sub arc welding of float equipment
- Tension netting
- Cutting and welding of conductors and wellheads
- Welding habitat (hot work enclosure)
- Pre-welding/post-welding heat treatment
- Fabrication of bit breakers, support bit gussets and abandonment caps

# **Survey & Data Verification services**

RusselSmith's Survey and Data verification services help our customers obtain data and also determine the accuracy and consistency of their data after surveys are performed.

Our services help to determine whether data is accurately translated when it is transported between sources, to ensure that it is complete and that it supports processes in the new systems. During verification, there may be a need for a parallel run of both systems to identify areas of disparity and foresails erroneous data loss.

RussselSmith's Survey & Data Verification Services include:

- Coefficient of friction tests
- EX surveys
- •LGI surveys
- Critical load path surveys
- Special surveys

- Dropped object surveys (DROPS)
- QA/QC third-party inspections

# **TOPSIDE DIVISION**

# **Mechanical Integrity Inspection**

The complex nature of today's structures requires great reliability in each component or material to assure trouble-free service and safety.

As a result of external factors and use, energy facilities and their components may experience material failure such as corrosion, wall loss, mechanical integrity anomalies, stress, and strain during their service life. These effects are potentially dangerous and can result in unplanned shutdowns.

With non-destructive testing (NDT), we can determine the presence of invisible defects in materials without any negative effects on the materials. Our approach to mechanical integrity is executed according to international and national codes and standards at the lowest implementation costs.

#### **Conventional NOT**

- Ultrasonic Testing
- Eddy Current Testing
- Magnetic Particle Inspection
- Visual Inspection
- Cathodic Protection
- Thermography
- Dye-Penetrant Inspection
- Coefficient of Friction Testing for Helidecks
- Borescope

#### **Advanced NOT**

- Digital Radiography
- Internal Rotary Inspection System (IRIS)
- Alternating Current Field Measurement (ACFM)
- Magnetic Flux Leakage (MFL)
- Corrosion Under Insulation (CUI)
- Acoustic Emission
- Phased Array Ultrasonic Testing (PAUT)
- Time of Flight Diffraction (TOFD)
- Pulsed Eddy Current (PEC) Testing







# **TOPSIDE DIVISION**

# **Pipeline Integrity Management Services**

Pipelines are critical business assets, and maintaining them in safe and reliable working conditions is one of the major challenges which pipeline owners and operators are faced with.

Failures in pipelines usually result in incidents that can have devastating impacts on life, reputation, production and the environment.

RusselSmith's Pipeline Integrity Management Services are designed to maintain pipelines and ensure that they are fit for purpose in a safe and cost-effective manner. The system complies with the latest regulations and standards and ensures operational integrity.

Our Pipeline Integrity Management Services offer the following benefits:

- Identification and analysis of actual and potential events that can result in pipeline transport incidents.
- Comprehensive and integrated means of examining and comparing risks and risk reduction activities.
- Provision of a structured and comprehensive means of selecting and implementing risk reduction activities.
- The risk of pipeline bursts, leakages and possible catastrophic scenarios will be reduced greatly.
- Mechanical pipeline integrity is always known.
- Due to more targeted inspection intervals and inspection points, inspection costs can be saved.

# **OUR TECHNOLOGIES**

### **AUTONOMOUS ROBOTIC IRM SOLUTIONS**

# **Autonomous Robotic IRM Solutions For Risers and Pipelines**

The Nautilus and Oktapous are subsea robots that are designed to perform inspection, repair and maintenance tasks on subsea pipelines and risers with minimal human intervention and a very light footprint.

These robots have the distinct advantage of being able to assess, clean and repair subsea pipes in a single operation, without requiring divers and most of the conventional vessel-supported equipment and control - all while minimizing the offshore crew.



#### **Features**

- Able to operate on a wide range of 'live' pipelines.
- Remove marine growth and pipe coatings and prepare the pipeline surface for repair.
- Perform detect verification and sizing before repair process.
- Create a controlled atmosphere around the defect to ensure consistent results and high quality of repairs.
- •Perform autonomous repairs in line with standard procedures.
- •No harmful discharge to the environment.



