AUSTRALIA WORKSHOP

QUALITY PLAN

for

Various Clients

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Rev	Date	Description	Prepared by	Checked by	Approved by
01	01/02/2019		NZ	SH	SF

PROJECT DESCRIPTION

Fabrication process at Australia Workshop

The scope of works includes: to supply, fabricate, sandblast and paint structural steel to the client Requirement.

Plan approved by:_____ Date:_____
(Workshop Manager)

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1 INTRODUCTION

- **Overview**

  Australia Workshop Quality Plan describing how Steelfitz intends to manage the quality issues on the ***Australia Workshop***.

  This Plan is developed to provide adequate guidelines for all parties involved to carry the Works specified in the Contract in a planned and controlled manner that satisfies contractual and Company requirements. This Quality Plan also provides a system for managing, monitoring and recording of the performance of the quality system.

Quality Representative is responsible to ensure all planned quality assurance and control activities are implemented and completed by the relevant Workshop team members.

- **Quality Scope**

The System for managing quality on this Workshop is part of the Steelfitz Quality Management System. The Workshop Management System interfaces closely with the other functional systems on the Workshop and runs as a single integrated system.

The effect of this integrated approach is that there are many functions of management with impact on quality that are covered in other and more appropriate Workshop Plan and not duplicated in this Plan (e.g., for procurement activities, it is more appropriate to document in the Workshop Commercial Plan).

As such it is important to understand that this Workshop Quality Plan is one of the suite of of quality management on the Workshop and the requirements of ISO 9001:2008.

- ## QUALITY TEAM

The Quality Team on this Project is set-up as shown in the overall organisation structure for the Project. Only key positions are indicated. In general, the Quality Representative is responsible for quality management of the Project.

The positions may change throughout the life of the Workshop based on situation and work requirements as determined by the Workshop Manager. Such changes are reflected in a detailed organisation chart which is produced and updated monthly for inclusion into the Monthly Project Progress Reports.

3 PROJECT CONSTRAINTS AND RISKS

3.1 Project Constraints

Constraints	Controls
Prevailing attitude & culture of subcontractors/ suppliers towards quality.	• Robust inspection and testing regime. • Extend awareness and education programmes to subcontractors/suppliers.
Limited coverage of QA Engineers due to multi project sites.	• Section Mgrs to be responsible for quality in their own Packages. • Implement every 3 month audits and monthly ITP verifications on all Packages.
Heavy reliance on Construction Team to conduct day-to-day inspections & testing.	• Robust inspection and testing regime. • Continuous awareness & education

	programme to Construction team. • Implement monthly audits and weekly ITP verifications on all Packages
Interfaces with Client site representatives	• Identify on ITP & implement

3.2 Project Risks

Risks related to Quality management of this project have been identified in the Project Risk Identification matrices. Controls to manage the identified risks are documented in various sections in this and other related Project Plans and System documents. These are referenced in the Project Risk Identification matrices.

The Project Risk Identification matrices are restricted documents and for internal use only. Copies are held by the Workshop Manager and department managers. No copies are to be issued to any external parties without prior permission from the Workshop Manager.

These matrices are reviewed and updated by the Workshop Manager monthly in conjunction with the relevant Manager and included in the Monthly Project Progress Report.

4 QUALITY MANAGEMENT STRATEGY

4.1 Quality Planning

The Project Management System is developed specifically to meet the Client's expectations, based on the requirements of the Contract. Such requirements also include identification and analysis of risks and constraints.

Quality Planning focus on:

- Identified constraints and risks
- Quality objectives and targets
- Resources required
- Competency and training needs
- Material controls
- Inspection and verification requirements
- Performance assessment of the system
- Continual improvement

The result of this quality planning is documented in this Workshop Quality Plan.

