Version
June 2026

English version

Approval requirement 15

Steel pipes for welding or threading

creating trust *driving progress*

Preface Kiwa

This approval requirement (AR) is approved by the Board of Experts (BoE) GASTEC QA, in which relevant parties in the field of gas related products are represented. This Board of Experts supervises the certification activities and where necessary require the GASTEC QA approval requirement to be revised. All references to Board of Experts in this GASTEC QA approval requirement pertain to the above-mentioned Board of Experts.

This AR will be used by Kiwa Nederland BV in conjunction with the GASTEC QA general requirements and the KIWA regulations for certification.

In this AR is established which requirements a product and the requestor/ certificate holder of the GASTEC QA product certificate should meet and the matter to which Kiwa evaluates this.

Kiwa has a method which is established in the certification procedure for the execution of:

- The investigation for provisioning and maintaining a GASTEC QA product certificate based on this AR.
- The periodic evaluations of the certified products for the purpose of maintaining a provided GASTEC QA product certificate based on this AR.

Approved by the Board of Experts: Month date, year

Accepted by Kiwa Nederland B.V.: Month date, year

Kiwa Nederland B.V.
Sir Winston Churchilllaan 273
2288 EA Rijswijk
P.O. Box 70

Telephone: +31 (0)88 998 44 00
nl.kiwa.info@kiwa.com
www.kiwa.com

Content

1. Introduction

1.1. General

This GASTEC QA approval requirement (AR) in combination with the GASTEC QA general requirements, is applied by Kiwa as the basis for the issuing and maintaining the GASTEC QA product certificate for steel pipes for welding or threading.

With this product certificate, the certificate holder can demonstrate to his or her customers that an expert independent organization monitors the production process of the certificate holder, the quality of the product and the related quality assurance.

Next to the requirements established in this AR and the general requirements, Kiwa has additional requirements in the sense of general procedural requirements for certification, as laid down in the internal certification procedures.

This GASTEC QA approval requirement replaces the version of July 2024.

List of changes:

- The approval requirement is fully textually reviewed.
- Extension of the scope with pipeline transportation systems.
- Extension of the appliclable diameter range with larger sizes of pipes (DN 50 up to and including DN 400) according to ISO 3183.
- Specification of MOP.
- Update of list of referenced documents.

The product requirements have changed for the application of larger sizes of pipes, for the pipes according to EN 10255 the requirements have not changed.

1.2. Scope

This approval requirement specifies the requirements for steel pipes for welding and treading or pipeline transportation systems. The steel pipes are used for the transport of gaseous fuels in accordance with the 2nd and 3rd family as per EN 437. These pipes shall be manufactured by a seamless or longitudinally welded process provided with sockets, threaded ends or with plain ends. The MOP of the steel pipes is 16 bar.

The specific funtional recommendations for the application of steel pipes is described in the NEN 7244 series.

2. Definitions

In this approval requirement, the following definitions are applicable:

Board of Experts (BoE): The Board of Experts GASTEC QA.

Maximum operating pressure (MOP): Maximum pressure that a component is capable of withstanding continuously in service under normal operating conditions.

See also the definitions mentioned in the GASTEC QA general requirements.

3. Material and product requirements

This chapter contains the material and product requirements that the raw materials, materials and products used shall meet.

3.1. General

Steel pipes for welding and treading shall comply with EN 10255 with the addition in paragraph 3.2.

Steel pipes for pipeline transportation systems shall comply with ISO 3183.

3.2. Wall thickness and threaded ends

The pipes shall have a wall thickness as specified in EN 10255, table 2: heavy series H or medium series M and three types of designated thickness L.

The pipes shall have threaded ends in accordance with EN 10226-1 and the maximum allowed thread size is 2".

4. Marking

4.1. Marking for steel pipes for threading and welding

The pipes shall be marked in accordance with EN 10255, article 10 and Annex ZA.3 with the following addition:

- GASTEC QA, GASTEC QA logo or punchmark

4.2. Marking for steel pipes for pipeline transportation systems

The pipes shall be marked in accordance with ISO 3183, article 4.4 with the following addition:

- GASTEC QA, GASTEC QA logo or punchmark

5. Quality system requirements

The requirements for the quality system are described in the GASTEC QA general requirements. An important part of this are the requirements for drawing up a risk analysis (e.g., an FMEA) of the product design and the production process in accordance with chapters 3.1.1.1 and 3.1.2.1. This risk analysis shall be available for inspection by Kiwa.

6. Summary of evaluation

This chapter contains a summary of the evaluation to be carried out during:

- The initial product assessment;
- The periodic product verification;

6.1. Evaluation matrix

Description of requirement	Clause EN 10255	Investigation within the scope of		
		Initial product assessment	Product verification	
			Inspection	Frequency
Manufacturing process	6	X		
Delivery conditions	7	X		
Chemical composition	8.2	X	X	1x/ year
Appearance	8.3	X	X	1x/ year
Dimensions, masses, and tolerances	8.4	X	X	1x/ year
Leak tightness	8.5	X		
Dangerous substances	8.6	X		
Reaction to fire	8.7	X		
Tensile strength and elongation test	9.3	X	X	1x/year
Bending test	9.4	X		
Flattening test (deformability)	9.5	X		
Marking	10	X	X	1x/ year
Additional GASTEC QA requirements:				
General	3.1	X	X	1x/ year
Wall thickness and threaded ends	3.2	X	X	1x/ year
Marking	4.1	X	X	1x/ year

Description of requirement	Clause ISO 3183	Investigation within the scope of		
		Initial product assessment	Product verification	
			Inspection	Frequency
General requirements	4.1	X		
PSL 2 pipe for European onshore natural gas transmission pipelines	4.2	X		
Information to be supplied by the purchaser	4.3	X	X	1x/ year
Marking	4.4	X	X	1x/ year
PSL 2 pipe ordered for European onshore natural gas transmission pipelines	Annex A.1	X		
Additional information to be supplied by the purchaser	Annex A.2	X	X	1x/ year
Manufacturing	Annex A.3	X	X	1x/ year
Acceptance criteria	Annex A.4	X		
Tolerances for diameter, wall thickness, length and staightness	Annex A.5	X		
Tolerances for the weld seam	Annex A.6	X	X	1x/ year
Inspection	Annex A.7	X	X	1x/ year
Pipe markings	Annex A.8	X	X	1 x per jaar
Steel designations	Annex A.9	X	X	1 x per jaar
Additional GASTEC QA requirements:				
Marking	4.2	X	X	1x/ year

Product verification tests will be assessed by the auditor at the manufacturer's location. The product verification tests depend on the options as specified in the EN 10255 and ISO 3183.

7. List of referenced documents and source

7.1. Standards/ normative documents

Number	Title	Version *
EN 10255	Non-alloy steel tubes suitable for welding and threading – technical delivery conditions.	2004 + A1: 2007
EN 10226-1	Pipe threads where pressure tight joints are male on the treads – Part 1 taper external threads and parallel internal threads.	2004
ISO 3183	Petroleum and natural gas industries – Steel pipe for pipeline transportation systems	2019

*) If no date of issuance is specified in this column, the current version of the document applies.

7.2. Source of informative documents

Number	Title	Version *
EN 437	Test gases- test pressure – appliance categories	2021
NEN 1078	Supply for gas with an operating pressure up to and including 500 mbar - Performance requirements - new estate.	2024
NEN 7224 series	Gas supply systems – Pipelines for maximum operating pressure up to and including 16 bar	
General requirements GASTEC QA		

*) If no date of issuance is specified in this column, the current version of the document applies.