



Digital Automation Control

Contents

- Introduction
- Organization Chart
- Portfolio
- Sample References Projects.
- Customer List
- Summary



DAC



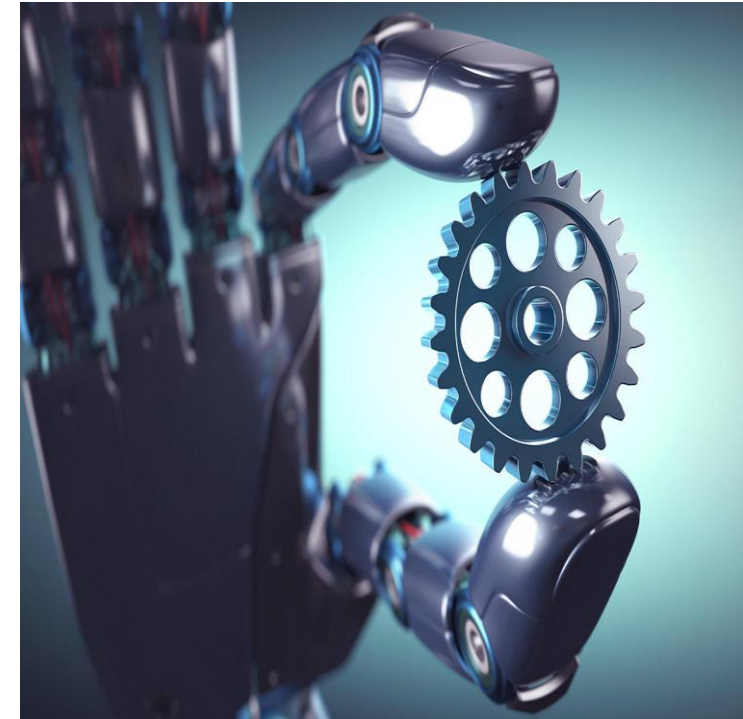
- **DAC** “Digital Automation Control” was established in 2018
- **DAC** is an I&C Instrumentation and control company operating in Oil & Gas, Power Plants, substations, and industrials
- **DAC** team fields of expertise cover Turn Key solutions, Detailed engineering, equipment turbines installation, testing , commissioning, startup, control system, upgrade, migration, third party inspection, maintenance, troubleshooting, supply skilled & unskilled manpower.
- **DAC** has range of resources required to meet all challenges presented by our customers in oil & gas, power plants, substations, and industries for all out projects as well as field services
- **DAC** employs highly educated, trained and qualified personnel who posses extensive experience, skills, technical knowledge gained from foremost manufacturers like **GE, SIEMENS, ABB, Rolls Royce**, Solar turbines, EMERSON, Honeywell, and **ROCKWELL Automation.**

DAC

DAC Vision

To be a leading automation, control & instrumentation company in the region that is responsive to customers' needs.

DAC is focused on Yemen market and aiming to be the regional leading company on automation and control specialized in gas turbines control systems and advanced processes control.





DAC

- DAC Mission
 - To achieve turnkey solutions.
 - To attained customer satisfaction
 - Provide ideal services for customer
 - Provide gas turbine solutions
- DAC Logo



- DAC Slogan

Your Vision, Our Mission

DAC

- *Offices*

Yemen

Free Zone, **Aden**

Tel. +967771116100, +967773060305

Haddah Town, st.4 **Sanaa**

Tel. +9671418578, +967735200042

Bin Maile station, Alramsa, **Marib**

Email: support@dacgeneral.com

kalmadhagi@dacgeneral.com

kbinsilm@dacgeneral.com

UAE

Unit No. STR-FLR18/107,SHEILH RASHID TOWER,DUBAI
WORLD TRADE CENTER



DAC

- Work History Location
 - Yemen
 - Sanaa
 - Aden
 - Marib
 - Hadramut
 - UAE

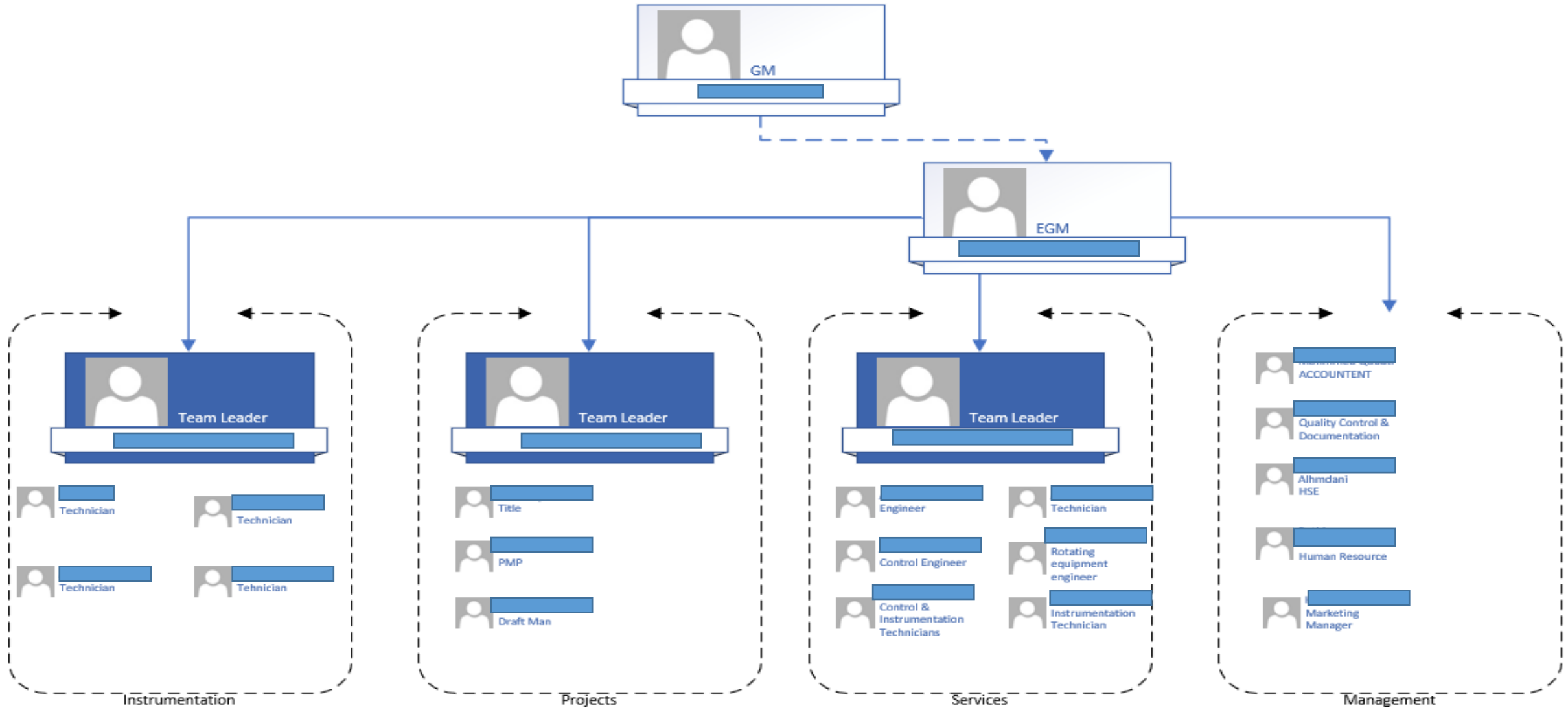
DAC Standardization



- Vision, mission, integrity, cooperate values, respect for the individual, trust & responsibility, credibility, Kaizen, recognition & celebration*
- HSE Policy*
- HSE Objectives*
- HSE charter*
- Quality objectives*
- Quality policy*
- Drug, alcohol, and weapons policy*
- Cooperate & social policy *
- Information security objectives *

*Documents available on request

Organization Chart



CREDENTIAL



- More than 8 years experience of total 33 heavy duties gas turbines, and aero-derivate in power generation and mechanical driven
- ISA Certified Automation Professional
- Project Management Professional certificate
- OSHA certificate
- Master on Industrial Automation recognized by ISA
- Advance courses in mark VI & mark Vie on site training
- Master of electronics engineering
- Master of engineering management
- PhD of electronics



