

Qualification of Distributors of Metallic Materials for Use in the Petroleum and Natural Gas Industries

API STANDARD 20J
SECOND EDITION, APRIL 2022



Special Notes

API publications necessarily address problems of a general nature. With respect to particular circumstances, local, state, and federal laws and regulations should be reviewed. The use of API publications is voluntary. In some cases, third parties or authorities having jurisdiction may choose to incorporate API standards by reference and may mandate compliance.

Neither API nor any of API's employees, subcontractors, consultants, committees, or other assignees make any warranty or representation, either express or implied, with respect to the accuracy, completeness, or usefulness of the information contained herein, or assume any liability or responsibility for any use, or the results of such use, of any information or process disclosed in this publication. Neither API nor any of API's employees, subcontractors, consultants, or other assignees represent that use of this publication would not infringe upon privately owned rights.

API publications may be used by anyone desiring to do so. Every effort has been made by the Institute to assure the accuracy and reliability of the data contained in them; however, the Institute makes no representation, warranty, or guarantee in connection with this publication and hereby expressly disclaims any liability or responsibility for loss or damage resulting from its use or for the violation of any authorities having jurisdiction with which this publication may conflict.

API publications are published to facilitate the broad availability of proven, sound engineering and operating practices. These publications are not intended to obviate the need for applying sound engineering judgment regarding when and where these publications should be used. The formulation and publication of API publications is not intended in any way to inhibit anyone from using any other practices.

Any manufacturer marking equipment or materials in conformance with the marking requirements of an API standard is solely responsible for complying with all the applicable requirements of that standard. API does not represent, warrant, or guarantee that such products do in fact conform to the applicable API standard.

All rights reserved. No part of this work may be reproduced, translated, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. Contact the Publisher, API Publishing Services, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001-5571.

Foreword

Nothing contained in any API publication is to be construed as granting any right, by implication or otherwise, for the manufacture, sale, or use of any method, apparatus, or product covered by letters patent. Neither should anything contained in the publication be construed as insuring anyone against liability for infringement of letters patent.

The verbal forms used to express the provisions in this document are as follows.

Shall: As used in a standard, “shall” denotes a minimum requirement to conform to the standard.

Should: As used in a standard, “should” denotes a recommendation or that which is advised but not required to conform to the standard.

May: As used in a standard, “may” denotes a course of action permissible within the limits of a standard.

Can: As used in a standard, “can” denotes a statement of possibility or capability.

This document was produced under API standardization procedures that ensure appropriate notification and participation in the developmental process and is designated as an API standard. Questions concerning the interpretation of the content of this publication or comments and questions concerning the procedures under which this publication was developed should be directed in writing to the Director of Standards, American Petroleum Institute, 200 Massachusetts Avenue, Suite 1100, Washington, DC 20001. Requests for permission to reproduce or translate all or any part of the material published herein should also be addressed to the director.

Generally, API standards are reviewed and revised, reaffirmed, or withdrawn at least every five years. A one-time extension of up to two years may be added to this review cycle. Status of the publication can be ascertained from the API Standards Department, telephone (202) 682-8000. A catalog of API publications and materials is published annually by API, 200 Massachusetts Avenue, Suite 1100, Washington, DC 20001.

Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Avenue, Suite 1100, Washington, DC 20001, standards@api.org.

Contents

	Page
1 Scope.....	1
1.1 Purpose	1
1.2 Applicability	1
2 Normative References	1
3 Terms, Definitions, and Acronyms	2
3.1 Terms and Definitions	2
3.2 Acronyms	3
4 Distributor Qualification.....	3
4.1 Facilities and Equipment.....	3
4.2 Activities Performed by the Distributor.....	4
4.3 Quality Management System (QMS)	4
5 Responsibilities and Duties.....	4
6 Personnel Training and Competency Requirements	4
7 Distributor Process Control.....	5
7.1 General	5
7.2 Review of Order Requirements	5
7.3 Control of Mills	5
7.4 Control of Sub-Distributors and Service Suppliers	7
7.5 Distributor Performed Processes.....	8
7.6 Sampling for Material Testing.....	8
7.7 Inspection Requirements	9
7.8 Identification and Traceability	9
7.9 Nonconforming Product	9
7.10 Customer-supplied Property	10
7.11 Preservation of the Product	10
7.12 Measuring and Testing Equipment.....	10
8 Management of Change (MOC)	10
9 Records and Document Control	11
Annex A (informative) Mill Remote Technical Assessment.....	12
Bibliography.....	23

Tables

1 Process Activities Performed by the Distributor.....	4
2 Service Supplier Industry Standards and Distributor Performed Processes	8

Qualification of Distributors of Metallic Materials for Use in the Petroleum and Natural Gas Industries

1 Scope

1.1 Purpose

This standard specifies requirements for the qualification of distributors of metallic materials used in the petroleum and natural gas industries.

1.2 Applicability

This standard is applicable to distributors of metallic bar, plate, and tubular products where API product standards require such services or are otherwise specified as a requirement for conformance. For organizations that manufacture and distribute metallic material, this standard only addresses the distribution portion of their processes.

