





## **Turbomachinery** | Asset Integrity | Maintenance





# CONTENTS

- About Us
- Mission and Vision
- Core Competencies
- Our Services
- Our Partners
- Our Projects
- Client List
- Our Offices







Cyclotron Engineering Services Limited is a fully Nigerian-owned oil and gas service company.

Our top management team brings on board a combined hands-on experience within the industry in excess of 45years. We provide a wide range of services to support companies like yours - Services, Procurement, Training and Certifications.

Specifically, we strive to become a preferred supplier of services to the oil and gas industry based on quality and reliability, and by providing cost-efficient.

We strive to be your company of choice for all. Turbomachinery, Asset Integrity, Maintenance.



# **MISSION AND VISION**

### Mission:

- To be recognized as the best-in-class Turbomachinery, Asset Integrity, and Maintenance (TAM) reliability solutions in the Nigerian Oil & Gas Industry through the provision of Engineering, Procurement, Maintenance and Operations Services.
- To proactively uphold the Environment, Health, & Safety while enhancing local capacity-building in line with the Nigerian Local Content Development Policy.

## Vision:

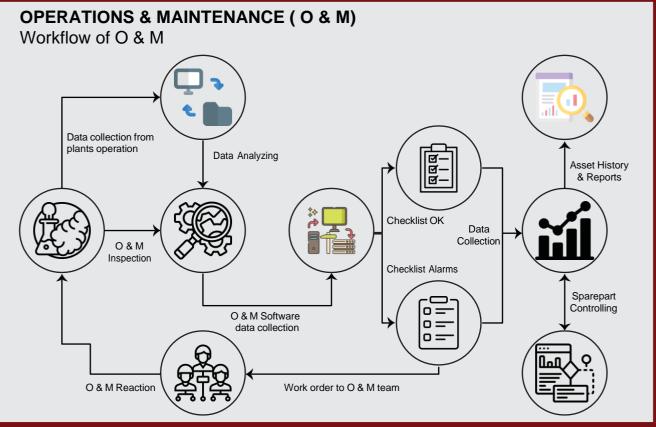
 The innovative use of technologies and human capacities to deliver clientfocused value through the improvement of assets at all stages of its lifecycle.





### | Turbomachinery, Operations & Maintenance | | Asset Integrity Management | Equipment Installation and Commissioning | | Procurement and Delivery | Training and Certification |







# **OUR SERVICES**

## Rotating Machinery (Turbomachinery)

- Turbines, Compressors, Generators, Pumps
  - Solar turbines, GE, Siemens, Rolls Royce
  - Ariel, Dresser-Rand, Aerzen, Cooper
  - Caterpillar, Waukesha, Perkins
- Operations and Maintenance
- Turbine overhaul/exchange programs
- Engineering, design, procurement, installation and commissioning
- Troubleshooting, controls and instrumentation
- Borescope inspections high quality images and videos

## Condition Monitoring Services

- Motors, pumps, compressors
- Development of risk-based inspection program
- Thermography





## Vessel and Tank Inspection, Repairs and Certification

- Process, storage, and pressure vessels.
- Corrosion monitoring, UTM, NDT, MPI etc.
- Surface protection, coating against corrosion.
- Meets industry standards and regulatory requirements.
- Inspection and audit coordination.



### HV/AC and Electrical Systems

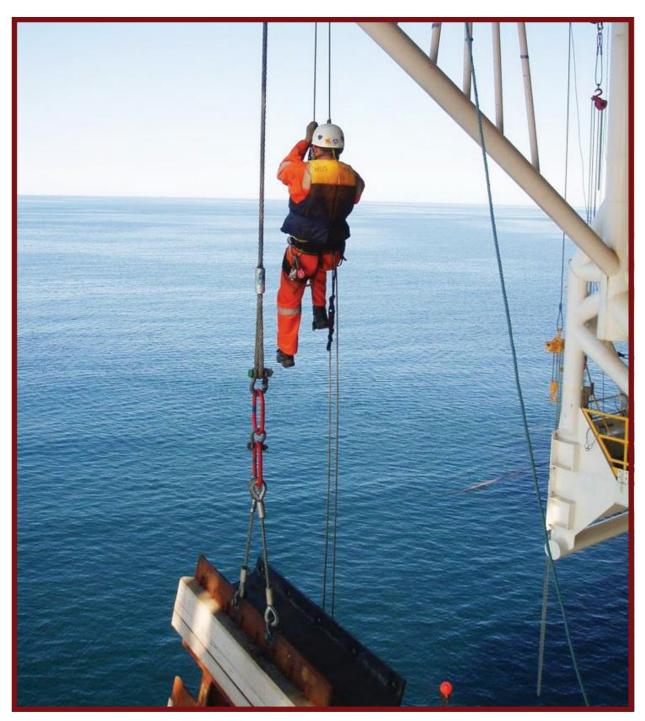
- Integrated solutions central and stand-alone systems.
- Design, fabrication and installation of electrical distribution systems.
- Low to high voltages application.
- CE & ATEX equipment for intrinsically safe operations.





## Rope Access Services

- Flow lines and Risers Inspection.
- Fabric Maintenance/Flare tower inspection.
- Structural integrity inspections.
- Conventional and advanced NDT services.
- Close visual and photographic inspections.
- Marine Services.





## Valve Inspection and Servicing

- Repairs, replacement parts and engineered upgrades.
- Leaks inspection.
- Relief, control, safety, flow, temperature, etc. valves.
- We support spares, servicing, and installations.



## Life Extension Services

- Development of a life extension work scope.
- Risk-based inspection.
- Engineering and Compliance Support.
- Project management, consultancy, and reporting.



