



Gas Transmission Pipelines



TECHNICAL STANDARDS FOR GAS TRANSMISSION PIPELINES

Reference to CEN/CENELEC Technical Committees

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INTRODUCTION

MARCOGAZ actively collaborates with standardisation bodies such as CEN, and our members have been deeply involved in the standardisation work for decades.

Essentially, standards reflect the state of the art in terms of safe and sustainable operational gas supply activities. The standardisation process fosters the continuous improvement of assets' integrity and interoperability while ensuring the continuity of supply to the customers in the best conditions. The introduction of new gases is a major step in the gas value chain and technical standards are crucial to support the gas industry's contribution to decarbonisation.

Based on its technical work and experience, MARCOGAZ developed a [summary of technical standards applicable to the gas industry's](#) activities to guide representatives and players in the sector. Given the large number of existing standards, MARCOGAZ selected the most relevant for the gas mid and downstream sector. This list is subject to periodic updates, based on the evolving nature of the standardisation processes and industry needs.

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Technical standards for gas

CEN / CENELEC Technical Committee			Title	CEN / CENELEC reference
CEN/CLC/JTC 6	Hydrogen in energy systems	WG1	Hydrogen in energy systems - vocabulary	prEN ISO 24078
CEN/TC 69	Industrial valves		Valves for natural gas transportation in pipelines - Performance requirements and tests	EN 14141
CEN/TC 219	Cathodic protection	WG1	General principles of cathodic protection of buried or immersed onshore metallic structures	EN 12954
CEN/TC 234	Gas infrastructure		Implementation Guide for functional standards prepared by CEN/TC 234 Gas infrastructure - Part 1: General	TR 13737-1
CEN/TC 234	Gas infrastructure		Gas infrastructure - Implementation Guide for Functional Standards prepared by CEN/TC 234 - Part 2: National Pages related to CEN/TC 234 standards	TR 13737-2
CEN/TC 234	Gas infrastructure	WG2	Gas infrastructure - Pressure testing, commissioning and decommissioning procedures - Functional requirements	EN 12327
CEN/TC 234	Gas infrastructure	WG3	Gas infrastructure - Safety Management System (SMS) for gas transmission infrastructure and Pipeline Integrity Management System (PIMS) for gas transmission pipelines - Functional requirements	EN 16348
CEN/TC 234	Gas infrastructure	WG3	Gas Infrastructure - Pipelines for maximum operating pressure over 16 bar - Functional requirements	prEN 1594 rev
CEN/TC 234	Gas infrastructure	WG3	Gas Infrastructure - Welding steel pipework - Functional requirements	FprEN 12732
CEN/TC 234	Gas infrastructure	WG6	Gas infrastructure - Gas pressure regulating stations for transmission and distribution - Functional requirements	EN 12186
CEN/TC 234	Gas infrastructure	WG6	Gas Infrastructure - CEN/TC 234 Pressure Definitions - Guideline Document	TR 16395
CEN/TC 234	Gas infrastructure	WG7	Gas Infrastructure - Compressor stations - Functional requirements	prEN 12583
CEN/TC 234	Gas infrastructure	WG11	Gas infrastructure - Quality of gas - Group H	EN 16726
CEN/TC 234	Gas infrastructure	WG12	Gas infrastructure - Safety Management System (SMS) and Pipeline Integrity Management System (PIMS) - Functional requirements	prEN 17649
CEN/TC 234	Gas infrastructure	WG14	Assessment of methane emissions for gas transmission and distribution systems [Scope currently being extended to Underground Gas Storages and LNG Regasification Terminals]	prCEN/TR XXX
CEN/TC 235	Gas pressure regulators and associated safety devices for use in gas transmission and distribution	WG1	Gas pressure regulators for inlet pressure up to 10 MPa (100 bar)	EN 334
CEN/TC 235	Gas pressure regulators and associated safety devices for use in gas transmission and distribution	WG1	Gas safety shut-off devices for inlet pressure up to 10 MPa (100 bar)	EN 14382
CEN/TC 238	Test gases, test pressures, appliance categories and gas appliance types		Natural gas - Standard reference conditions (ISO 13443:1996 including Corrigendum 1:1997)	EN ISO 13443
CEN/TC 238	Test gases, test pressures, appliance categories and gas appliance types		Natural gas - Vocabulary (ISO 14532:2014)	EN ISO 14532
CEN/TC 238	Test gases, test pressures, appliance categories and gas appliance types		Natural gas - Organic components used as odorants - Requirements and test methods	prEN ISO 13734 rev
CEN/TC 238	Test gases, test pressures, appliance categories and gas appliance types		Natural gas - Calculation of compression factor - Part 1: Introduction and guidelines (ISO 12213-1:2006)	EN ISO 12213-1
CEN/TC 264	Air quality		Stationary source emissions - Predictive Emission Monitoring Systems (PEMS) - Applicability, execution and quality assurance	TS 17198
CEN/TC 408	Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid		Natural gas and biomethane for use in transport and biomethane for injection in the natural gas network - Part 1: Specifications for biomethane for injection in the natural gas network	EN 16723-1

CLC/SC 9XC	Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)		Effects of electromagnetic interference on pipelines caused by high voltage a.c. electric traction systems and/or high voltage a.c. power supply systems	EN 50443
CLC/TC 31	Electrical apparatus for potentially explosive atmospheres		Explosive atmospheres – Part 0: Equipment – General requirements	EN 60079-0
CLC/TC 31	Electrical apparatus for potentially explosive atmospheres		Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres	EN IEC 60079-10
CLC/TC 31	Electrical apparatus for potentially explosive atmospheres		Explosive atmospheres - Part 14: Electrical installations design, selection and erection	EN IEC 60079-14
ISO Technical Committee		Title		ISO reference
ISO/TC193	Natural gas		Natural gas - Odorization	ISO/TR 16922