DAC Portfolio

- Oil & gas, power plants, substations, & industries I&C projects
- Oil & Gas Instrumentation, control, electrical and process solutions
- I & C EPC projects
- Installation, testing, commissioning and startup services
- Engineering review, design, and studies
- Panel building, and control system upgrade
- Maintenance Services & Troubleshooting
- Oil & Gas and power generation plants field experts' Manpower supply for E,I & C, mechanical, civil, process, inspection, studies engineers, commissioning and startup
- Training Services

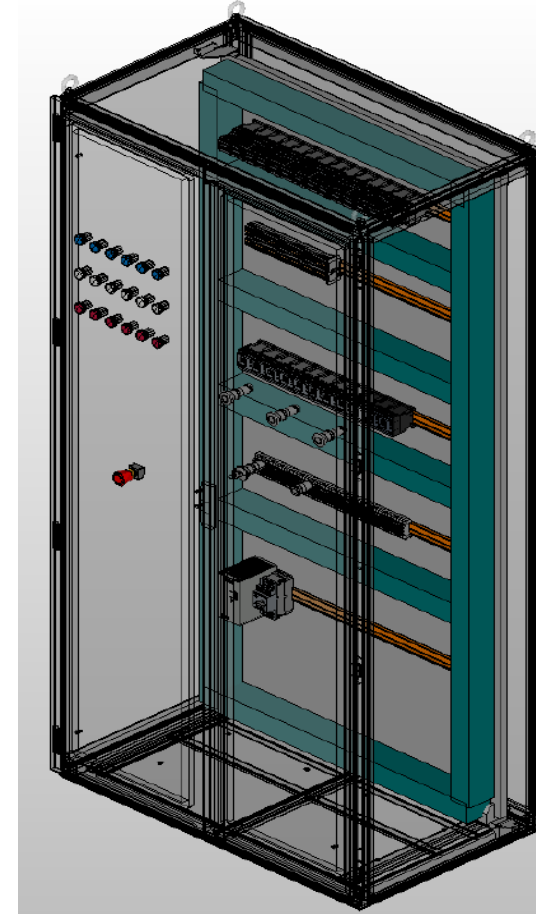
Engineering Work

- Includes documentation, drawing, designing, cause & effects, functional flow chart, programming logic building using **IEC61131 STANDARDS**, **ISA101** HMI design, **ISA18.2** alarm management system, planning, simulation software such as EPLAN, ETAP, AUTOCAD, Studio 5000, RSlogix5000, CMMS and others.

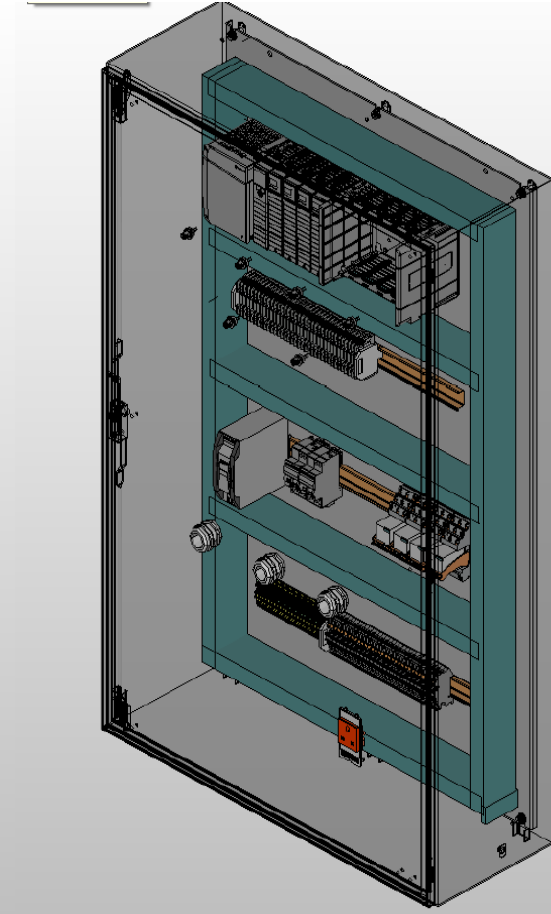


Panel Building

- After building the panel using EPLAN, and doing all the engineering work such as logic building, drawings, flow charts, and P&IDs. The panel is build base on the EPLAN documentation. And after building the panel, the control system is configured and downloaded the software and logics needed. Test the network and hierarchy of the network and system



Relay based panel



PLC panel

Instrumentation & Control

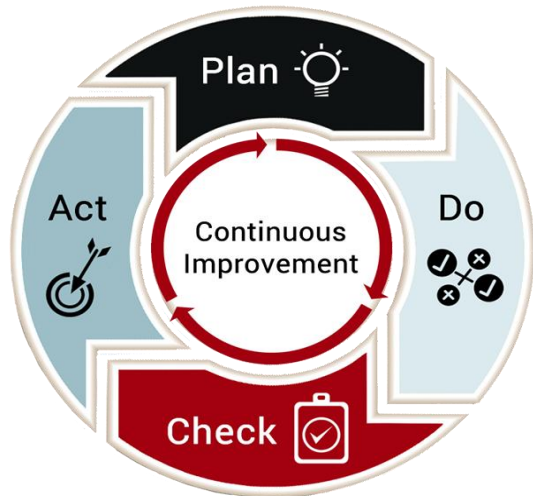
- Installation, setting, testing, & calibration
 - ✓ Transmitters & Gauges “Pressure, Level, Temperature, & Flow”
 - ✓ Valves “Control, PSV, SDV & BDV”
 - ✓ Servo valves “SRV, GCV, IGV, VN”
 - ✓ Motorized valves
 - ✓ Fire & Gas detection
- DCS & SCADA: IA FOXBORO, FACTORY TALK SITE EDITION AND MACHINE EDITION
- ESD & FGS “Triconex TMR”
- PLC’s “Allen Bradley, Siemens, Schneider, Uticore, CBOS, & CBFC”
- GE packages “Mark V, VI, & Vie” “ToolBox & ToolBoxST” “Proficy Machine Edition ” “Cimplicity, workbench”

Installation, Testing, & Start-up

- GE
- SIEMENS
- RR
- Solar Turbines
- Fire & Gas Panels
- Electrical motor compressor
- Instrument air compressors “Atlas Copco”
- Gas Analyzers “Siemens Maxum”
- Burners Management System BMS “FURNACES”

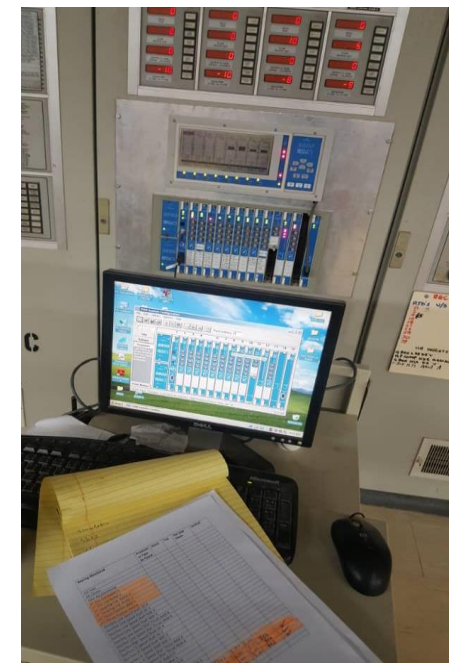
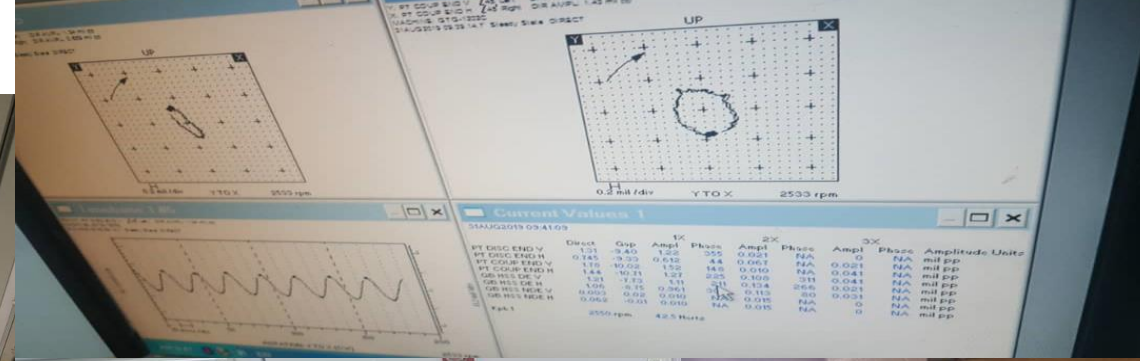
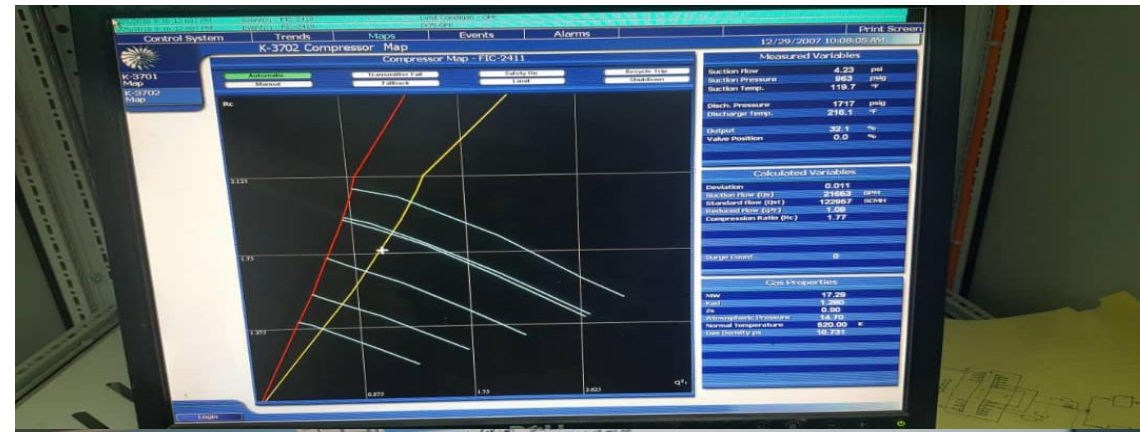
Maintenance Services

