We constantly seek to engineer our performance through a culture built on meticulous excellence, precision efficiency and inspired integration, where time-served expertise is honored and a passion for people nurtured. To ensure that we continue be the most regarded, sought after and respected provider of dynamic integrated Rig Inspection anywhere in the world.
ENGINEERED PERFORMANCE

Our mission statement perfectly conveys the core values of the company, namely to deliver an integrated service, flexible in approach and collaborative in application; Engineered to the most exacting standards, providing all major Oil and Gas operators and contractors, both onshore and offshore with the highest standard of cost effective solutions available anywhere in the world.

ADC is an independent family owned business and as such you can rely on our integrity and objectivity. You can also take confidence that we recognise our greatest asset is our carefully selected team of specialists. It is because of them that we constantly invest in the latest OEM training to ensure our personnel are fully compliant and competent in all rig-related technological and legislative advances.

Being so comprehensively equipped, our specialist and multiskilled teams are able to identify the full range of problems; be they digital, mechanical, electrical, hydraulic or competency related which may occur on board a drilling rig. We work in collaboration with the drilling contractor and operator to provide support in their identification of appropriate solutions, enabling us to be just as active with regard to the solution as we were with the problem.

Integration and the benefits integrated thinking can produce, are central to our operations at home or in the field. We have invested extensively to create not only a physical working environment but a company-wide culture where all our professionals and specialists integrate and interact on a daily basis. Our operational culture is based on our ALL4ONE philosophy, where the 4 key areas of our inspection teams (Rig Equipment, BOP & Well Control, Cyber Security & Rig Control Software and HSE & Management Systems) work collaboratively.

Our commitment to providing the highest level of quality from the initial enquiry to the delivery of our final reports is underpinned by our Quality Management System (QMS) which has been independently certified against ISO 9001:2015. Our QMS ensures everyone within our organisation understands the importance of engaging with our people and clients to offer a service that is focused on leading the industry in rig inspection and assurance services.

After over 30 years of experience, we are as determined as ever to be the most innovative and forward thinking rig inspection consultancy anywhere in the world; developing new operational solutions such as our ALL4ONE initiative, as well as spearheading unique technological advances for rapid reporting with our TRAMSWEB service. All which enables us to stay ahead of the ever changing requirements of the Oil and Gas industry and the ever evolving drilling environment.
ADC’s unique concept in Integrated Rig Inspection and Operational Assurance

All4One highly regarded specialist inspection teams, working as experts in their own field, collectively combine through innovative collaboration, integrated management and real time reporting systems to supply ALL your inspection needs in ONE single comprehensive inspection service and assurance programme.

**BENEFITS INCLUDE:**

**Accelerated reporting** deliverables presented in a single logical format.

**Intelligence sharing** between inspection teams to produce in depth analysis and data.

**TRAMSWEB** to provide clients with real-time progress updates on the tasks at hand.

**Reduced inspection periods** and more focused attention on the details that matter.

This adds up to the most intelligent, data driven integrated rig inspection service available anywhere in the world, designed to proactively meet the ever changing demands and high standards in today’s Oil & Gas Industry.

**THE MAJOR FOCUS** of ADC is to help our clients reduce Non Productive Time (NPT), reduce their exposure to risk (while maintaining efficiencies) and ensure operational objectives are met. Downtime brings with it huge cost implications and impacts on the overall safety of people and the environmental performance of the wells programme.

All ADC inspections utilise TRAMS (Technical Rig Audit Management System) as the vehicle by which our projects are conducted and our results are delivered.

**TRAMS DELIVERS:**

- A global standard for reporting based on classic audit procedure in accordance with ISO 19011 – standardisation, and the ability to create company specific standards.
- A streamlined reporting environment for completion of all workscope related tasks, collection of data, and delivery of interactive visual reports – transparency and traceability.
- Web enabled; online access to the ongoing project; allows YOU to be present at the inspection or audit from behind your desk anywhere in the world – interactive.
- Fleet-wide or individual rig audit management; sharing improvement opportunities and closing out corrective actions as they happen – intuitive.

