

Quality of Goods Audit Guide - Supplier

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1. OBJECTIVE

This guide has the objective to inform PETROBRAS' suppliers what will be verified during the Quality of Goods Audit.

2. QUALITY OF GOODS AUDIT

The Quality of Goods Audit is the audit of the processes involved in the manufacture of the product and the good of the contractual object, carried out by PETROBRAS' technical team, after the conclusion of a contractual instrument for the acquisition of a good and, preferably, performed during the manufacturing phase. The aim is to evaluate the supplier in relation to its degree of compliance with the General Quality Requirement, the Complementary Quality Requirement and the contractual technical standards and specifications.

Audits can be carried out on site and / or remotely. The audits at the Supplier's facilities will be informed by PETROBRAS, within the period provided in the General Quality Requirement. The definition of the scope of the audit and the dates for carrying it out will be informed, depending on the availability of PETROBRAS, considering logistics factors for the displacement of the team, priority of evaluation and the manufacturing schedule of the good.

The topics to be verified are presented in the following sections, as well as the weight of each one to compose the Final Score (*IQF* - Supplier Quality Indicator).

The duration, timing and frequency of the Goods Audit is defined by PETROBRAS and depends of some factors, such as: size of the company's facilities, items to be evaluated, location of the Head Office and factory, if they are at the same address or not, historic of non-conformities, value and complexity of the good, or others.

At the end of the audit, a report will be issued, within the period informed in the General Quality Requirement, which will be provide to the Supplier containing all objective evidence, eventual non-conformities, opportunities for improvement, observations, score for each section and Final Score (*IQF*), when applicable.

NOTE 1: Each audit check has its respective Degree of Risk. The scores by Section and the *IQF* will be calculated from the number of checks implemented (Compliance) by the total number of applicable checks (Compliance and Non-Compliance).

NOTE 2: The weight of each section is defined below:

SECTIONS	Degree of Risk
SECTION I - GENERAL AND COMPLEMENTARY REQUIREMENTS	3
ITEM I - OBLIGATION OR RELEASE TO CONTRACT AIB	-
ITEM II - PRE-INSPECTION MEETING (PIM)	-
ITEM III - INSPECTION AND TESTING PLAN (ITP)	-
SECTION II - MANUFACTURING AND INSPECTION DOCUMENTATION	4
ITEM I – INCOMING INSPECTION	-
ITEM II - DIMENSIONAL CONTROL (INTERMEDIATE OR FINAL);	-
ITEM III - NON-DESTRUCTIVE TESTS	-
ITEM IV - WELDING	-
ITEM V - ASSEMBLY	-
ITEM VI - TESTS	-
ITEM VII - SPECIAL PROCESSES	-
ITEM VIII - PAINTING AND COATING	-

ITEM IX - PRESERVATION AND PACKAGING	-
SECTION III - MANUFACTURING AND INSPECTION EXECUTION	4
ITEM I - INCOMING INSPECTION	-
ITEM II - DIMENSIONAL CONTROL (INTERMEDIATE OR FINAL);	-
ITEM III - NON-DESTRUCTIVE TESTS	-
ITEM IV - WELDING	-
ITEM V - ASSEMBLY	-
ITEM VI - TESTS	-
ITEM VII - SPECIAL PROCESSES	-
ITEM VIII - PAINTING AND COATING	-
ITEM IX - PRESERVATION AND PACKAGING	-
SECTION IV - QUALITY MANAGEMENT SYSTEM	3
ITEM I - MONITORING AND MEASUREMENT FEATURES (CALIBRATION)	-
ITEM II - EXTERNAL PROVIDERS	-
ITEM III - IDENTIFICATION AND TRACEABILITY	-
ITEM IV - TREATMENT OF NON-CONFORMITIES AND CORRECTIVE ACTION	-
SECTION V - QUALITY RECORDS AND MANUFACTURING INSPECTION	2
ITEM I - INCOMING INSPECTION	-
ITEM II - DIMENSIONAL CONTROL (INTERMEDIATE OR FINAL);	-
ITEM III - NON-DESTRUCTIVE TESTS	-
ITEM IV - WELDING	-
ITEM V - ASSEMBLY	-
ITEM VI - TESTS	-
ITEM VII - SPECIAL PROCESSES	-
ITEM VIII - PAINTING AND COATING	-
ITEM IX - PRESERVATION AND PACKAGING	-
ITEM X - MANUFACTURING INSPECTION PERFORMANCE AND RECORDS	-
ITEM XI - DATA BOOK COMPILATION	-
SECTION VI - REGISTRATION OF IMPROVEMENT OPPORTUNITIES OR OBSERVATIONS	-