- Daily, monthly, 3 monthly, 6 monthly, and annual preventive maintenance for instrumentation, & control in Oil and Gas, Power Plants, Industries



Troubleshooting Services

- Vibration Analysis
 - Bentley Nevada ADRE
 - Bentley Nevada 3500, 3200, & 7200
- Anti-surge system
 - Ge, CCC, MOORE, & SIEMENS





Projects

The following slides will show some of the major projects which DAC personal were involved

Team Major Projects

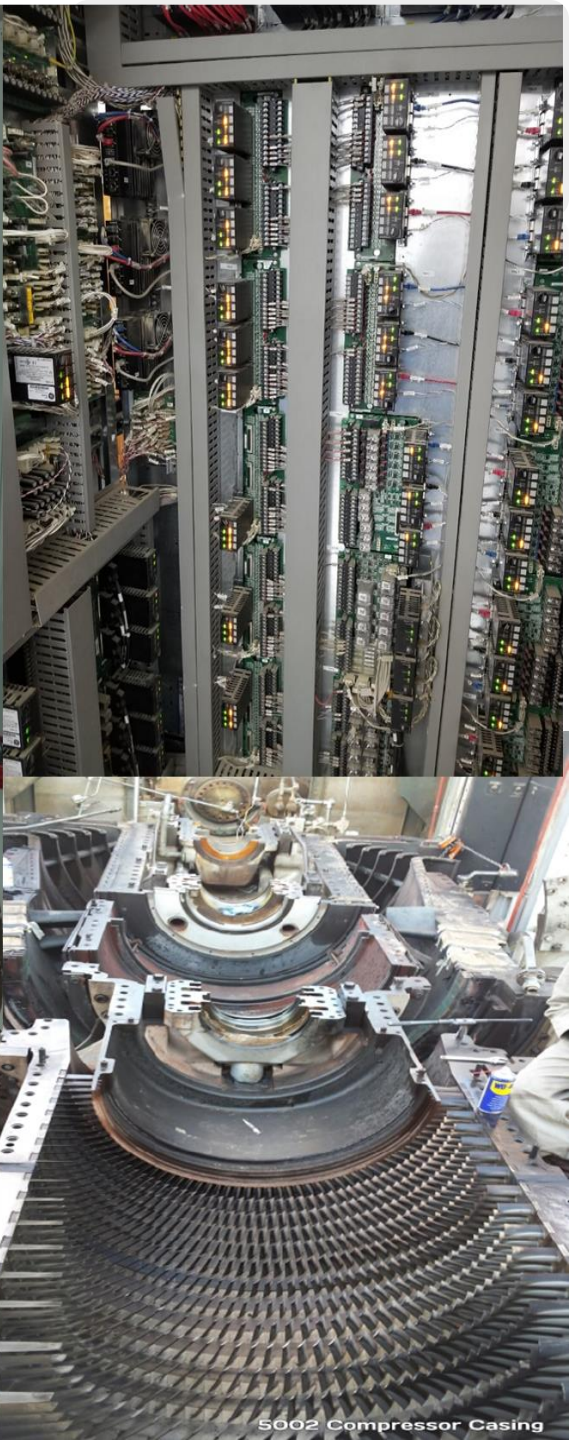
- Four panel upgrades from Mark IV to MarkVIe
- PreCommissioning, & Commissioning of Mark VI
- Six major overhauls in I & C Frame 5C
- Eight Nuovo Pignone centrifugal compressor
- RR power turbines overhauls
- Two UCP upgrade from FT100 to FT125