**TRAMS ANALYTICS**

Collecting data over the last decade, the analytics engine behind TRAMS looks at the past to help predict the future and focus our attention to the common trends, critical deficiencies and measuring KPIs between rigs, designs, owners, equipment manufacturers and regulatory compliance.

This data analysis helps our clients select the best rig for operations and well design, as well as providing insight, value and performance improvement. Reducing the frequency of common issues. Please visit

www.adc-engineering.com/reporting.html

To view a video explaining how TRAMSWEB works, you can use a QR scanner (most smart phones have this feature) on the QR code found to the right, alternatively visit:

www.adc-engineering.com/tramsweb.html
OUR FOCUS:

INSPECTION

With over thirty years of international business, you can imagine that we’ve gained quite a reputation. The words that are consistently used by our clients to underpin our reputation are professional, experienced, attention to detail, relevant and quality of reporting.

We are proud of our independent status and our approach to conducting inspections. We recognise that the Drilling Rig is more often than not the largest project cost item for our clients, both in terms of daily cost when operating and more importantly the daily cost when it is not operating. The risks of un-planned downtime or unexpected safety issues can be significantly reduced by the implementation of planned maintenance and proactively identifying risks through systematic Rig Inspection and Operational Assurance.

Our belief is that such an investment should be evaluated to the highest possible standard, given the potential financial risks and commercial exposure rig downtime can present. In the current oilfield economic environment we understand that our clients’ prime focus is on operating their projects and meeting their objectives in the most cost efficient way possible.

O U R  F O C U S :

- FUNCTIONALITY
- AVAILABILITY
- RELIABILITY
- SERVICABILITY
- INTERACTIONS

We provide a transparent auditable trail for our activities, accompanied by a comprehensive reporting system to demonstrate control and management at all stages of the project with an all-inclusive final report.

Our operational assurance and inspection experience spans the full gamut of operating rigs, from compound (mechanical) drive land rigs to 7th Generation and DP3 Drillships; and also enables us to deliver inspections of the highest standard by first insisting on understanding our client’s operational requirements and applying any lessons learned from data gathered during previous projects.

Our inspections aim to contribute to preparing the rig for drilling operations; we understand that to do that, we must fit in with the onshore and offshore teams and provide direct feedback to enable early repair and closure of any non-conformances identified.

ADC rig inspections are performed during all aspects of rig lifecycle

RIG SELECTION

When 2 or more rigs are being considered for an upcoming drilling campaign, we assist our clients with evaluating and benchmarking each rig option based on Client Specific Weightings and Requirements, Management, Equipment, Maintenance and Modifications to deliver Normalised data. We conduct rig selection evaluations in collaboration with our clients, allowing them to focus on the well programme while we assess the capability and suitability of each rig option.

RIG REACTIVATION

The industry has changed significantly over the last few years; rigs are being retired or stacked in various locations and to varying degree. Utilising the experience gained during the newbuild boom when drilling contractors were commissioning state of the art cyber rigs, ADC has built a proven track record of successful Rig Reactivation projects. Integrating into the Rig Reactivation Plan, our teams of specialists are able to help assure the rig is not only compliant with Class and local legislation; but that the equipment and systems on board are operationally fit for purpose to avoid any unnecessary delays when it arrives on location.

PRE CHARTER

The aim of the pre-charter inspection is to provide a comprehensive assessment of the rig operability status, equipment condition and compliance to Operator requirements. This is achieved by a combination of focused inspections conducted on past rig performance, rig-based systems (HSE management, maintenance and certification) and physical inspection of the rig equipment.

OPERATIONAL ASSURANCE & ACCEPTANCE

Utilising a structured Rig Acceptance Document that is bespoke to each project, we integrate our client’s existing procedures with lessons learned from our 30 years of experience. Whether the rig is newly constructed or currently in operation, we adopt our System Integration Testing (SIT) to assure our client’s that the rig is capable of performing to their specific well design and planned requirements.

IN-SERVICE

Working proactively with the Drilling Contractor, inspections monitor and measure in-service performance against agreed client criteria and KPI’s with analysis of all Safety & Environmentally Critical Equipment (SECE’s) adhering to the performance model of: Functionality, Availability, Reliability, Serviceability and Integration.

