



IGEM Standards

August 2024



*Founded 1863
Royal Charter 1929
Patron: His Majesty the King*



ABOUT IGEM STANDARDS

Since the 1960s, IGEM has published technical Standards that are now recognised as trusted industry Standards, used to assist in compliance with national legislation and official approved codes of practice and guidance. IGEM Standards relate to aspects of the Pipelines Safety Regulations; Pressure Systems Safety Regulations; Gas Safety (Management) Regulations; Gas Safety (Installation and Use) Regulations; Dangerous Substances and Explosive Atmospheres Regulations; Reporting of Injuries, Diseases and Dangerous Occurrences Regulations; Building Regulations; Health and Safety at Work etc. Act; Management of Health and Safety at Work Regulations; Pressure Equipment Regulations, Electricity at Work Regulations and so on.

The Standards are drafted by expert Panels representing a cross-section of the relevant parts of the gas industry. Regulatory bodies such as HSE, Ofgem and Gas Safe Register contribute to the drafting process. The drafts are issued to the industry and other stakeholders for review and comment prior to publication and, thus, take into account the sometimes broad range of views on the content. The professional status of IGEM ensures its Standards reflect the best possible levels of safety, practice and quality within reasonable cost.

In general, IGEM Standards and guidance documents do not overlap the scope of British Standards (BS) but they do often mirror the scope of British European Standards (BS EN) adding much more detail in many cases. There is no intent to contradict other such standards, and it is IGEM's policy to ensure this does not occur.

IGEM's Standards and guidance documents are mostly available in hard copy. IGEM does also offer online access to the standards, the benefits of this service are:

- the Standards are always up to date
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ABOUT THIS LIST

The list uses the following terms:

Edition X Where an edition number is stated, the previous edition is superseded i.e. not current and is obsolete.

Set of Amendments The edition is issued with separate amendments to bring it up to date. These amendments are issued with every Standard purchased but, where this was purchased prior to issue of amendments, they are available for downloading for free from the IGEM website at www.igem.org.uk or by email to technical@igem.org.uk.

Reprint with Amendments The edition has been reprinted to contain amendments (and enhancements If applicable). Owners of the previous version of the same edition will have to insert amendments (see above) to bring that version up to date. It is not essential to insert enhancements.

Nth Refers to a re-print with enhancements. Previous impressions remain current.

IGEM STANDARDS

ITEM and EDITION	TITLE (COMMUNICATION NO.)	DATE	STANDARD 2024 PRICE £	MEMBER/IA 2024 PRICE £
HYDROGEN				
IGEM/H/1 with amendments June 2022 and June 2023	Reference Standard for low pressure hydrogen utilisation (1877) Download for free at www.igem.org.uk	2023	FREE	FREE
TRANSMISSION AND DISTRIBUTION				
IGEM/TD/1 Ed 6 with Amendments May 2024	Steel pipelines for high pressure gas transmission (1892)	2024	411	275.37
IGEM/TD/1 Ed 6 Supplement 2	High pressure Hydrogen pipelines (1849)	2021	116	77.72
IGEM/TD/1 Ed 5 Supp 1 Ed 2	Handling, and storage of steel pipe, bends and transport fittings (1825)	2018	105	70.35
IGEM/TD/2 Ed 2 with Amendments July 2015	Assessing the risks from high pressure Natural Gas pipelines (1779)	2015	179	119.93
IGEM/TD/3 Ed 5 with Amendments October 2015	Steel and PE pipelines for gas distribution (1780)	2015	272	182.24
IGEM/TD/3 Ed 5 Supplement 1	Repurposing of Natural Gas (NG) pipelines with MOP not exceeding 7 bar for NG/Hydrogen blends (1856)	2022	116	77.72
IGEM/TD/4 Ed 5	PE and steel gas services and service pipework (1867)	2023	273	182.91
IGEM/TD/12 Ed 3	Pipework stress analysis for gas industry plant (1834)	2021	226	151.42
IGEM/TD/13 Ed 3	Pressure regulating and exceeding 7 bar pipeline installations' (1872)	2023	353	236.51
IGEM/TD/13 Ed 3 Supplement 1	Pressure regulating installations for hydrogen at pressures exceeding 7 bar (1889)	2024	116	77.72
IGEM/TD/13 Ed 3 Supplement 2	Pressure regulating installations for hydrogen at pressures not exceeding 7 bar (1890)	2024	116	77.72
IGEM/TD/16 Ed 2	Biomethane injection (1833)	2019	146	97.82
IGEM/TD/17	Steel and PE pipelines for biogas distribution (1769)	2014	105	70.35
IGEM/TD/19	Reinforced thermoplastic pipelines for high pressure gas transmission (1812)	2019	138	92.46
IGEM/TD/21	Reference Standard for Hydrogen distribution for new steel and PE mains and services (1879)	2023	201	134.67
IGEM/TD/22	Reference Standard for repurposing Natural Gas distribution mains and services for Hydrogen (1884)	2023	146	97.85
IGEM/TD/23	Reference Standard Hydrogen pressure regulating installations not exceeding 7 bar (1885)	2024	353	236.51
IGEM/TD/101 Ed 3	Adoption of pipe systems by GT- management of UIP activities (1802)	2018	138	92.46
GAS MEASUREMENT				
IGEM/GM/4 Ed 3	Flowmetering practices. Inlet pressure exceeding 38 bar and not exceeding 100 bar (1815)	2019	261	174.87
IGEM/GM/5 Ed 4	Electronic gas meter volume conversion systems (1817)	2023	168	112.56
IGEM/GM/6 Ed 3	Non-domestic meter installations. Standard designs (1864)	2022	261	174.87
IGEM/GM/7A Ed 2	Electrical connections for gas metering equipment (1803)	2018	146	97.82
IGEM/GM/7B Ed 2	Hazardous area classification for gas metering equipment (1804)	2018	185	123.95
IGEM/GM/8 Part 1 Ed 2	Non-domestic meter installations: Flow rate exceeding 6 m ³ h ⁻¹ and inlet pressure not exceeding 38 bar Design (1795)	2016	261	174.87
IGEM/GM/8 Part 2 Ed 2	Locations, housings and compounds (1796)	2016	138	92.46
IGEM/GM/8 Part 3 Ed 2	Fabrication, installation, testing and commissioning (1797)	2016	168	112.56
IGEM/GM/8 Part 4 Ed 2	Operation and maintenance (1798)	2016	138	92.46
IGEM/GM/8 Part 5 Ed 2	Notices and labels (1799)	2016	138	92.46
IGEM/GM/PRS/1	Meter Installation fittings (1793)	2017	156	104.52
IGEM/GM/PRS/3 with amendments July 2022	Meter Regulators for gas flow rates not exceeding 6m ³ h ⁻¹ and inlet pressures not exceeding 75 mbar (1859)	2022	98	65.66

