

# Scope of Services



MEESA Engineering GmbH is an independent Engineering Office, which is certified according to ISO 9001:2015 and has area of expertise in

- **Mechanical Engineering**
- **Electrical Engineering**
- **Material Engineering and Welding Technologies.**

## Mechanical Engineering

- Feasibility studies and Concept development
- Plant – and General Layout planning
- Prototype– and Component development
- Design and Stress Analyses (Pressure Vessel, Heat Exchanger, Crane, ...)
- Detail Engineering and Detail Design
- Production monitoring and inspections, ongoing quality controls (desk / field)

## Material Engineering

- Analysis of damage cases
- Consulting regarding the Selection of materials
- Preparation of specifications, Procedures and expertise reports
- Innovative technical material actions
- Optimization of production process
- Material developments
- Production monitoring and inspections, ongoing quality controls (desk / field)

## Project management

- Tendering of Projects
- Budget– and cost planning
- Controlling and Project management
- Document management incl. Preparation of documentation (Data Books)
- Preparation of all specific project documents
- CE marking
- Acceptance of projects and verification of the correct project execution

## Electrical Engineering

- Planning and design of Instrumentation and control units
- Layout and Design of drive and control technology
- Preparation of Technical specifications
- Function diagrams and capture designs
- Verification of Designs of sub suppliers
- Preparation of assembly and installation instruction
- Electrotechnical inspections and production monitoring (desk / field)

## Welding Technology

- Consulting and training regarding
  - the design of the welding joint
  - the selection of the welding process and material
  - the optimization of the heat treatment
- Preparation or Control of the Technical welding documents acc. to national and international standards
- Support in the Handling of Welding Procedure Qualification and Production samples
- Supervision of welding (desk /field)

## Divisions

- Chemical– and petrochemical industry
- Plant– and apparatus construction
- Steel factory and metallurgical industry
- Mechanical Engineering and special purpose machinery

## Standards

- International– and European standards (ISO, EN, RCC-M, ...)
- American standards (ASME, ANSI, NUREG, ...)
- German and National standards (DIN, AD 2000, KTA, ÖNORM)

**Tools:** Catia, Solid Works, Solid Edge, Inventor, AutoCad, PV Elite, MathCad, EPlan, Sistema