NOTE 3: Section VI does not influence the final audit score (*IQF*), being used only for the “Record of Improvement Opportunities or Observations”.

NOTE 4: The records and documents are sampled by the auditor based on the complexity of the contractual requirements, complexity of the organization's processes, degree of change in technology, human factor and significant risks identified.

NOTE 5: *RIF* – Responsible for Manufacturing Inspection.

NOTE 6: The *IQF* will be provided only after checking all applicable sections during the audit and presented in the final report.

2.1 GENERAL AND COMPLEMENTARY REQUIREMENTS

Verify the certification of the Manufacturing Inspection Body (AIB). Verify that the supplier dispensed from hiring the Manufacturing Inspection Body meets the minimum established in the contractual documents

Verify that the systematic and the implementation of the Pre-Inspection Meeting (PIM) are in accordance with the contractual documents

Verify that the systematic and implementation of elaboration and approval of the Inspection and Test Plans for the material and / or critical equipment are in accordance with the contractual documents. Verify that inspectors involved in manufacturing, welding, dimensional control, non-destructive testing, painting and coating are certified according to contractual documents.

2.2 MANUFACTURING AND INSPECTION DOCUMENTATION

The documentation analysis considers the manufacturing processes divided as follows:

- a) INCOMING INSPECTION;
- b) DIMENSIONAL CONTROL (INTERMEDIATE OR FINAL);
- c) NON-DESTRUCTIVE TESTS;
- d) WELDING;
- e) ASSEMBLY;
- f) TESTS;
- g) SPECIAL PROCESSES;
- h) PAINTING AND COATING;
- i) PRESERVATION AND PACKAGING.

Verify that the procedures referring to the processes of lines "a" to "i" or any other additional activity within the manufacturing inspection, required by contract or established by the supplier, are in accordance with the contractual documents.

Verify that the system established in the contractual documents before the start of the inspection has been implemented.

In "g", the most specific manufacturing processes are included. Examples of Special Processes are: extrusion, forming, casting.

2.3 MANUFACTURING AND INSPECTION EXECUTION

The analysis of the manufacturing execution considers the processes described in item 2.2 of this document.

Verify the effective implementation of the execution system for the processes of lines "a" to "i" and whether active professionals are certified according to contractual requirements.

2.4 QUALITY MANAGEMENT SYSTEM

Verify that the instrument calibration system complies with the contract documents.

Verify the system implemented for the selection and qualification of sub-suppliers and their effective implementation, ensuring that critical items are adequate to supply and meet the requirements of ISO 9001: 2015. Verify that the contractual requirements are considered for the determination of the selection and qualification criteria of the sub-suppliers.

Verify the identification and traceability system to ensure the conformity of your products, as provided for in ISO 9001: 2015.

Verify the system for controlling non-compliant outputs and corrective actions as provided for in ISO 9001: 2015.

2.5 QUALITY RECORDS AND MANUFACTURING INSPECTION

Verify that the records of the processes in lines "a" to "i" (as described in item 2.2 of this document) are in accordance with the contractual documents. Also verify that such quality documents were issued, verified and approved as required in the contractual documents in a timely manner.

Verify that the inspection reports / records are issued by the Responsible for Manufacturing Inspection (RIF), with the content and deadlines as established in the contract documents.

Verify that the manufacturing data books include all documents provided for in the contractual requirements.

2.6 REGISTRATION OF IMPROVEMENT OPPORTUNITIES OR OBSERVATIONS

This section was inserted only to record the Opportunities for Improvement and Observations, however an action plan must be presented to deal with these findings.