NOTE This standard does not limit the responsibility of any manufacturer of commercial products using metallic materials and manufactured to an API standard from its responsibility for conformance with all applicable requirements of that API standard.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Specification Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*

API Standard 20D, *Nondestructive Examination Services for Equipment Used in the Petroleum and Natural Gas Industry*

API Standard 20H, *Heat Treatment Services – Batch Type for Equipment used in the Petroleum and Natural Gas Industry*

API Standard 20M, *Qualification of Suppliers of Machining Services for Use in the Petroleum and Natural Gas Industry*

API Standard 20N, *Heat Treatment Services – Continuous Line for Equipment Used in the Petroleum and Natural Gas Industry*

AMS 2750,¹ *Pyrometry*

ISO² /IEC 17020,³ *Requirements for the operation of various types of bodies performing inspection*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

¹ SAE International, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, www.sae.org.

² International Organization for Standardization, BIBC II, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, www.iso.org.

³ International Electrotechnical Commission, 3 rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland, www.iec.ch.

3 Terms, Definitions, and Acronyms

3.1 Terms and Definitions

3.1.1

acceptance criteria

Defined limits placed on characteristics of materials, products, or services.

3.1.2

calibration

The process of comparison to a standard of known accuracy, comparison of results against testing, measuring, monitoring, and detection equipment acceptance criteria, and, if applicable, making needed adjustment(s).

3.1.3

chemical analysis

Determination of the chemical composition of material.

3.1.4

conformance

Meeting specified requirements.

3.1.5

distributor

An organization that maintains and provides metallic bar, plate, and tubular products for resale.

3.1.6

heat treatment

A specified, timed sequence of controlled heating and cooling of materials for the purpose of changing physical or mechanical properties.

3.1.7

metallic material

Any product included in the scope of this standard.

3.1.8

mill

A factory in which metals are hot worked, cold worked, or melted and cast into standard shapes suitable for secondary fabrication into commercial product.

3.1.9

outsourced

A function or process that is performed by an external supplier on behalf of the distributor.

3.1.10

processes that require validation

Processes where resulting output cannot be verified by subsequent monitoring or measurement.

3.1.11

receiving verification

The process of ensuring the product received meets purchase requirements.

3.1.12

remote technical assessment

A technical assessment of capabilities performed using a method other than an on-site assessment.

NOTE This includes but is not limited to use of information and communication technologies to gather information, interview auditee(s), etc., and may include use of a checklist or a survey.

3.1.13**service supplier**

An organization that performs activities on behalf of the distributor.

3.1.14**sub-distributor**

A secondary distributor that is a supplier to the primary distributor.

3.1.15**traceability**

The ability to verify the history and delivery location of an item by means of documented record identification.

3.1.16**technical authority**

A competent and technically qualified person or organization with evidence to demonstrate the expertise, skills, and experience required to perform the assessment(s).

NOTE Technical authority may also be considered a subject-matter expert (SME).

3.1.17**validation**

Confirmation, through the provision of objective evidence generated from testing, that specific requirements have been fulfilled.

3.1.18**verification**

Confirmation, through the provision of objective evidence, that specific requirements have been fulfilled.

NOTE The objective evidence needed for verification can be the result of an inspection or of other forms of determination, such as performing alternative calculations or reviewing documents.

3.2 Acronyms

FBH	flat-bottom hole
MOC	management of change
MTR	material test report
NDE	nondestructive examination
QMS	quality management system

4 Distributor Qualification**4.1 Facilities and Equipment**

To conform to this standard, the distributor shall have the following capabilities, at a minimum:

- equipment to receive and ship material to customers;
- a facility to store and maintain physical inventory;
- appropriate handling and lifting equipment;
- inspection and test equipment.

4.2 Activities Performed by the Distributor

The distributor shall maintain the capability to perform the activities listed in Table 1. When these activities are not performed at the distributor's facility and are not part of a purchased service, they shall be performed by the distributor's personnel.

Table 1—Process Activities Performed by the Distributor

Item	Process Activity
1	Receiving verification
2	Traceability
3	Marking
4	Final inspection

4.3 Quality Management System (QMS)

The distributor shall establish, document, implement, and maintain at all times a QMS conforming to API Specification Q1. In addition, the distributor shall be responsible for conforming to all of the applicable requirements of this standard.

5 Responsibilities and Duties

The distributor shall ensure that:

- all functions are performed in accordance with specified standards and applicable quality control criteria;
- operations are only performed for which the distributor is adequately equipped and has personnel who are qualified against defined competencies;
- sub-tier suppliers of products or services are controlled;
- testing, measurement, and monitoring equipment is calibrated, and personnel are qualified in accordance with the requirements of the distributor's written procedure;
- the facility and equipment are properly maintained;
- any discrepancy or limitation imposed on the requested material and associated operations by such factors as size, traceability, form, shape, material, or procedure are communicated to the purchaser;
- any irregularity or deficiency noted in the purchaser's procurement documents are communicated to the purchaser; and
- formal reports of all materials supplied are promptly provided to the purchaser.

6 Personnel Training and Competency Requirements

6.1 Personnel shall be competent based on the appropriate education, training, skills, and experience needed to meet product and customer requirements. A written procedure shall define personnel competency and identify training and qualification requirements. The organization shall identify:

- roles that require a knowledge of metallic material processing and testing, and the level of knowledge;
- methods and frequency required for personnel training qualifications;