4.2 Objectives and Targets

The Project Quality Team adopts the following for this Project:

OBJECTIVES	Targets / Measures
1. Focus on customer Satisfaction.	1.1 Customer survey conducted twice a year, 100%
	1.2 Customer feedback closed out on time, 100%
	1.3 Satisfaction Score, ≥ 4

2. Ensure Quality Management systems are consistently implemented across the Business	2.1 Audit Score / Compliance to L1, and L2 Quality Audit, 90% & 85%
	2.2 Audit Findings closed out on time for L1 and L2 Quality Audit, 100% & 90%
	2.3 Audit Score / Compliance to Purchasing Requirement in L2 Audit, 95%
	2.4 Audit Score / Compliance to Documentation Requirement in L2 Audit, 95%
	2.5 Number of CPAR from L1 Audit findings >5
	2.6 Compliance to Completion Procedure, 100%
3. Improve Quality Management System Performance	3.1 Number of OFI raised and reviewed >15
	3.2 Number of OFI implemented >15
4. Provide Quality Management System Training	4.1 New hired On-boarding QMS on time, 100% 4.2 Supervisor / Superintendent pass QMS Essential Course and Process Improvement Course, 100% 4.3 Build Level 1 audit team, add new member for auditor, 100%
5. Ensure that our Quality Management System is accordance to ISO 9001:2008	5.1 Number of Major findings / non conformity, 0
6. Ensure all staff understand about Code of Ethics and Business Conduct	6.1 Socialization Code of Ethics and Business Conduct monthly (conducted at management meeting), 100%

Progress of the above targets and measures are reported monthly in the Quality section of the Monthly Project Reports.

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- **Resources**

4.3.1 Responsibility and Authority

The responsibility and authority assigned to each member of the Workshop Quality Team by their respective superior is documented in their Position Descriptions

The Quality Representative is the Quality Management Representative for the Project as defined in ***clause 5.5.2 ISO 9001:2008***.

The Workshop Quality is responsible to assign tasks to each member of the Project Quality Team and the limits of the area to be covered by each member. These may change from time to time as decided by the Project Quality Representative as the Project progress. These assignments are reviewed and handed out to the team by the Project Quality Representative during the monthly meetings (see ***4.3.2*** below).

4.3.2 Reporting and Meetings

All Project Quality Engineers submit weekly reports to the Project Quality Representative. The format of these weekly is determined by the Project Quality Representative based o the data required to enable him to analyse

the performance of the quality system on the field and to compile his report for inclusion into the Monthly Project Report.

The format and minimum information required for the Quality section of the Monthly Project Report is provided by the Company Management Systems Manager. However, the Project Quality Representative may include additional information as he sees fit or required by the Client. This report is submitted to the Project Manager with a copy to the Company Management Systems Manager.

The Quality Representative calls for meetings at least once a month with his team as a forum to discuss problems encountered/anticipated and to disseminate critical information. Minutes are kept of the monthly meetings.

- **Facilities**

The Workshop Manager in conjunction with the Quality Representative ensures the Quality Team are provided with adequate facilities to perform their assigned tasks properly. Such facilities include the temporary site facilities mentioned in ***Section 4.2 Workshop Plan***.

Where provision of such facilities is not possible or impractical, the Quality Representative out-sources the required services (e.g., laboratory) in conjunction with the Workshop Commercial Manager (Subcontracts/ Procurement). This is done according to the procedures mentioned in the ***Workshop Commercial Plan*****.**

- **Monitoring and Measuring Equipment**

The Quality Representative identifies all monitoring and measuring equipment required by the Project Quality Engineers for verifying conformity of the Works to specifications and arranges for them to be procured.

These equipment do not include those mentioned in *4.4.7 Workshop Plan* and similarly controlled according to STF Procedure ***STF-OPR-PR-006 Inspection, Measuring and Testing Equipment*** by the Quality Representative.

4.3.5 Transportation and Communication

Adequate vehicles are provided for the Quality Team to travel within the site. Such vehicles are drawn from the vehicle pool set-up by the Workshop Manager and dedicated to the Quality Team.

Radios are provided to the Project Quality Team so that they can be contacted at all times during working works.

The control of the vehicles and radios are detailed in the Administrative Project Instructions.

4.3.6 Resources Monitoring

Should at any time during the project, the Project Quality Representative consider resources inadequate for the work to be done, the perceived inadequacy is discussed with the Workshop Manager to determine a solution.

