Quality requirements for noise emitting equipment
Acknowledgements

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Foreword

This specification was prepared under a Joint Industry Programme 33 (JIP33) "Standardization of Equipment Specifications for Procurement” organized by the International Oil & Gas Producers Association (IOGP) with the support from the World Economic Forum (WEF). Companies from the IOGP membership participated in developing this specification to leverage and improve industry level standardization for projects globally in the oil and gas sector. The work has developed a minimized set of supplementary requirements for procurement, with life cycle cost in mind, resulting in a common and jointly approved specification, building on recognized industry and/or international standards.

Recent trends in oil and gas projects have demonstrated substantial budget and schedule overruns. The Oil and Gas Community within the World Economic Forum (WEF) has implemented a Capital Project Complexity (CPC) initiative which seeks to drive a structural reduction in upstream project costs with a focus on industry-wide, non-competitive collaboration and standardization. The CPC vision is to standardize specifications for global procurement for equipment and packages, facilitating improved standardization of major projects across the globe. JIP33 provides the oil and gas sector with the opportunity to move from internally to externally focused standardisation initiatives and provide step change benefits in the sector's capital projects performance.

This specification has been developed in consultation with a broad user and supplier base to realize benefits from standardization and achieve significant project and schedule cost reductions.

The JIP33 work groups performed their activities in accordance with IOGP's Competition Law Guidelines (November 2014).
Introduction

The purpose of this quality requirements specification (QRS) is to define quality management requirements for noise emitting equipment in accordance with ISO 15664 Acoustics — Noise control design procedures for open plant for application in the petroleum and natural gas industries.

The QRS includes definition of a conformity assessment system (CAS) which specifies standardized customer interventions against quality management activities at four different levels. The applicable CAS level is specified by the customer in the equipment datasheet or purchase order.

This QRS shall be used in conjunction with the supplementary requirements specification (IOGP S-717), the information requirements specification (IOGP S-717L) and the noise datasheet (IOGP S-717D) which together comprise the full set of specification documents. The introduction section in the supplementary requirements specification provides further information on the purpose of each of these documents and the order of precedence for their use.
1 Scope

To specify quality management requirements for noise emitting equipment in accordance with IOGP S-717 Supplementary Specification to ISO 15664 Acoustics — Noise control design procedures for open plant for application in the petroleum and natural gas industries including:

a) supplier quality management system requirements;
b) purchaser conformity assessment (surveillance and inspection) activities;
c) traceability requirements;
d) evidence of conformance.

2 Normative References

ISO 9001:2015 Quality management systems - Requirements
API Specification Q1 Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry
ISO 15664 Acoustics Noise control design procedures for open plant
IOGP S-717 Supplementary Specification to ISO 15664 Acoustics — Noise control design procedures for open plant

3 Terms and Definitions

3.1 Conformity assessment

Demonstration that requirements relating to a product, process, system, person or body are fulfilled.

NOTE 1 Conformity assessment (or assessment) includes but is not limited to review, inspection, verification and validation activities.

NOTE 2 Assessment activities may be undertaken at a supplier or sub-supplier’s premises, virtually by video link, desktop sharing, etc. or by review of information formally submitted for acceptance or for information.

3.2 Conformity assessment system (CAS)

Systems providing different levels of assessment of the supplier’s control activities by the purchaser (second party) or independent body (third party) based on evaluation of the supplier’s capability to conform to the product or service specification and obligatory requirements.

NOTE CAS A reflects the highest risk and associated extent of verification. CAS D is the lowest.

3.3 Conformity assessment - hold point

The point in the chain of activities beyond which an activity shall not proceed without the approval of the purchaser or purchaser's representative.

3.4 Conformity assessment - witness point

The point in the chain of activities that the supplier shall notify the purchaser or purchaser's representative before proceeding. The operation or process may proceed without witness if the purchaser does not attend after the agreed notice period.
3.5 Conformity assessment - surveillance

Observation, monitoring or review by the purchaser or purchaser's representative of an activity, operation, process, product or associated information.

3.6 Conformity assessment - review

Review of the supplier's information to verify conformance to requirements.

NOTE Information review requirements are managed on a surveillance basis and as such do not impose schedule constraints, unless specified as hold points in Annex A or as conditions specified in the associated IRS.

3.7 Critical

That deemed by the organization, product specification, or purchaser as mandatory, indispensable or essential, needed for a stated purpose or task, and requiring specific action.

4 Symbols and abbreviations

CAS  Conformity assessment system
IRS  Information requirements specification
QRS  Quality requirements specification (this document)

5 Quality requirements

5.1 Quality management system

The supplier shall demonstrate that the quality management arrangements established for the supply of products and services conform to ISO 9001, API Specification Q1 or an equivalent quality management system standard agreed with the purchaser.

5.2 Conformance assessment

5.2.1

Quality and inspection plans and test plans developed as outputs to operational planning and control for the products and services shall define the specific controls to be implemented by the supplier and when applicable, their sub-suppliers, to ensure conformance with the specified requirements.

5.2.2

Controls shall address both internally and externally sourced processes products and services.

5.2.3

Quality plans and inspection plans and test plans shall include provision for the purchaser conformity assessment system (CAS) as specified in the data sheet IOGP S-717D; see Annex A.

5.2.4

Supplier performance in meeting the requirements will be routinely assessed during execution of the scope and where appropriate, corrective action requested and conformity assessment activities increased or decreased consistent with criticality and risk.
NOTE 1 For industrial well proven solutions CAS level D is specified unless risk assessment indicates that a more stringent CAS level is required.

NOTE 2 Irrespective of conformity assessment requirements defined by the purchaser, either, by reference to standard or specification requirements or in the scope, the supplier remains responsible for operational planning and control and demonstration of the conformity of products and services with the requirements (see ISO 9001:2015, 8.1 and 8.2).

6 Traceability

Material certification and traceability shall be maintained in accordance with Annex B.

7 Control of nonconforming products and services

Nonconformance with specified requirements identified by or to supplier prior to or during the delivery of the products and services shall be corrected such that the specified requirements are satisfied or the purchaser’s acceptance of the nonconformance agreed in accordance with purchase order conditions. See ISO 9001:2015, 8.2.3, 8.2.4, 8.5.6 and 8.7.

8 Evidence (records)

Plans, procedures, methods and resultant records shall be provided in accordance with the associated IRS.
Annex A
(normative)

Purchaser conformity assessment requirements

This annex defines four conformity assessment systems (CAS) or levels of customer assessment. The supplier shall provide for the specified CAS when developing quality plans and inspection and test plans in accordance with Clause 5.

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<thead>
<tr>
<th>PURCHASER ASSESSMENT ACTIVITIES</th>
<th>CAS</th>
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<tbody>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>Production and service provision</td>
<td>B</td>
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<tr>
<td>W H R -</td>
<td>D</td>
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H is hold point, W is witness point, S is surveillance and R is review. Note: Definitions for these terms are provided in Section 3 of this document.