MARK IV to MARK VI



FRAM 5C Overhaul



5002 Compressor Casing

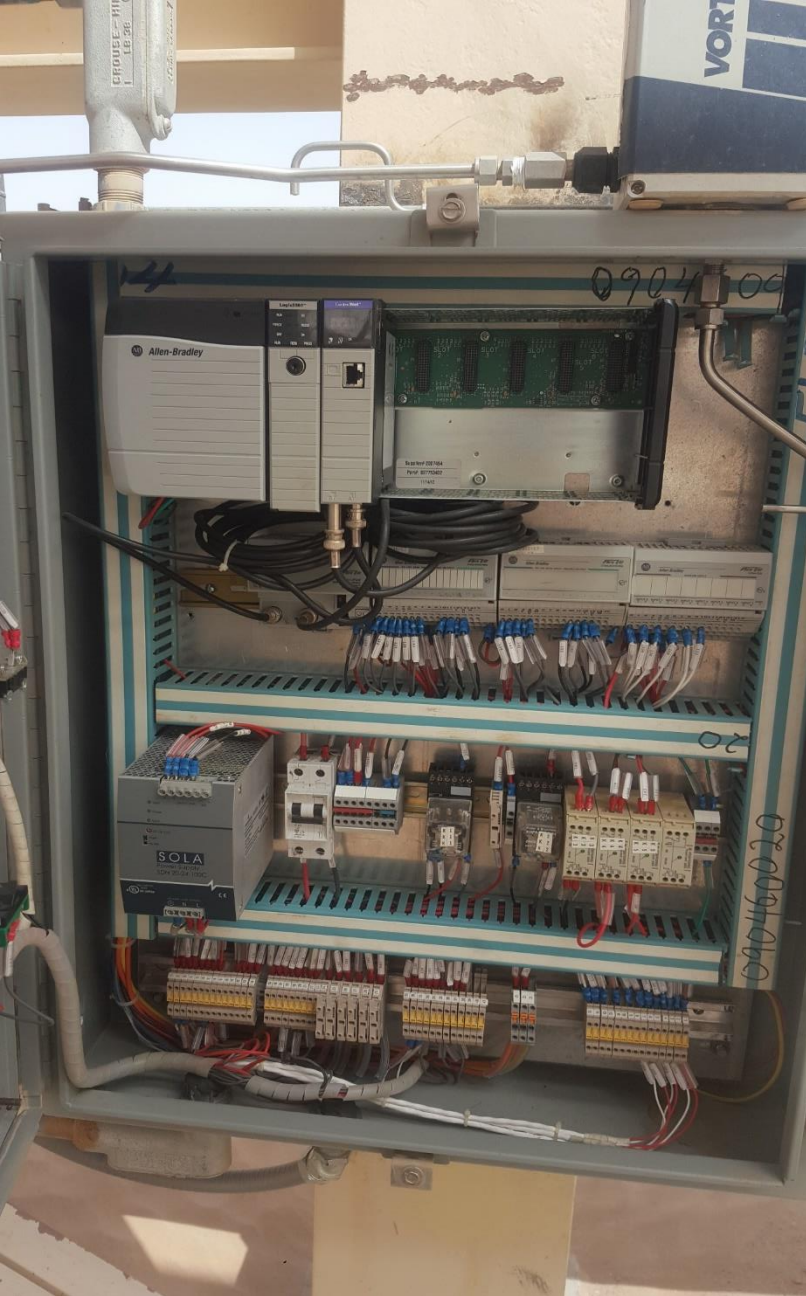


FRAM 5 C OVERHAUL

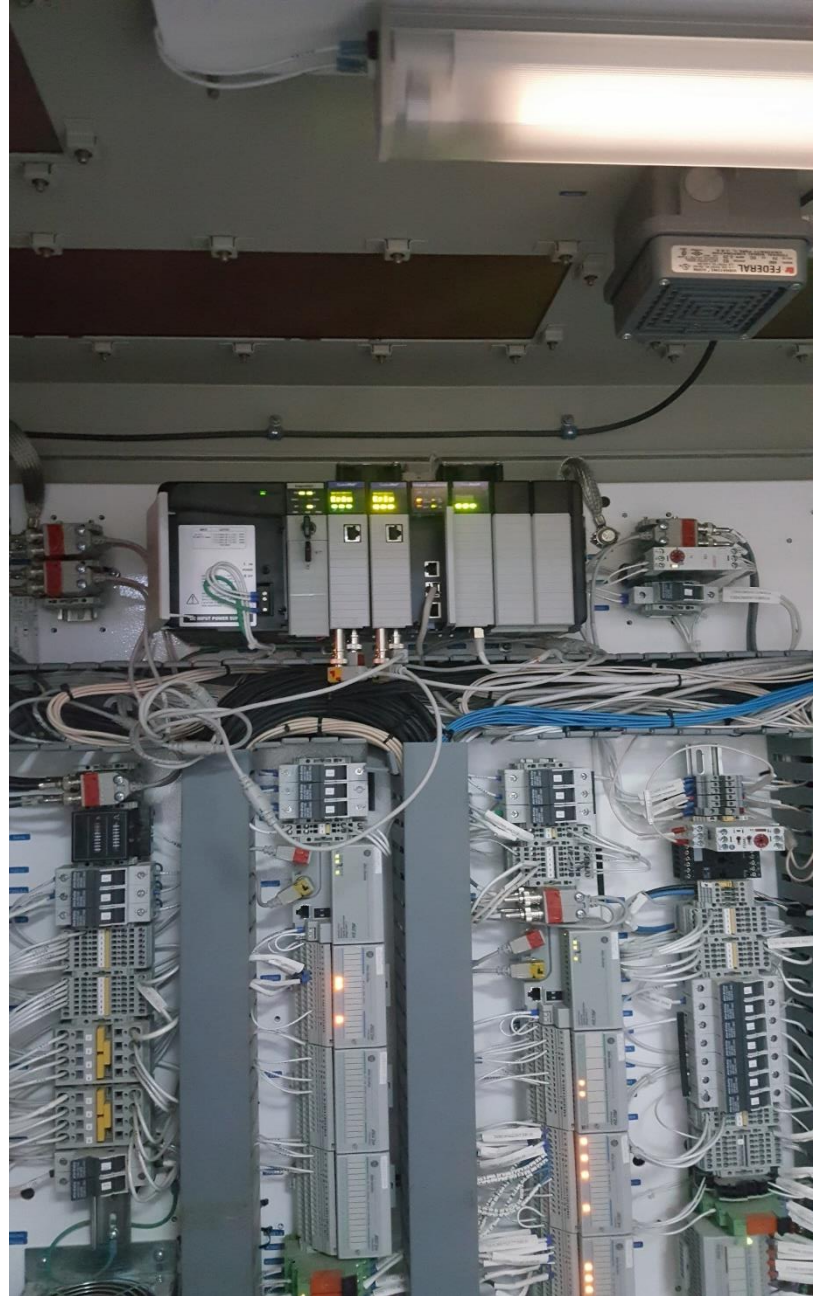




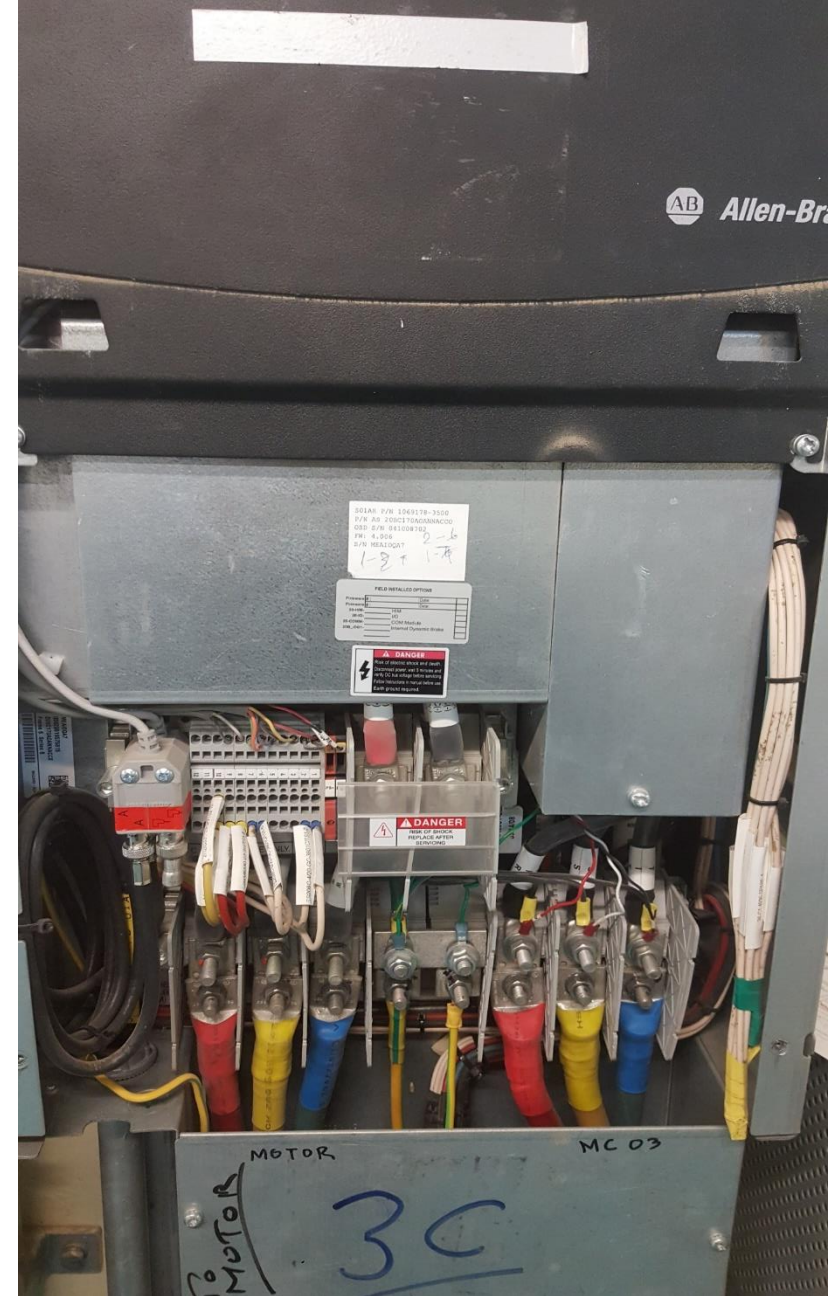
FT125, ROLLS ROYCE 15MW upgrade from FT100



