

INTEGRITY MANAGEMENT AND CONSULTANCY SERVICES (IMACS)

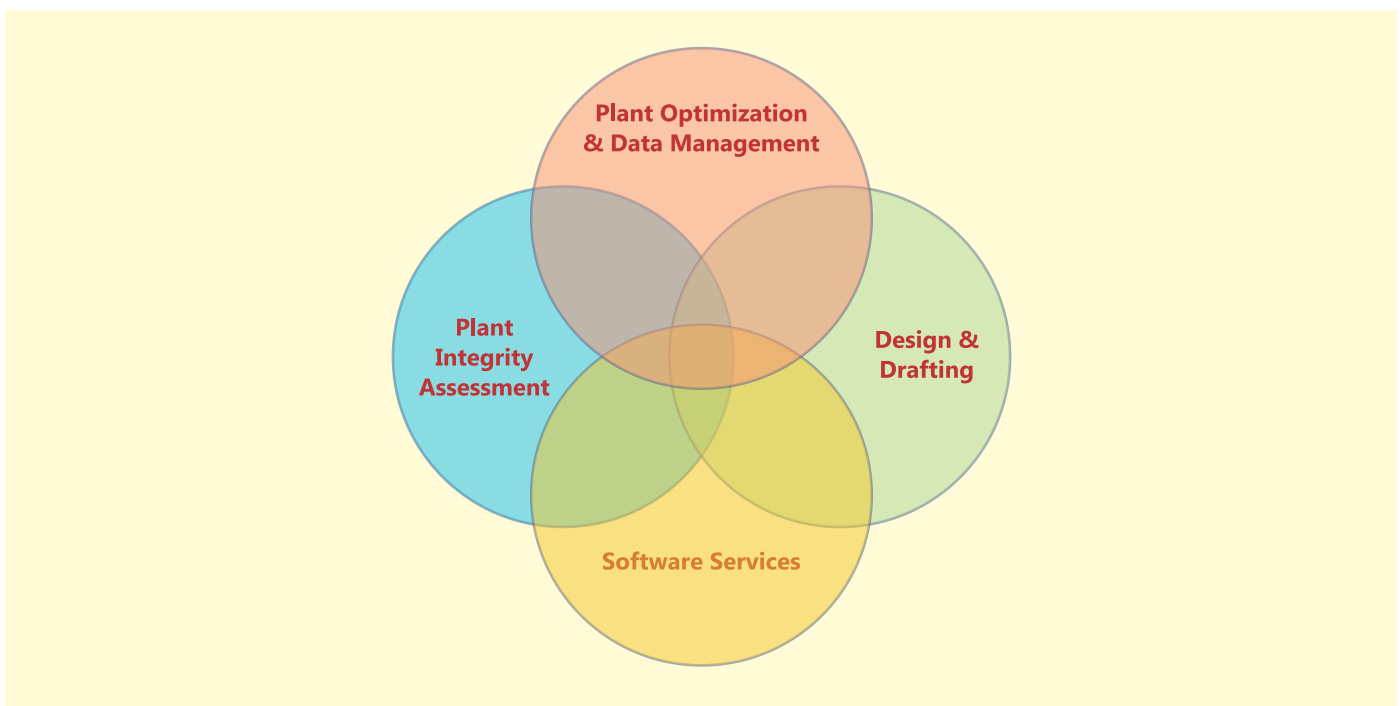


ENMAS
INDIA

ENMAS Integrity Management and Consultancy Services (**IMACS**), focusing on offering advanced Maintenance & Materials optimization services.

The company serves a host of industrial segments with an emphasis on its clients achieving high quality 360 Degree Asset Management benefits.

ENMAS is in a position to provide excellent services by pooling their cross functional expertise available within the group and associates to support all the facets of the Asset management process.



A. Integrity Management and Consultancy Services Offerings

- Maintenance & Materials Master Data
- Maintenance & Materials Optimization
- Maintenance Procedures

a) Maintenance & Materials Master data and Optimization

Data Generation

- MTBF & MTTR based on actual plant data and standard sources
- Maintenance Methods and practices
- Current Maintenance procedures and methodologies
- Asset register and specifications
- Spares list, Life Cycle spare parts

b) Optimization Studies

Reliability Centred Maintenance (RCM), Classical & back fit

- Failure Mode and Effect Analysis (FMEA), FMECA
- Functional & Equipment Criticality Analysis (FCA & ECA)
- Maintenance Procedures and optimal maintenance intervals
- Safety Critical Elements

Risk Based Inspection (RBI) – Limited scope

- Historical data capture
- Population of measurement points & corrosion data
- Generation Corrosion loops
- Risk assessment using Risk Matrix