We pride ourselves on our extensive engineering knowledge of over 30 years and our ability to deliver strong teams of experience professionals available on a “call out” basis anywhere in the world. Working alongside your own rig management team, we will define and tailor the precise scope of service that fits your specific needs, regardless of where you are in the world.
A digital revolution has taken place within the Oil and Gas industry during which networking technologies and software controlled systems have become integral to the infrastructure of modern drilling environments. The main benefits of these technologies have been to deliver significantly improved safety and productivity.

SERVICES PROVIDED:

CYBER SECURITY:
One of the consequences of these advances has been to create additional vulnerabilities that expose drilling operations to a range of cyber threats previously unheard of. In response to this emergent threat of cyber-attacks, in conjunction with NCC Group (global experts in cyber security and risk mitigation), ADC offers clients a unique Cyber Security Assessment which aims to identify threats and vulnerabilities within the systems on board the rig which could be exploited. This relationship merges the experience gained from two industries that are facing the same threats.

CONTROL SYSTEM INSPECTIONS:
ADC’s Control Systems Specialists are Original Equipment Manufacturer (OEM) trained and experienced in the evaluation of drilling and vessel systems. In order to test a control system, the equipment under control must be operated or function tested. ADC witness test activities in accordance with OEM procedures and all control system items are assessed against rig specific OEM Functional Design Specifications (FDS), Failure Mode Effects Analysis (FMEA), Operating and Maintenance Manuals.

DRILLING SYSTEMS:
Drilling Control systems are evaluated using the methodology above on systems including Drilling Instrumentation, Active Heave, Tubular Handling, Heave Control, Emergency Stop, Alarm Management, Fluid Control, Mud Controls, Communication and the Drilling Control Network to name but a few.

VESSEL MANAGEMENT SYSTEMS:
Due to the dispersed nature of the equipment, the Vessel Management System evaluation plan is coordinated between the Electrical, Mechanical and Control Systems Specialist to confirm what will be tested and what the expected results are according to the VMS Functional Design Specification, User Manual and / or Cause and Effect charts.

DECK CRANES:
Deck Cranes are evaluated using the Control System Test activities described above and typically include a review of the following, where applicable:
- Instrumentation
- Calibration
- Safety systems

DYNAMIC POSITIONING (INCLUDING POWER MANAGEMENT):
The aim of the DP acceptance test is to ensure a health check of the DP capability of the vessel prior to the start of contractual operations so that it is fit for purpose and thereby minimise occurrence of downtime based on foreseeable occurrences during the on-hire period. ADC review the rig’s geographical planned drilling location and assess the rig’s capability and DP reference system suitability on that location against the equipment fitted. The DP acceptance tests are based on the rig FMEA and DP annual trials programme. As Members of IMCA ADC is provided the latest Guidelines and safety Alerts.

JACKING SYSTEMS:
Jacking Systems are evaluated and typically include a review of the following:
- Central and Local Controls
- RPD Monitoring and Correction Systems
- VFD Controls
- Emergency Systems
- Software

SOFTWARE MANAGEMENT:
As part of the audit, ADC also evaluates software management. This incorporates all aspects of control system software including security, backup procedures, software management of change and remote diagnostics.

TUBULAR HANDLING ASSESSMENTS:
Onboard modern rigs, automation is embedded in all aspects of tubular handling, from deck cranes transferring tubulars to and from supply vessels to drillfloor equipment making and breaking stands at well centre. Equipment typically includes functionality such as overload protection, anti-collision systems and alarms and stop systems which are assessed as part of the process. Whilst automation of equipment brings with it many efficiency and safety advantages, it also has the potential to introduce new hazards. In addition to the assessment of the operational effectiveness of the automated equipment and associated safety systems, ADC Tubular Handling Assessments are also designed to evaluate the processes and procedures involved in the handling of tubulars. This holistic approach is designed to assess whether the automated equipment is functioning safely, efficiently and as per design and whether or not the processes and procedures in place ensure that the crew are not at unforeseen risk from the automated elements.
BOP and Well Control Equipment

BOP and Well Control Equipment manage the high-risk part of the oil and gas extraction process and undoubtedly represent the most safety critical components on any rig. Therefore meticulous inspection and detailed reporting regimes for these Safety and Environmentally Critical systems are essential.