ESDVs panel with DCS & Triconex

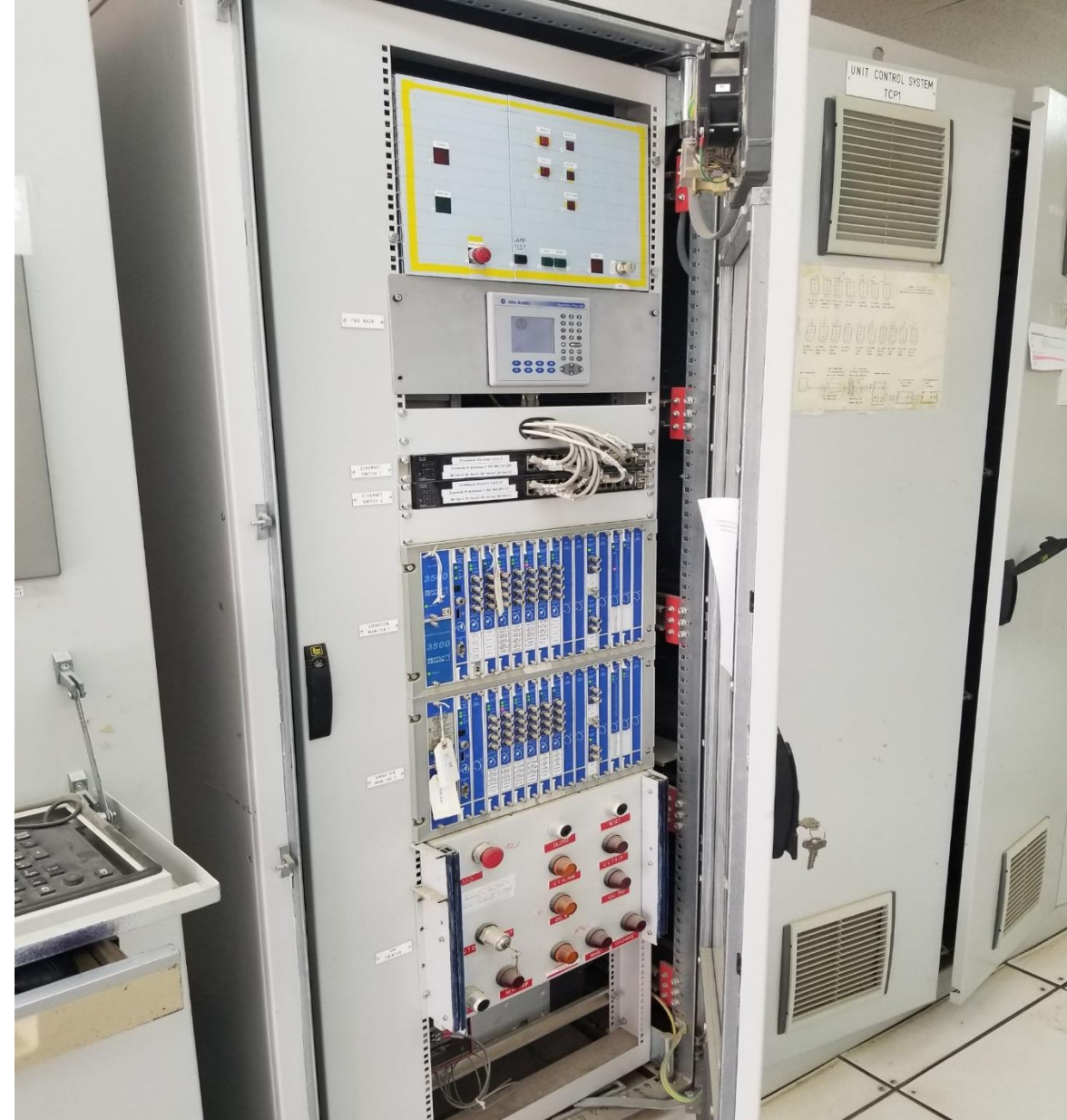
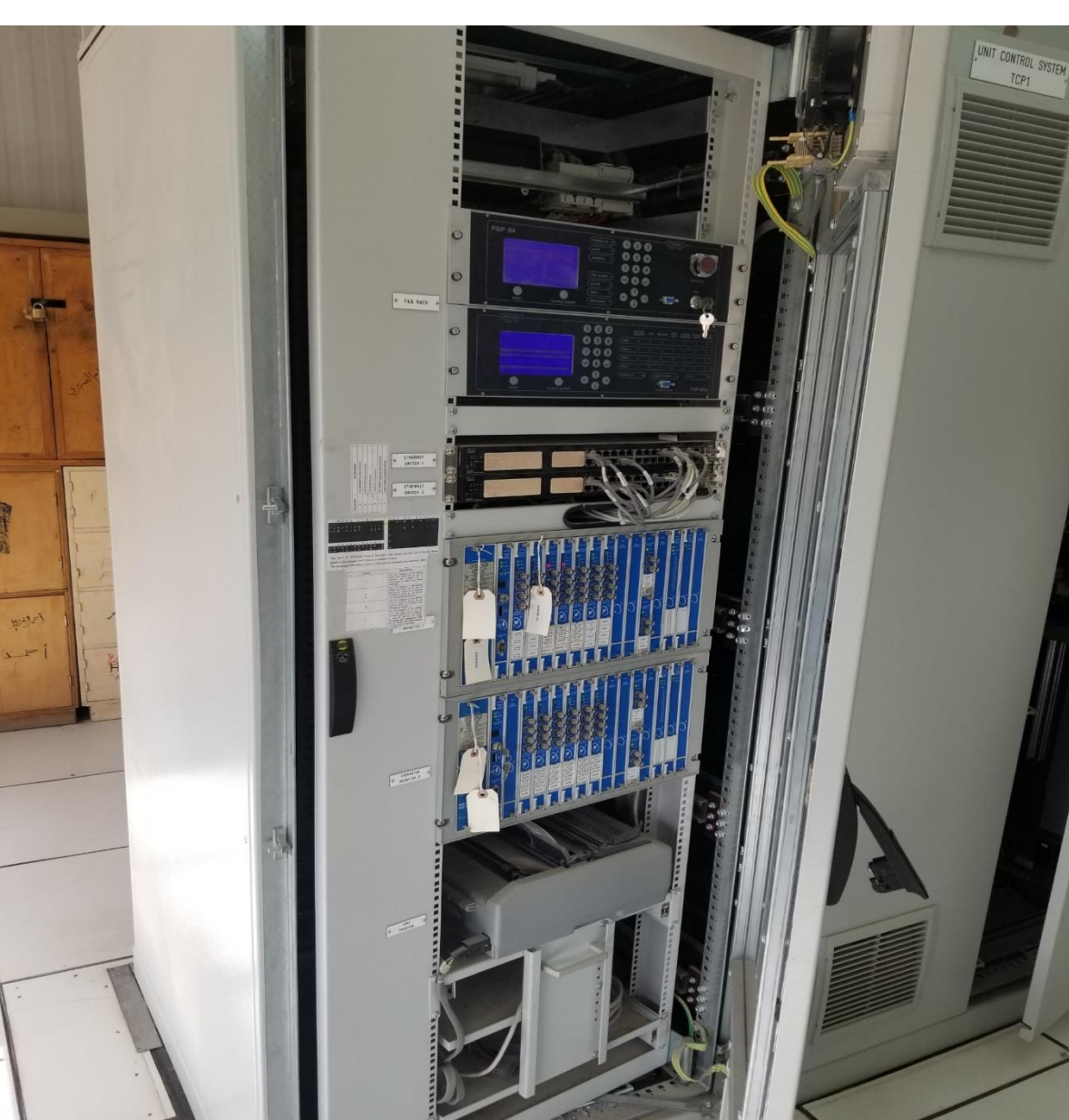