## Field Machinery Services

- Major preventive, predictive and corrective maintenance strategy development.
- Laser alignment and inspections.
- Complete plant operations and maintenance.
- Delivery and/or fabrication of spare parts.
- Upgrade of existing projects.

### Engineering Consultancy and Design

- Engineering design, management consultancy.
- Process optimization and de-bottlenecking.
- Development of equipment O & M strategies.
- Computerized maintenance management systems (CMMS) setup and support.
- FATs and SATs on mechanical and electrical equipment.
- Greenfield projects from concepts.
- Equipment specification, selection, and design.
- Brownfield re-design, assessment, and review.
- Process system review and redesign to meet changing in condition of feed fluids.
- Root Cause Failure Analysis (RCFA) for plants and facilities.

## Training and Certification

- Subject-Matter-Expert (SME) trainings.
- Classrooms and online trainings.
- Need-based assessment carried out to ascertain and contrast the capacity, ability, and official functions of a target group.
- Delivery utilizing an approach that is interactive, friendly and needs focused.
- Assessment impact of the training on the participants is carried out to ascertain the value for money spent by the client.
- Multiple training locations Lagos, PHC and Eket.















Gefico











# **OUR PROJECTS**

• 2023	Procurement and delivery of CAT 3616 Cylinder head	Network Oil & Gas
• 2023	Inspection and certification of 2-unit gas generators package	FrazPower
• 2023	Akam Gas Generator Reinstatement and Hook- up	Addax Petroleum
<b>-</b> 2022	Provision of Required Spares & Materials for MCC & Generator Intervention	Addax Petroleum
• 2022	Main Oil Line Pump P-100 Overhaul and Repairs	Addax Petroleum
• 2022	CAT G3616B Compressor Spares and Consumables	Addax Petroleum
• 2021	Synchronization of 2X CAT gas generators	Addax Petroleum
• 2020 - Date	Operations and Maintenance of CAT driven Compressors and Generators	Addax Petroleum
• 2019/2020	Supply of 2X CAT XQ1475G (1.5MW each) gas generators, 2 years running and commissioning spares	Addax Petroleum
• 2021	Repair of Instrument Air Compressor and Dryer Units	Neconde
• 2020	Supply of Fuel Gas Filter	Addax Petroleum
<ul><li>2019/2020</li></ul>	Rewinding of Gas Generator Alternator Contracts	Addax Petroleum
<ul><li>2019/2020</li></ul>	Supply of general CAT, Waukesha and Ariel spares	Addax Petroleum
<b>2019/2020</b>	Condition Monitoring Services for Top-Tier Equipment (TTM)	ExxonMobil
- 2019	GE10 Turbine Commissioning Readiness Assessment Inspection	Neconde
• 2019	Procurement of Solar Turbine Spares	Neconde
• 2019	Compressor RCFA Inspection and Reporting	Heritage Oil (CAPSL)
<b>2019</b>	Engine change out of Solar Centaur 50 unit	Total E & P
<b>2019</b>	GE10 Borescope/CTA Inspection	NPDC



# **CLIENT LISTS**























# **OUR OFFICES**



## □ Head Office:

• Admin/ Engineering:

13, Gbenga Adeyinka 1st Street, Off Freedom way, Lekki Phase 1, Lagos State.

• PHC (Workshop):

Plot 146, Trans-Amadi Industrial Layout, Opposite Michelin, Port Harcourt, Rivers State.

- Eket( Fab-Yard):
- 42, Enen Ekpene Road, Afaha Eket, Eket, Akwa Ibom State.



# **COMPANY FLYER**

## ASSET INTEGRITY MANAGEMENT SOLUTION

### **Core Competencies**

#### Rotating Machinery (Turbomachinery)

- Turbines, Generators, Pumps, Compressors.
- Procurement, Installation, Commissioning, Overhaul.
- Operations & Maintenance.

#### **Condition Monitoring Services**

• Vibration & Oil analysis, thermographic/thermal imaging, engine borescope inspections.

#### **Crane and Davit Services**

• Supply, installation, repair/replacement and certification of cranes, hoist, and gantry from a wide range of OEMs.

### Vessel/Tank Inspection, Repairs and Certification

• Automated & Semi-automated cleaning, re-certification, corrosion control etc.

#### Rope Access & Non-destructive testing (NDT)

Deliver full range of level I-III NDT services and rope access.

#### Valve Inspection and Servicing

• Procurement, testing and recertification.



CAT XQ1475G Gas Generator Project



Gas Compression Faclity O & M Project

### **Key Projects Executed**



Solar Centaur 50 Gas Turbine Engine Change-Out

### Total E & P Nigeria Limited - 2019

 Centaur 50 Gas turbine engine - Generator driver change-out.

#### Aiteo Exploration & Production - 2019

Provision of condition monitoring services.

#### Nigerian Petroleum Development Corporation - 2019

- GE-10 Gas turbine hot-gas-path Borescope inspections (40MMSCFD Gas Compressors driver).
  Provision of Solar turbine inlet filters.
- Heritage Oil Exploration & Production Limited 2019
  - Gas compressor RCFA and recommendation.



## **Cyclotron Engineering Services Limited**

Administrative and Technical Publication13, Gbenga Adeyinka 1st Street,Off Freedom way, Lekki Phase 1,Lagos State,Nigeria.Phone:+234-802-834-4311Website:www.cyclotroneng.comEmail:info@cyclotroneng.com



Confidential & Proprietary document of Cyclotron Engineering Services Limited

Unauthorized distribution is prohibited.