Our Specialists are OEM equipment trained and qualified engineers competent to inspect both surface BOP equipment and subsea BOPs and associated Well Control Equipment. ADC’s specialist BOP & Well Control Inspection Team brings to bear over 30 years of subsea expertise with specialist engineers fully conversant with the complete range of equipment from traditional manual controls through to Multi-plex electronic systems (MUX), ensuring all equipment complies to current regulatory requirements and best practices.

Using API Standard 53 “Blowout Prevention Equipment System for Drilling Wells” as our benchmark, our core priority is the identification and pragmatic management of risk. We deploy multidisciplinary teams of professionals who combine a ‘new hand’ technological expertise with an ‘old hand’ understanding of the acceptable operational parameters of systems and equipment. Our rapid reporting tool TRAMS allows our teams on-site to provide essential risk assessment information including the levels of risk identified to our clients in real-time. This essential information enables all relevant stakeholders to respond as rapidly as possible, ensuring costly downtime is kept to a minimum.

Our specialist teams inspect the mechanical, hydraulic, pneumatic, electrical, and control system components of all Well Control Equipment (WCE) including: diverter, riser, choke manifold, motion compensation systems and MUX BOP systems covering all generations of rig in use (including cutting edge dual-activity units). Our inspections encompass all risk assessment and surveillance activities in the equipment lifecycle, including Between Wells Maintenance, HAZOP/HAZID, FMECA, FAT, Commissioning, Acceptance, Pre-deployment Support, Troubleshooting, Remediation and Regulatory Compliance.

REGULATORY COMPLIANCE:

We understand that rig documentation should be treated with the same importance as the on board equipment. As such it is essential to involve and work with the rig contractor during the inspection process. In reviewing existing maintenance records, equipment data packs, certification and inspection reports our specialist engineers can advise on shortcomings and help support and encourage best practice, and in so doing provide the most comprehensive BOP and Well Control Inspection Service available anywhere in the world.

In addition to utilising API S53 and other API Well Control associated specifications, ADC Specialists are fully conversant with all major geographical BOP and Well Control guidelines in use, such as Oil & Gas UK in the UKCS, BSEE in the USA, NORSOK in Norway and NOPSEMA in Australia. ADC also ensure clients’ individual corporate Well Control Policies are included within the bespoke inspection work scopes which ensures that industry standards, local geographical legislation and client requirements are always covered.

The Remotely Operated Vehicle (ROV) package is an indispensable part of modern day offshore drilling. As the focus on the blow out preventer (BOP) increases, it includes the ROV spread as essential to comply with API S53 and a safe and successful operation.

With the experience and skill sets that exist within ADC, the company ensures that ROV contractors are providing “fit for purpose” equipment spreads that meet international and local standards, API S53, interface correctly with the BOP and reduce potential ROV downtime.

By providing ROV inspection services, ADC complement all the other rig inspection services that they provide, ensuring that the client benefits from a standardised and cohesive approach to rig inspection and operational assurance.
HSE AND MANAGEMENT SYSTEMS

Effective HSE Performance or ‘Safety’ is achieved by trained and competent personnel operating within effective Management Systems. The HSE related services we offer our clients determine whether the management systems in place are suitable and effective. ‘Safety’ can be an absolute science or it can be achieved by getting the management right on a day to day basis every day. At ADC, we believe that ‘Safety’ can be as simple as thinking about what we do before we do it, looking after one another as we do it and capturing lessons so they are not forgotten.

Whilst recognising the importance that onsite equipment is ‘fit for purpose’ and performs as designed, we should never forget that the equipment is only as good as it’s operator, and that effective HSE is all about competent, engaged people who are fit for purpose.