Solar Turbine Generators

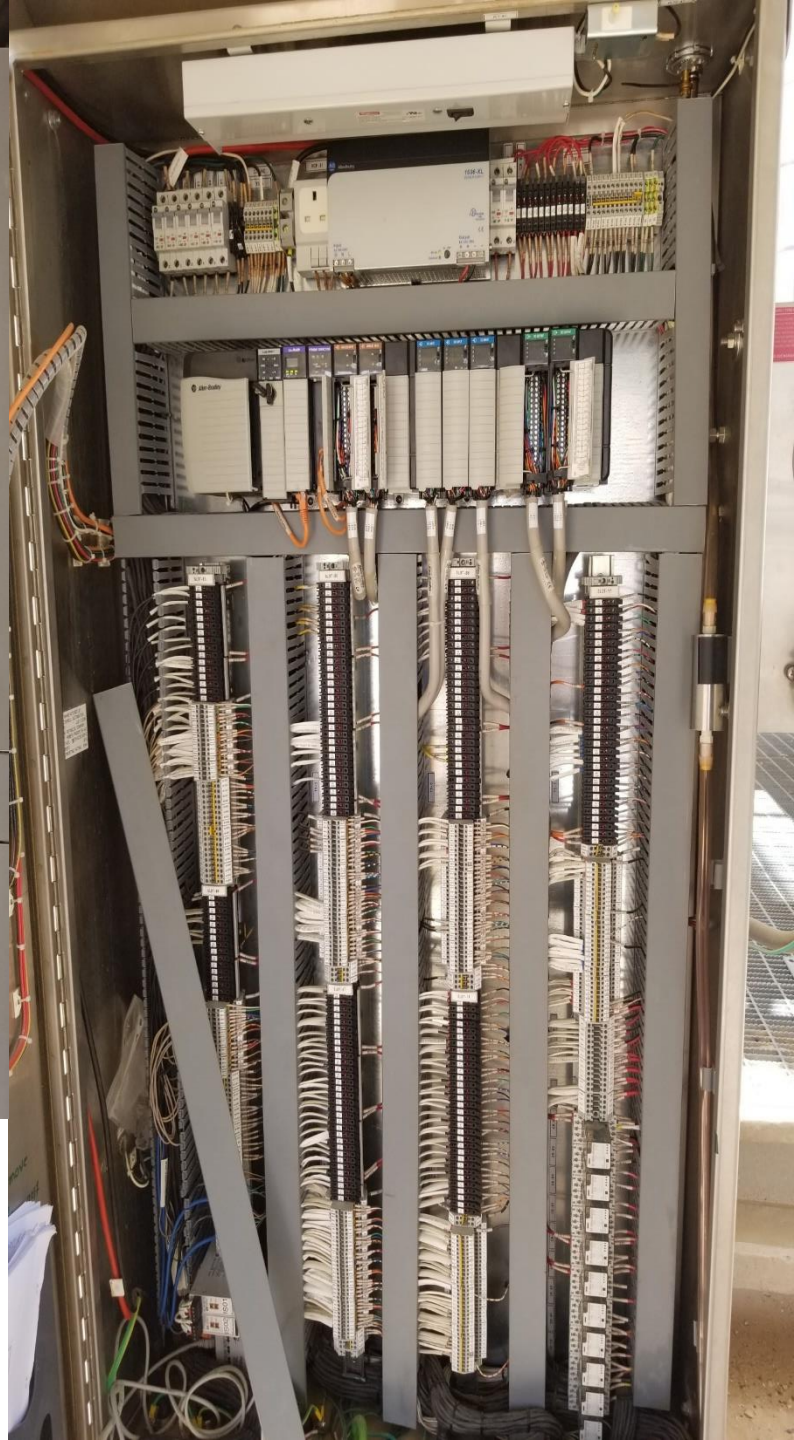
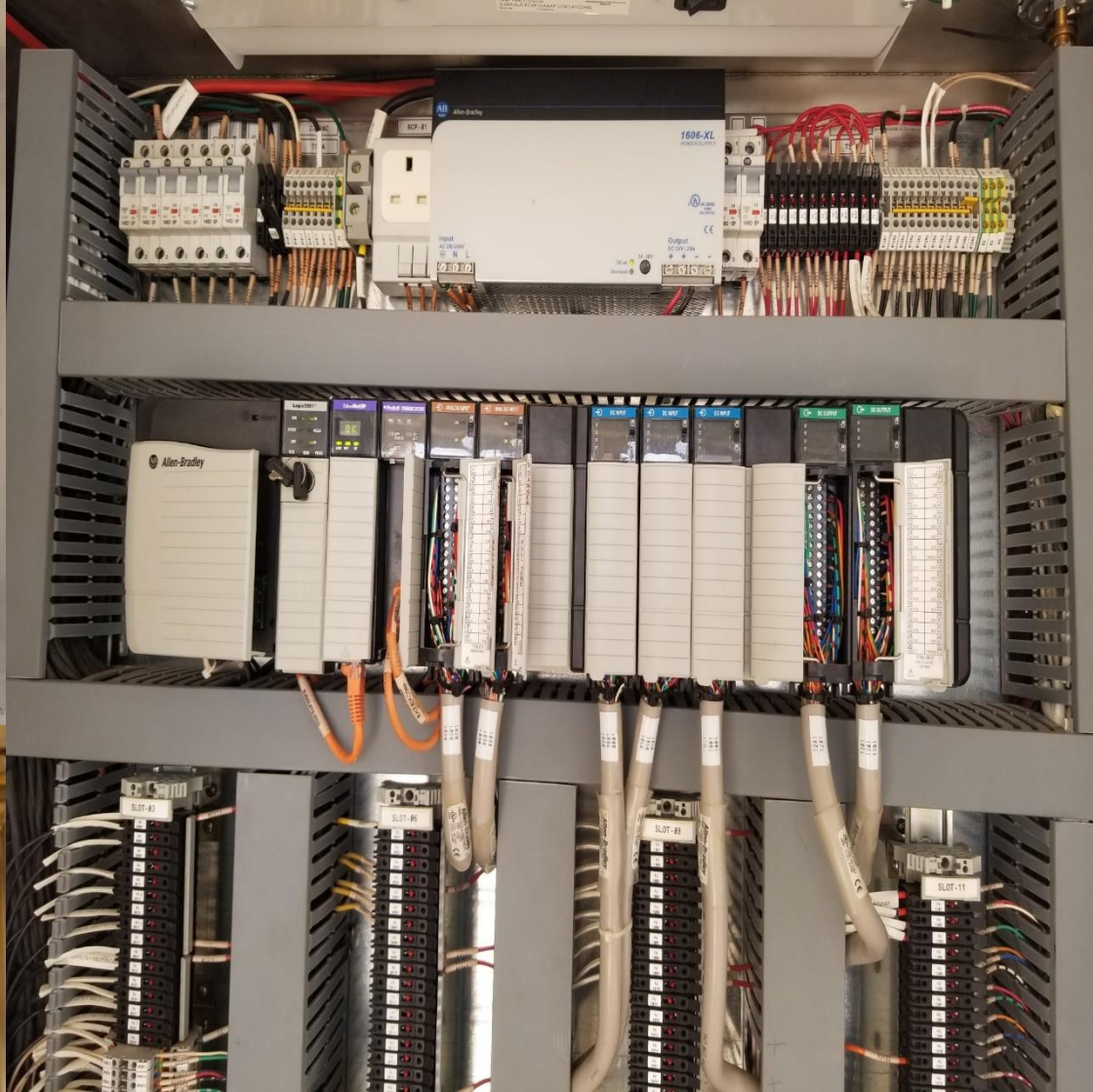
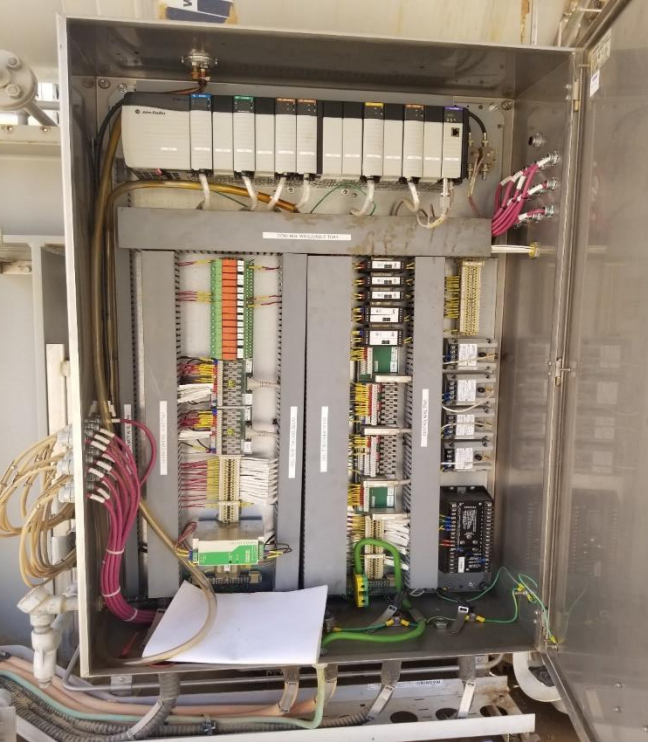