4.4 Competency and Training

In addition to the formal performance appraisal system and subsequent training needs identification, the Workshop Quality Representative also assess on-the-job the competency of his team members. The Quality Representative determines the type of training required and arranges for the training to conducted. Such training can be in the form of external, internal or on-the-job courses.

As minimum, the following types of training must be completed.

Topics	**Type of training (as a minimum)**
Project Management System	Induction
Usage of Inspection & Test Plans	Briefing
Welding Certification	External course
Cutting & Grinding	Briefing/Toolbox meeting
Packing	Briefing/Toolbox meeting
Sandblast & Painting	Briefing/Toolbox meeting
Awareness of ISO 9001:2008 requirements	Internal/External course
Writing procedures	Internal/External course
Internal Quality Auditing	Internal/External course
Lead Auditor (optional)	External course (IRCA & RABQSA-approved)

The first 6 training topics listed above are also extended to the subcontractors responsible for the various trades identified. The Project Quality Representative in conjunction with the Project Manager ensures the subcontractors attend these trainings.

4.5 Material Control

The ordering, receiving, handling, storage, issuing and wastage control of material are covered in *4.4.2 Workshop Plan*.

The following deals with the matter of material quality.

4.5.1 Pre-award Assessment

Prior to awarding of a supply agreement for high volume material as per the ***Workshop Commercial Plan***, potential suppliers are short-listed. The Workshop Commercial Manager (Subcontracts/Procurement) arranges with the Workshop Quality Representative to conduct visits to the potential suppliers' production premises to assess their capability and resources to meet the required standard of quality.

The Workshop Quality Representative assigns the appropriate person to conduct the assessment. Where special technical skill is required, the Workshop Quality Representative coordinates with the Workshop Manager to identify the person.

Reports are completed of the visits and forwarded to the Workshop Commercial Manager (Subcontracts/Procurement) for his evaluation.

4.5.2 Material Certification

All major material suppliers are required in their Agreements to provide conformance certificates or test reports confirming compliance of the material traceable to the batches supplied. Proof of calibration for equipment used in the certification testing is also to be included.

These certificates or/and test reports are forwarded to the Workshop Quality Representative for review. Any corrective and preventive action arising from the review is handled according to STF Procedure *Corrective and Preventive Action*.

4.5.3 Visits to Supplier Premises

Periodic visits to the suppliers' production premises are planned and implemented by the Workshop Quality Representative. The purpose of these off-site visits to verify the checks and testing are being carried out correctly the supplier and to provide continuous confidence in the certification documents supplied.

The frequency of these visits corresponds with the criticality of the material quality at certain work stages and standard of quality shown by the supplier as assessed by the Workshop Quality Representative.

- **Inspection and Verification**

In order to deliver the project successfully meeting the Client's requirements, it is necessary to map out the process or task and identify the inspection or test point, who is responsible, and the record to demonstrate compliance.

4.6.1 Inspection and Test Plans

Inspection and Test Plans serve as a checklist specifying at what point of the process certain inspection or/and test would be required, the frequency and the person responsible for the inspection and testing, acceptance criteria and type of records required.

All these planned inspection and testing are derived by correlating requirements from the Fabrication Programme, Contract specifications, Work Method Statements, construction/shop drawings and industrial standards.

Inspection and Test Plans (ITP) are developed and controlled according to STF Procedure *System Documents Procedures*. It is required that all

Supervisors responsible for the activities on the ITP to sign on the ITP to indicate having read and understood the requirements.

Appointed subcontractors are requested to submit their own ITP or QA Plan for review by the Project Manager, relevant Section Manager and the Project Quality Representative. Where the subcontractor is unable to produce ITP or where submitted ITP does not meet the requirements, the Project Quality Representative decides whether to assists the subcontractor in amending the ITP or issued STF-produced ITP for their use.

Any interfaces with the CLIENT's representatives with regard to joint and/or acceptance inspection must be included in the ITP to ensure these are carried out. HOLD points are included into the ITP only when it is required contractually. Additional hold points requested by the CLIENT must be agreed with the Project Manager.