SAFETY CASE REVIEW:
When a rig is entering a new geographical region such as the UK North Sea for the first time, or returning after a number of years operating in a different region, ADC can conduct an independent review of the rig Safety Case or International Safety Management system against:
- SCR2015 Regulations
- Assessment Principles for Offshore Safety cases (APOSC)
- Health & Safety Executive Safety Case Assessment Templates
- Guidance for the Topic Assessment of the Major Accident Hazard Aspects of Offshore Safety Cases (GASCET)
- IADC Guidelines

ENVIRONMENTAL RISK ASSESSMENT:
Facilitating Environmental Hazard Identification (ENVID) for our clients, assists them in understanding the environmental impacts of the planned drilling activities; as required by ISO 14001:2015 and also incorporates identification of Safety & Environmentally Critical Equipment (SECE). Additionally, we can produce and update the environmental aspects register considering the fundamentals of the equipment design and operation, in order to conduct an inherently safe environmental operation. This can also be used for identifying worst case scenarios for blow out contingency plans and oil spill contingency plans.

TRAINING & COMPETENCE
Maximising operational efficiency and minimising downtime requires a trained and competent workforce. Legislators and international operators increasingly demand assurance that drill crews are demonstratably trained, supported in their role and mentored. ADC’s Training and Competency assessments analyse the suitability and effectiveness of the policies, procedures and systems to assure clients that supervisory positions on the unit relevant to forthcoming operations are in place and that crew experience levels are (and remain) appropriate to the specific rig and equipment.

OIL SPILL RESPONSE:
ADC conducts audits on Oil Pollution Emergency Plans (OPEP) to assess the level of preparedness and ability to respond to any incidents. We have HSE Specialists who hold OPEP Level 4 and MCA Level 2 for oil spill response and can be located in an Operator’s or drilling contractor’s emergency response room as/when required.

DROPPED OBJECT SURVEYS:
ADC’s scope is formatted to comply with the “DROPS Reliable Securing Booklet Rev 04 (Sep 2017)” and in most cases exceeds standard DROPS surveys by ensuring that work areas and equipment are fit for purpose and that management policies and standards are in line with best practices and legislative requirements.

ADC are able to develop bespoke Dropped Object Management Systems for clients and provide comprehensive online training designed to stimulate greater levels of competency and understanding of rig safety.
Specific benefits delivered by Virtual Academy:

1. A better understanding of the entire drilling operation.
2. A better understanding of the diverse parameters within which drilling equipment can operate.
3. Better communication between drilling contractors and operators through a fuller understanding of the equipment.
4. Greater ability to recognise good and bad practice across the rig operation.
5. Increased safety and environmental awareness of drilling operations.
6. Global access 24/7.
7. Dynamic learning accessible everywhere there’s a Broadband connection.
8. Learning designed to fit with busy schedules.
9. Pass to proceed structure enables learning to progress at a pace compatible to the learner’s ability.
10. Traceability of learning progress through a bespoke learning management system.

Courses Available:

IWCF Drilling Well Control Level 2 Course
An interactive e-learning training course explaining the fundamentals of well control involving equipment calculations, filling out kick sheets and managing a kill operation – ultimately to prevent a kick or blow-out.

Course - IWCF accredited.

Understanding Rig Inspection Programme
A comprehensive e-learning training programme leading to an internationally recognised qualification in Rig Inspection. The programme is specifically designed, through multiple courses, to equip candidates with a comprehensive appreciation of the importance of inspections, their scope, the industry standards that apply, and the resulting benefits to asset output and safety.

Understanding Drilling Equipment Course
A complete e-learning training course explaining the function, operation and key safety and maintenance indicators of both offshore and onshore oil and gas drilling equipment.

Course - IADC DIT accredited.

Understanding Well Control Course
An e-learning training course explaining the fundamentals of well control involving calculations, filling out kick sheets and managing a kill operation to prevent a kick or blow-out.

Ideally suited as pre-course work material for anyone studying for a Drillers Well Control certificate.

Understanding Dropped Objects Course
A wide ranging e-learning training course focusing on successfully managing dropped objects. Candidates gain an understanding of DROPS and their consequences, how to assess the risks and apply the hierarchy of control measures required for prevention.

Course - IADC DIT accredited.