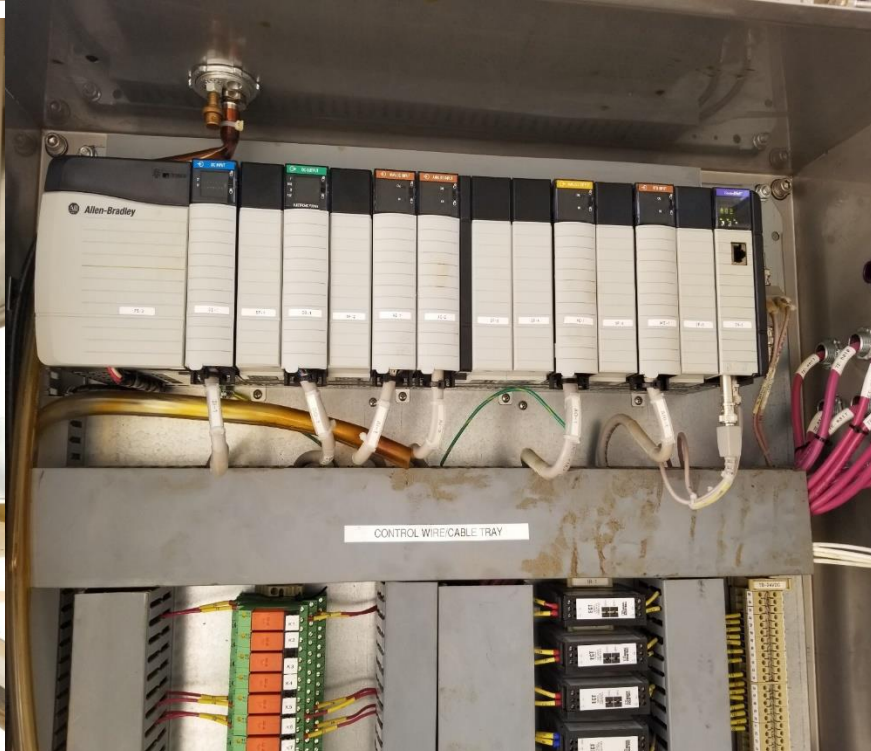
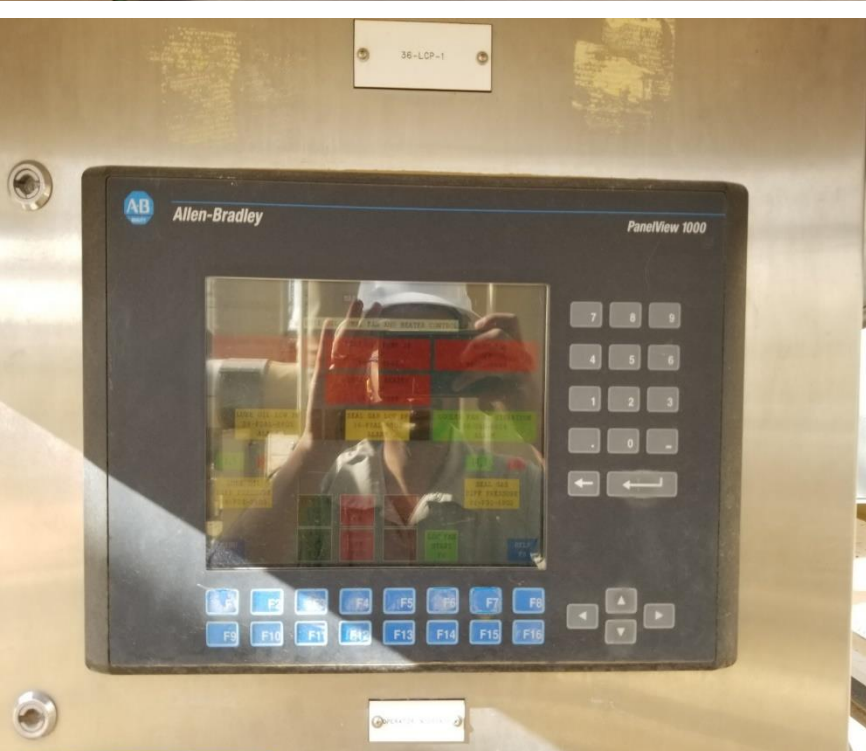
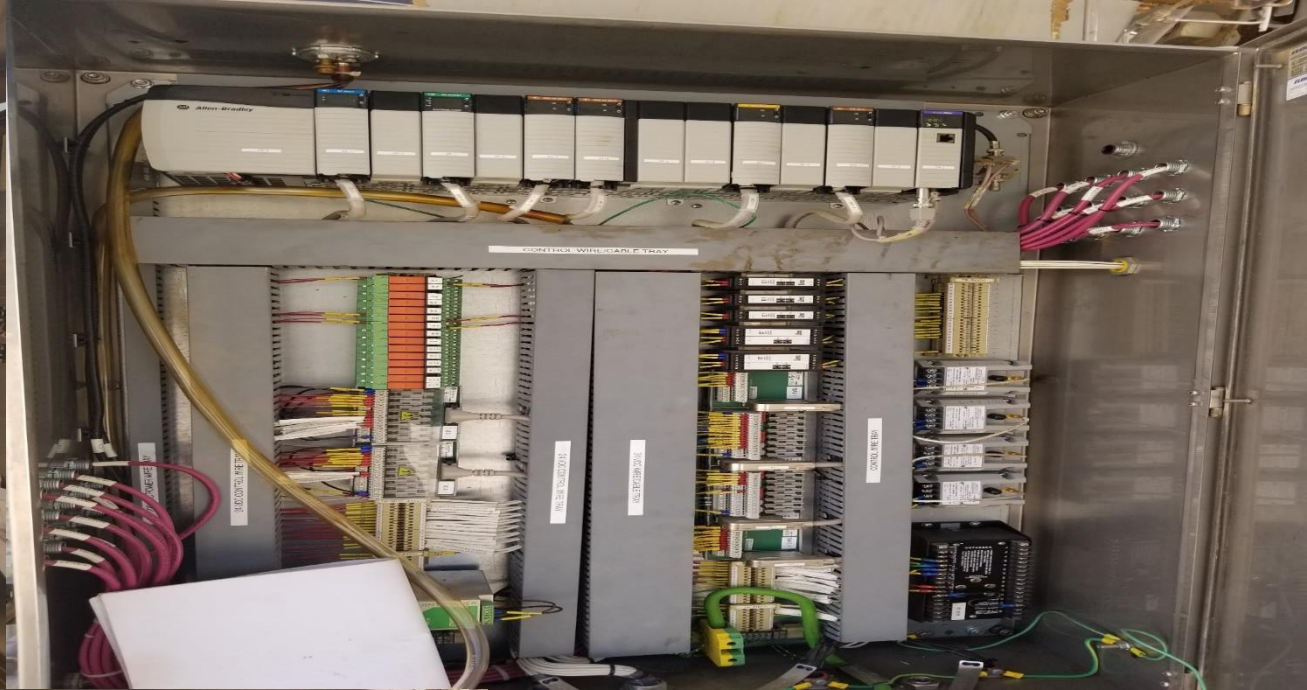
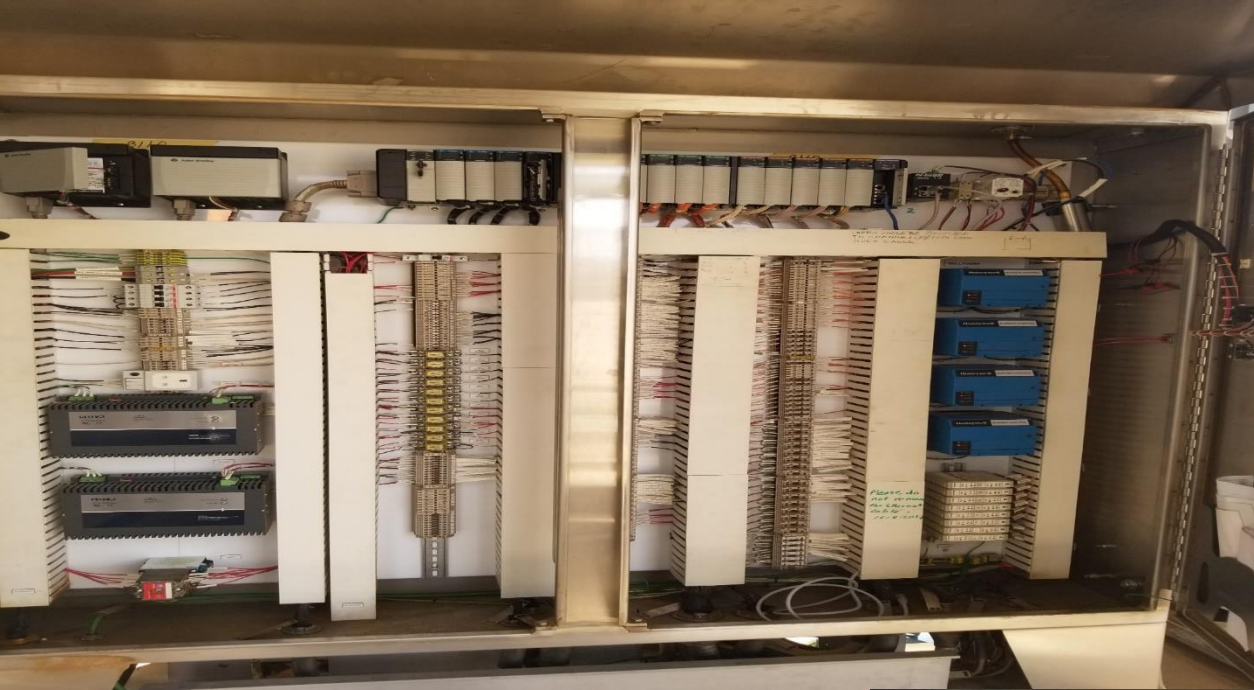
Rockwell PowerFlex