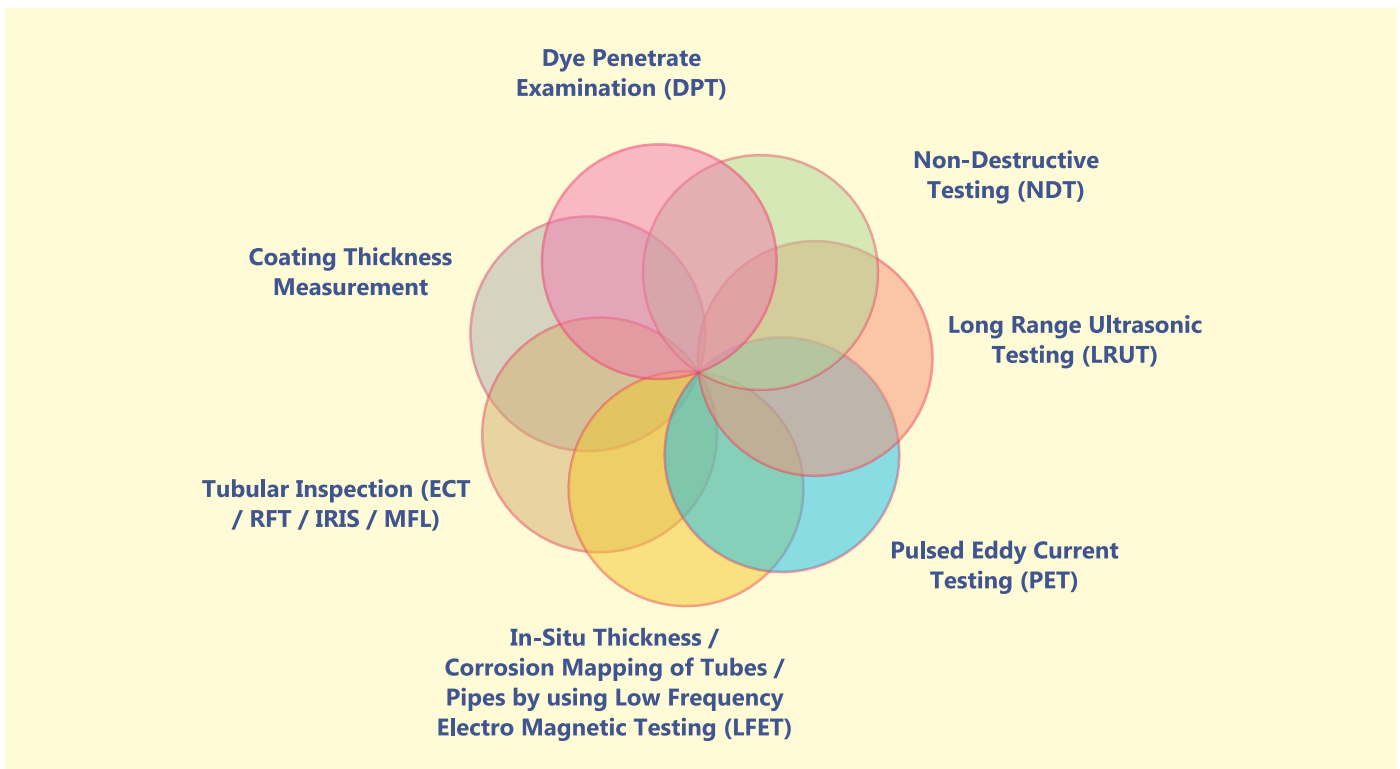
Risk Spare Analysis (RSA)

- Identification of special tools requirements
- Preventive and predictive maintenance schedule development

c) Software Exposure

- RCM Turbo
- RCM++
- PP SIMTECH (RBI)
- Strategic Corporation (SOS) for RSA
- Shell Proprietary Software

B. Integrity Service





- Cutting Plans & BOQs
- Marking, Punching, Welding and Cutting
- Welding compliance to ASME-3G,6G and structural welding
- Certified Personnel
- Turning / Boring / Milling / Shaping

- NDT ASNT level II - Radiography, UT, MPT, DPT
- Vessel Inspection and report generation
- Quality checks and clearance
- Condition Monitoring and Inspection Services

- PPEs
- PTW
- Hole watch
- Compliance to Work Permits and JSAs
- Hazard identification and safe work practices

C. Credentials

- RCM Study -Report and Analysis of BARKA 1,2,3 & SALALAH GAS SUPPLY STATION of Oman Gas Company Sultanate of Oman
- MARMUL/ FAHUD/ SAIH RAWL -- RCM & ECA for Booster Gas Compressor with Gas Turbine as Prime Mover 2 running and one stand by for PDO Oman
- SALALAH GAS SUPPLY STATION (GSS)-- RCM & ECA for gas supply station-Oman

Data Management for QSTec Polysilicon plant-Qatar

- Equipment technical data preparation in Predefined SAP template
- Development of Equipment Master (Equipment functional location, hierarchy& technical objects)
- Creation of function location hierarchy
- Bill of materials preparation
- Spare part data preparation for any ERP/CMMS
- Maintenance Data Preparation

Maintenance Procedures and Manuals preparation for QSTec Polysilicon plant-Qatar

- Mechanical Maintenance Procedures-150 Nos
- Electrical Maintenance Procedures-110 Nos
- Instrument Maintenance Procedure-90 Nos.



D. Group Associates

GLOBAL ASSOCIATES

- Hofincons & Co LLC. Muscat, Oman
Asset Management Services provider in Oman and Saudi Arabia
- Construction Development Company, Doha, Qatar
Asset Management Services provider in Qatar

DOMESTIC ASSOCIATES

- BETZ (AWS, ASNT Partners), Chennai
BETZ Engineering and Technology is a pioneer in Testing, Inspection and Certification (TIC), delivering high quality services to help clients meet the growing challenges of quality and safety.