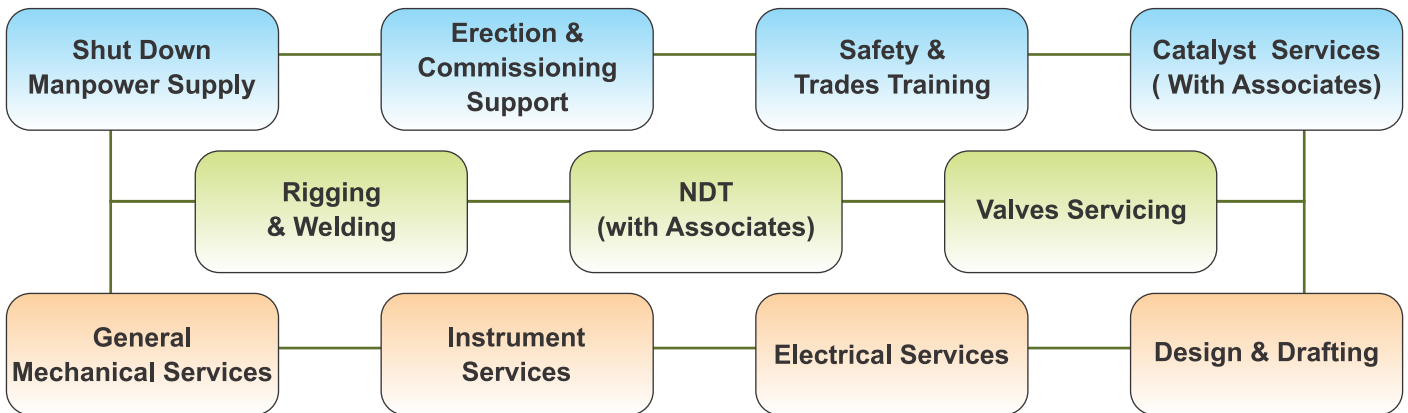


# SHUTDOWN AND SUPPORT SERVICES



ENMAS  
INDIA

## Inhouse Capabilities



## ENMAS Offers the following Shut Down Services to Clients on a regular basis



- Bearing Alignment Checks / Replacement
- Mechanical Seal Checking / Replacement
- Pressure Testing And Mechanical Clearance
- Alignment Using Laser/ Optical/ Reverse Dial
- Gear Box Testing/ Alignment And Replacement
- Rigging/ Blinding/ De-blinding / Torqueing
- Heat Exchanger Maintenance
- Column / Tanks Internals

- Covering All Types Of Valves
- Servicing And Testing
- Lapping, Gland Replacement
- Pressure Testing/ Calibration

## Regular and shut down maintenance of all types of Rotating equipment

- Regular Maintenance, Overhaul
- Rotor balancing
- Bearing inspection, replacement
- Skid equipment overhaul, repair and restoration
- Gear box repair and overhaul
- Alignment
- Fans & Blowers
- Pumps – Centrifugal, reciprocating, screw type
  - Regular Maintenance, Overhaul
  - Impellor repairs
  - Shaft repair
  - Seals, bearing changing
  - Alignment – laser and Manual

## Gas Turbine Inspection, regular maintenance & Overhaul

### Steam Turbine – Regular Maintenance and Overhaul

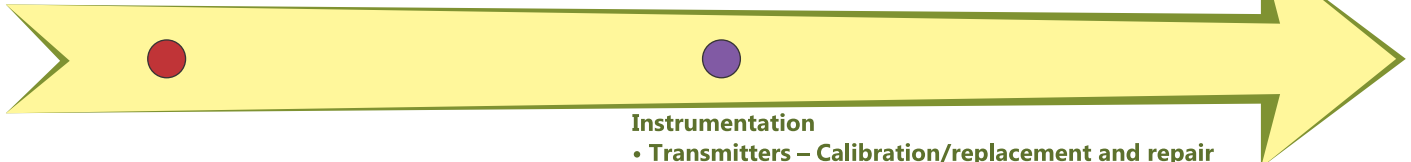
- Full inspection services (visual, dimensional, NDT)
- Rotor disassembly & re assembly
- Rotor & stator re-blading
- Rotor balancing (low speed dynamic)



- Seal repair & replacement
- Dimensional restoration journals & steel areas
- HVOF & cold coatings (corrosion protection & anti fouling)
- Overhauling of Rotor & Casing

#### **Electrical**

- **HV/LV Switch board & Bus section – Testing/ Meggar/Inspection**
- **SF6 & Vacuum Circuit Breaker – Testing/inspection of auxiliaries/ replacement**
- **Transformers – Inspection and Testing**
- **LV/HV motors – Winding checks/overhaul**
- **Resistance Measurements**
- **Cable laying, Terminations, isolation and De-isolation**



#### **Instrumentation**

- **Transmitters – Calibration/replacement and repair**
- **Control Valves – Testing/Repair/Calibration**
- **Field Instrumentation – Calibration, removal & replacement**
- **Instrument cable laying, terminations, loop checking and ferruling**

### **Commissioning Support**

- Review and comment on Operation & Maintenance Manuals provided by OEMs.
- Development, fine-tuning and implementation of Computerized Operation & Maintenance Management systems.
- Review of documents such as plant systems description, spare parts list & recommendations for maintenance practices etc. as provided by the OEMs/ Consultants.
- Prepare and finalize Standing Instructions & Procedures as necessary for day to day management of the plant
- Review Operating Procedures.
- Associate with the EPC/ Plant Suppliers during pre-commissioning, commissioning, start-up & testing of the plant.

### **GROUP ASSOCIATES**

#### **Global Associates**

##### **EMDAD SERVICES LLC, Abu Dhabi, UAE**

Shut down services and Short Term services for Oil & Gas and Petrochemical Industries

##### **Construction Development Company, Doha, Qatar**

Shut Down Services provider in Qatar

#### **Domestic Associates**

##### **Turbo Engineering Services, Hyderabad**

Specialized in Turbine and rotary equipment's overhauling, repair & reconditioning, Spares manufacturing, condition monitoring, trouble shooting, Erection & Commissioning, AMC, installation, service R&M and Reengineering

##### **Hi-Tec Valves, Chennai**

Servicing and Refurbishment of all types of Industrial Valves