A briefing is held whenever an ITP is issued for all engineers, supervisors and subcontractors involved to explain the usage of the ITP as well as to highlight any issues identified. This briefing is called by the Workshop Quality Representative and conducted by the originator of the ITP or other nominated person by the Workshop Quality Representative.

4.6.2 ITP Verifications

To ensure a most robust inspection and testing regime, verification are carried out to ensure the personnel responsible to carried out the planned inspection and testing has done so effectively and in timely manner.

The Workshop Quality Representative is responsible to identify the area and activity, plan, and assign personnel to carry out the verification activity. The frequency depends on the criticality of the activity, but generally, this is carried at least once a month for all Packages.

Personnel who are nominated to undertake the verification must be one removed from the process activity or area. The verifying personnel are also rotated with regards to the assigned activity or area.

Reports are completed and submitted to the Project Quality Representative for review and coordinate any further action required.

4.6.3 Test Laboratory

While the Workshop Quality Representative is overall responsible for laboratory testing, the Laboratory Manager is responsible for planning and carrying out the lab testing as required in the Contract Specifications and according to the relevant ITP.

All test results from the lab testing are submitted to the Workshop Quality Representative who then forwards them to the relevant Manager for any action necessary.

The Laboratory Manager is also responsible to ensure all equipment or external laboratories used for the testing are calibrated and adequate. Verification visits are also carried out on any appointed external labs on regular basis to provide continuous confidence in the reports submitted by these labs.

4.6.4 Non Conformance Control

Non-conformance are identified, reported and rectified according to STF Procedure *Control of Non Conforming Product*.

Raising Non Conformance Reports (NCR) is not solely by the Workshop Quality Team. The Workshop Team is also responsible to raise NCR according to *4.4.6 Workshop Plan*.

The Workshop Quality Representative is responsible to perform the analysis of non-conformances *5* and include the analysis into his Monthly Project Report.

4.7 Performance Measurement

4.7.1 Auditing

The implementation and effectiveness of the Workshop Management System is verified by use of audits.

The Workshop Quality Representative prepares and maintains an Audit Schedule to define the extent and type of audits during the project. The schedule is reviewed and updated when necessary to ensure it remains current and so that new subcontractors and processes are properly monitored. The schedule takes into consideration audits of the project scheduled by the Management System Manager.

Audits are planned, carried, reported and subsequent improvement actions are addressed accordingly to STF Procedure *Quality Audits*. The Workshop Quality Representative nominates the auditor(s) for those audits he scheduled for the Workshop.

Upon completion of the audit reports, the Workshop Quality Representative distributes copies to:

- Project Administration Manager
- Workshop Manager
- Corporate QA Manager

Non-compliances identified during audits are handled in accordance with STF Procedure *Non Conformity* . For the purposes of that procedure the nominated manager who has authority to determine the disposition of non-compliance is the Project Director.

4.7.2 Data Analyses

Various data are collected and analysed as indicators of the performance of the quality management system. Such data includes the following.

- Objectives and targets for the Workshop Quality Dept (see *4.2* above)
- Audit findings (see STF Procedure *Internal Audits*)
- Non Conformance (see STF Procedure *Non Conformance Report*)
- Material wastage (see STF Procedure *Material Wastage*)
- Quality scores of the subcontractors (See STF Procedure *Internal Audits)*

The Workshop Quality Representative collates the data collected from the various sources as set out in the Procedures and coordinates any action arising from these analyses. These are reported in the Monthly Project Report.

The above list does not include technical data for measuring quality level of finished work; like concrete cube results, soil compaction results, material testing, etc. These are tracked and compiled separately as according to the relevant ITPs.

4.8 Improvement

4.8.1 Management Reviews

As the Project runs on an integrated system, review of the quality system is carried out as part of the review of the overall Workshop Management System
Other reviews are also carried in the monthly quality meeting with the Workshop Quality Team.

4.8.2 Corrective and Preventive Actions

STF Procedure *Corrective and Preventive Action* provides the instructions for how actions arising from the reviews are to be dispositioned.

The Workshop Quality Representative is responsible to coordinate with the relevant manager(s) to ensure the action are closed and documented. Such documented corrective and preventive actions are included into the *End of Project Report* for the benefit of future projects.