# Main Application of Oktapous

- Conductors
- Risers
- •EPRS
- •I ife Extension

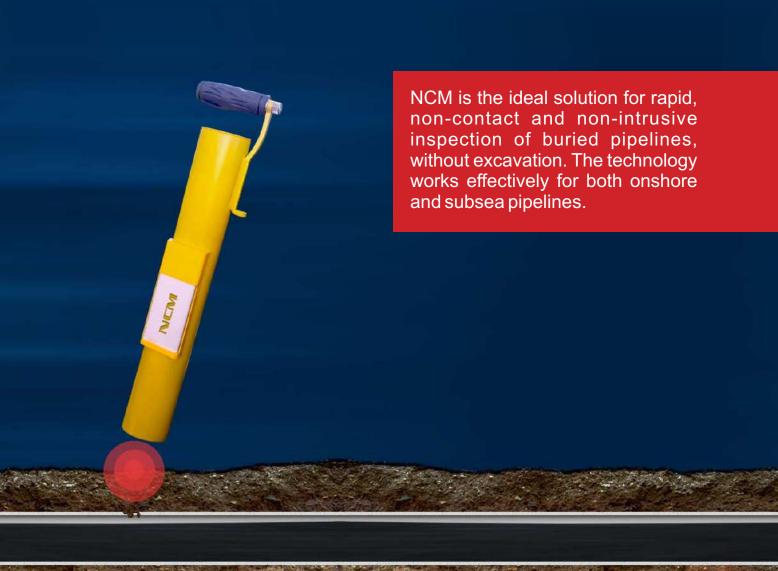


# Main Application of Nautilus

- Flowlines
- Pipelines
- •EPRS
- Life Extension

# **OUR TECHNOLOGIES**

**NON-CONTACT MAGNETOMETRIY (NCM)** 



# **OUR TECHNOLOGIES**

# NON-CONTACT MAGNETOMETRY (NCM)

# Non-Contact Inspection Service for Buried Pipelines (Onshore and Subsea)

Our Non-Contact Magnetometric (NCM) Inspection Service allows for efficient inspection of steel pipelines, even when such pipelines are buried, without having to de-bury the pipes.

Traditional methods of inspecting pipelines usually require contact with the pipes, and existing methods of inspecting buried pipelines are costly and labour-intensive because they require de-burial of sections of the pipes.

Our inspection service uses magneto-elastic technology to detect changes in a pipeline's magnetic field which are caused by various flaws such as stress, tension or corrosion. The received data is visualized in real time and shows the locations of anomalies, complete with GPS coordinates. After analyzing the data, we give a report with recommendations on areas which might require further inspections or actions.

#### **Advantages**

- •No preparations or disruption are required, so there is no production loss.
- •It detects anomalies from stress, tension or corrosion In real time.
- •High level of reliability.
- •High inspection speed (up to 15-20 km per day, onshore).
- Digital mapping with GPS coordinates of anomalies.

- •Very adequate for inspection of non-piggable pipelines.
- •Cost-effective (reduces the need for inline surveys or de-burial).
- •Can be used to inspect onshore pipelines and subsea buried pipelines.
- •Subsea inspection can be done via diver or ROV (rated for 2000m).
- •Field-proven, with extensive experience and successful deployment in over 7 countries.

# **Identifiable Anomalies**

- Stress-deformed state-SDS
- •Corrosion fatigue Defects related to metal loss
- •Local damage (pitting,medtal loss, etc.)
- Changes in pipeline geometry



# YOUR PARTNER OF CHOICE

With over a decade and a half of operations, and a stellar record of successful and timely project completion, our Customers are confident in our ability to take on difficult projects and still deliver world-class results within the required timeframes, whilst keeping our commitment to safety and quality.

At RusselSmith, we see ourselves as your partner, and we are committed to adding value to your business through innovative and cost-effective solutions.

















