

# Quality Management System

#### **Three Essential Themes**

# Focus on clients and project delivery

Whatever our role within the organization, each one of us ultimately work toward:

- •Delivering value to the company's clients.
- •Building upon and maintaining the company's reputation.
- •Helping to secure the company's future.

# Importance of employee responsibility and experience

- •Employees deserve respect, a "civil" and "ethical" workplace, and opportunities to grow and contribute to the overall success of the company.
- •We also have responsibilities and accountabilities related to this success.

# Quality-related expectations

- •Deliver the product clients want, safely, on schedule and on budget meeting their requirements and expectations.
- Understand and meet the needs of internal customers.
- Strive for continual improvement.

# **Project Quality Definitions**

#### **Quality Management**

Coordinated quality policy, quality objectives, quality planning, quality assurance, quality control, and quality improvement activities sufficient to instruct organizations on how to apply the knowledge, skills, tools, and techniques necessary to meet project requirements.

#### **Quality Plan**

The Project Quality plan describes the applicable technical practices, client requirements, and documentation needed to ensure deliverables meet client requirements.

# **Project Quality Definitions**

#### **Quality Assurance**

Application of planned, systematic, quality activities that ensure the project will employ all the processes needed to meet requirements; and the evaluation of overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards.

#### **Quality Control**

The process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

# **Project Quality Definitions**

#### Non-conformance

A deficiency in characteristic, documentation, or procedure that renders the quality of an item unacceptable or indeterminate.

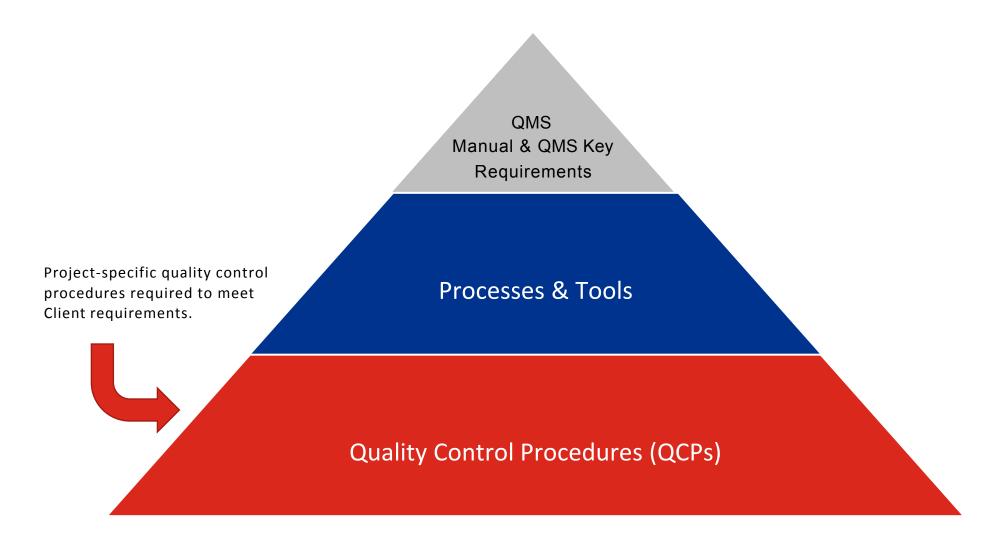
#### **Corrective / Preventive Action (CAPA)**

Changes made to bring expected future performance of the project in line with the plan.

#### **Continual Improvement**

The process used to proactively identify areas where processes or performance can be improved.

# **Project Quality Management Model**



# **Three Critical Project Quality Processes**

#### **Quality Planning**

Identifying which specifications, processes and systematic, quality activities quality control procedures are relevant to the project.

#### Inputs:

- Project Scope;
- Client Specifications;
- Client Drawings.

#### **Outputs:**

- Project Quality Plan;
- Welding Procedures;
- Weld Maps;
- Acceptance Criteria.

#### **Quality Assurance**

Application of planned, that ensure the project will employ all processes needed to meet requirements.

#### Inputs:

- Project Quality Plan;
- Quality Metrics;
- Processes and Procedures;
- Project Performance.

#### **Outputs:**

- Corrective/Preventive
- **Actions:**
- Project Requirements Met.

#### **Quality Control**

Monitoring Specific project results to determine whether they comply with relevant quality standards and identifying ways to eliminate unsatisfying results.

#### **Inputs:**

- Project Quality Plan;
- Quality Metrics;
- Project Deliverables.

#### **Outputs:**

- Project Performance;
- Validated Project

Deliverables;

 Recommended Corrective actions.

# **Project Quality Toolkit**

- Project Quality Plan (PQP) Template;
- Project Team Alignment;
- Internal Quality Process and Project Audits;
- Corrective and Preventive Actions (CAPA system);
- Lessons Learned (part of CAPA system);
- Client Feedback;
- Quality Metrics;
- Continuous Improvement;
- Root Cause Analysis.

### **Project and Process Audits**

- Process / Procedure Owners audited for compliance;
- Process / Procedure Owners audited for performance;
- Projects audited for Compliance with project criteria.

# **Project Quality Metrics**

Metrics are collected for the following activities

- Quality Control checks;
- Client issued NCRs, Surveillance Findings, Audit Findings;
- Corrective / Preventative Actions (CAPAS);
- Client Feedback Surveys;
- Project Audits.

# **Project Quality Management**

#### QA

- •Lessons Learned
- •Corrective / Preventive Action
- •Management Review
- •Continuous Improvement

# Act

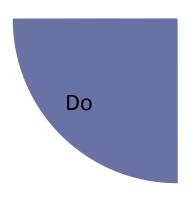


#### QA

- •Identify Requirements
- •Develop / Modify Quality Control Procedures to meet requirements as required

#### QA

- •Monitor & Control project deliverables
- Project Audits
- •Supplier Surveillance
- Fabrication Quality





#### QA

- •Implement processes
- Project Delivery execution