

TECHNICAL DESCRIPTION

Client ref. no. 014-003-008

PG no. PG201802088

Scope

- 1 off 1185020_C - FGI SMALL CABINET FRAME
- 1 off 1185355_B - FGI SUNSHADE MABROUK

Revision 02

CHANGE HISTORY

Revision 01

- Issued to client for acceptance

DESCRIPTION

This document describes the fabrication, inspection & testing and surface treatment of **SCOPE**

REFERENCES

- Purchase order no. 029756-1
- Requirements & Certificates for Frame and Sunshade Fabrication *dated 13.03.2018*

AVAILABLE CERTIFICATIONS

- ISO 9001:2008 Quality management system - requirements
- ISO 3834-2:2006 Quality requirements for welding - comprehensive

CODES & STANDARDS

- ASME V - BPVC Section V - Nondestructive Examination
- ASME VIII - BPVC Section VIII - Rules for Construction of Pressure Vessels Division 1
- ASTM A380 - Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems
- NS-EN ISO 13920 - General tolerances for welded constructions dimensions for lengths and angles, shape and position
- ISO 15609-1 - Specification and qualification of welding procedures for metallic materials - Welding procedure specification
- ISO 15614-1 - Specification and qualification of welding procedures for metallic materials - Welding procedure test
- ISO 9606-1 - Qualification testing of welders - Fusion welding
- ISO 9712 - Non-destructive testing - Qualification and certification of NDT personnel

SCOPE OF SUPPLY

The scope of supply will include raw material procurement, fabrication, inspection & testing, surface treatment, packaging for shipment & documentation of **SCOPE**

DEVIATIONS FROM REQUIREMENTS

Welding procedures are qualified to ISO 15614-1, not ASME Section IX. The recently published ISO 15614-1:2017 states the following:

Introduction
...
Two levels of welding procedure tests are given in order to permit application to a wide range of welded fabrication. They are designated by levels 1 and 2. Level 1 is based on requirements of ASME Section IX and level 2 is based on the previous issues of this document.
...
1 Scope
...
Two levels of welding procedure tests are given in order to permit application to a wide range of welded fabrication. They are designated by levels 1 and 2. In level 2, the extent of testing is greater and the ranges of qualification are more restrictive than in level 1.
Procedure tests carried out to level 2 automatically qualify for level 1 requirements, but not vice-versa.

MATERIAL SELECTION

All materials needs to be from European or American mills only, no Asian materials allowed

- ANGLE 40 x 40 x 4 EN 10088-3 / 1.4404
- ANGLE 50 x 50 x 5 EN 10088-3 / 1.4404
- ANGLE 80 x 80 x 8 EN 10088-3 / 1.4404
- ANGLE 100 x 100 x 10 EN 10088-3 / 1.4404
- ROUND \varnothing 40 EN 10088-3 / 1.4404
- SQUARE 50 x 50 EN 10088-3 / 1.4404
- PLATE 03 EN 10088-2 / 1.4404

FABRICATION

Fabrication to be acc. to NORSOK M-101

TOLERANCES

Tolerances to be acc. to NS-EN ISO 13920-B/F

INSPECTION & TESTING

Welding inspection to be acc. to ISO 3834-2

NDT extent to be acc. to client specification

- 100% Visual testing acc. to ASME V Art. 9
- 100% Penetrant testing acc. to ASME V Art. 6
- 100% Positive Material Identification

NDT acceptance criteria shall be according to ASME VIII Div. 1 (PT) & ASME B31.3 (VT)

- PT acc. to ASME VIII, Appendix 6, Section 4
- VT acc. to ASME B31.3, Table 341.3.2, Normal and Category M Fluid Service

PMI acceptance criteria shall be 316L

SURFACE TREATMENT

Pickling to be acc. to ASTM A380

DOCUMENTATION

- ITP - Inspection & Test Plan [1]
- WPS - Welding Procedure Specifications [1]
- WPQR - Welding Procedure Qualification Records [1]
- WQR - Welders Qualification Record [1]
- NDT procedures [1]
- NDT reports
- PMI procedure [1]
- PMI report
- Welding traceability index
- Material traceability index
- Material certificates acc. EN 10204 3.1
- Welding consumable certificates acc. EN 10204 3.1

[1]: To be approved before fabrication