Migrate from PROMEL to AB ControlLogix





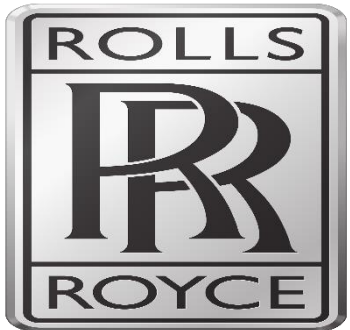
Manufactures DAC Expertise



Honeywell

**Rockwell
Automation**

Solar Turbines
A Caterpillar Company



**Schneider
Electric**

YOKOGAWA 
Co-innovating tomorrow®

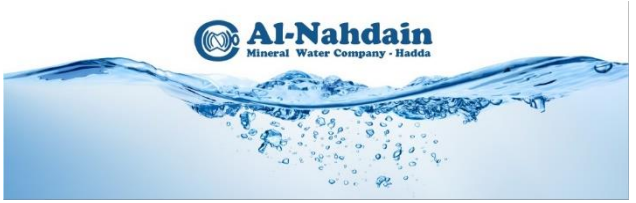

EMERSON™

SIEMENS

ABB


Endress+Hauser
People for Process Automation

Customers



Office In Aden

Location: Yemen, Aden, Khor Maksr, near Ministry of education



Workshop FZ in Aden



Workshop rental at Aden Free Zone which the facility has the following:

- i. Over head cranes
- ii. Varsity of test & calibration equipment's

Test & Calibration Equipment



Ser	Type	Quantity	Manuf.	Model	Photo														
1	Loop Current Calibrator	1	Altek			14	Thermocouple Calibrator	1	Altek			27	Electrical Generator (Portable) 5-100 KW	1					
2	Altek Model 241(942) Frequency Calibrator	1	Altek			15	Water Bath	1	Techna			28	Table shaker Density brand for vibration test Hardy	1					
3	Dry Block Temperature Calibrator	1	Ametek/Joffra			16	General Resistance RTD Simulator	1	Altek			29	BoreScope- Olympus	1					
4	Electronic Thermometer	2 unit	Barnant			17	PSV Test Bench Suitable for PVRV up To 8 inch	1	Groth OR Hydration			30	Fuel nozzle cleaning system Bath tub	1					
5	Hydraulic Pressure Comparator	1	Budenberg			18	Handheld Ultraviolet (UV) Lamp	1	HUAIEC Or Equivalent										
6	Dead weight (Portable)		Budenburge 580			19	Barton Chart Recorder up to 6000 psi	1	IIT Barton	202E									
7	Hart Digital Communicator		Emerson	475		20	Decad Resistanc Box	1	RS component Or Equivalent										
8	Megger		Megger	MIT200		21	Shaker Table 9110D/9210D Portable Vibration Calibrators	1	Bently Nevada										
9	Multimi Meter		Fluke			22	Tool Set for Instrument Technician	1	Snap On, Boto or Equivalent										
10	Power Supply 50 VDC		TTI			23	Tool Set for Mechanic Technician	1	Snap On, Boto or Equivalent										
11	High Pressure calibrator	1	Druck			24	Instrument Senior Technicians 15 Years	2											
12	Pressure calibrator	1	Druck			25	Mechanic Senior Technicians 15 Years	2											
13	Low Pressure Calibrator	1	AirFlow EDM2500			26	Air Compressor	1											

Page 1

Page 2

Manpower Supply



Target

1. Manpower

- a. Mechanics skilled and unskilled
- b. Electrical skilled and unskilled
- c. Welders / fabricators/ scaffolders
- d. Pipe fitters
- e. Insulators
- f. Machining technicians
- g. Forklifting licensed operator
- h. E&I technicians
- i. HSE officers
- j. Store keepers

2. On site Equipment

- a. Air compressors
- b. Welding
- c. Gridding
- d. lifting
- e. Hydraulic tension
- f. Clamping
- g. Rentals equipment's

4. On site infrastructure

- a. Offices
- b. Temporary power
- c. Industrial care
- d. Consumables
- e. Loading areas

5. Investment

- a. Training
- b. Tools & equipment
- c. Field service teams (Sales)

6. **Targeted clients for DAC**

1. OMV YEMEN
2. Petromasila
3. SAFER
4. PEC
5. Industrials automation

Manpower Supply



No.	Description
1	Hydraulic Bolt <u>Torquing</u> machines
2	Bolt Tensioning Equipment
3	Hydraulic jacks and Hydraulic flange spreaders
4	Pneumatic operated Tools
5	Pneumatic Jet Fans & Air movers
6	Pneumatic Lights
7	Heavy Duty Air Compressors
8	Hydro - jetting equipment with flexible lance (3 set minimum)
9	Certified Cup Lock Scaffolding
10	Mechanical tube cleaning equipment for heat exchanger cleaning
11	Hot and Cold pipe cutting equipment

No	Description
1	Hydrotesting Pump, Calibrated <u>Guages</u> & Recorders
2	Videoscope 6mm or 8mm <u>dia</u> 10mm length GE or Olympus or similar
3	MFL (Magnetic Flux Leakage Test) ECT Eddy Current Testing
4	Radiographic Testing (Both Gamma Ray and X Ray)
5	<u>Ultrasonic</u> Testing
6	MPE & PT
7	<u>Paiting</u> Inspection (Holiday Testing, WFT, DFT, Profile Measurement)

Successful Projects



- Details engineering project for water reservoir
- Details engineering for oil & gas companies
- Panel designs and drawing using EPLAN, & AUTOCAD
- Solar Panels design, and installation.
- Construction of Several ATS panels for UN, IMC, & IRC.
- Monthly preventive maintenance for Power generation reciprocated diesel engines (Cummins , Perkins, caterpillars and Mitsubishi)



- Added value & suggested projects

- Engineering review
- Installing, pre-commissioning & Commissioning
- Performance test services
- After startup Service
- Hot inspection service
- Overhaul services
- Preventive, predictive, and corrective Services & Solutions

Honeywell

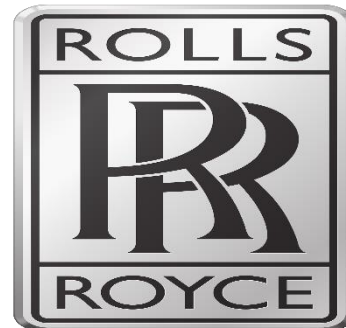


SIEMENS

- Projects

- Aden Power Generation “FRAME 9E, TM2500”
- Marib Power Generation
- OMV
- Jabal Hadid
- SEPOC “Gas Turbines”

Solar Turbines
A Caterpillar Company



Conclusion



- ✓ DAC has full capability in Project management, engineering, procurement, consulting, maintenance, & commissioning.
- ✓ Our team is our values whom they are experts in their fields
- ✓ HSE, Quality, & commitment is our top priorities
- ✓ Your vision is our mission and we will bring projects to life on time.