IGEM/GM/PRS/6	Meter connectors (1794)	2016	127	85.09
IGEM/GM/PRS/11	Purchasing specification for diaphragm gas meters (1853)	2024	112	74
IGEM/GM/PRS/28	Medium pressure single-stage regulators for gas flow rates not exceeding 6m ³ h ⁻¹ (1791)	2016	138	92.46
IGEM/GM/PRS/29	Medium pressure two-stage meter regulators for gas flow rates not exceeding 6m ³ h ⁻¹ (1790)	2016	138	92.46
IGEM/GM/PRS/33	Meter regulators of nominal diameter 32mm (1 1/4 inch) and not exceeding 150mm (6 inch) and for inlet pressures not exceeding 75 mbar (1792)	2016	98	65.66
IGEM/GM/PRS/40	Medium pressure meter installation kits for flow rates not exceeding 6 m ³ h ⁻¹ (1807)	2019	138	92.46
IGEM/GM/PRS/41	Low pressure meter installation kits (1808)	2019	138	92.46
IGEM/GM/PRS/50	Meter and converter serial numbering and model names (1811)	2019	98	65.66
UTILISATION				
IGE/UP/1 Ed 2 Reprint with Amendments March 2005	Strength testing, tightness testing and direct purging of industrial and commercial gas installations (1716)	2005	190	127.30
IGE/UP/1A Ed 2 Reprint with Amendments March 2005	Strength and tightness testing and direct purging of small low pressure industrial and commercial Natural Gas installations (1717)	2005	156	104.52
IGEM/UP/1B Ed 3 with Amendments October 2012	Tightness testing and direct purging of small Liquefied Petroleum Gas/Air, Natural Gas and Liquefied Petroleum Gas installations. (1759). Set of amendments issued 2012	2012	179	119.93
IGEM/UP/1C	Strength testing, tightness testing and direct purging of Natural Gas and LPG meter installations (1751)	2011	146	97.82
IGEM/UP/2 Ed 3	Installation pipework on industrial and commercial premises (1771)	2014	347	232.49
IGEM/UP/3 Ed 3	Gas fuelled spark ignition and dual fuel engines (1781)	2015	168	112.56
IGEM/UP/4 Ed 4	Commissioning of gas fired plant on industrial and commercial premises (1801)	2016	105	70.35
IGEM/UP/6 Ed 3	Application of compressors to Natural Gas fuel systems (1813)	2020	168	112.56
IGE/UP/7 Ed 2 with Amendments October 2008	Gas installations in timber framed and light steel framed buildings (1722). Set of amendments issued 2008. Download for free at www.igem.org.uk	2006	168	112.56
IGEM/UP/9 Ed 3	Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners (1863)	2022	168	112.56
IGEM/UP/10 Ed 4 with Amendments March 2016 and February 2017	Installation of flued gas appliances in industrial and commercial premises (1800)	2017	248	166.16
IGEM/UP/11 Ed 3	Gas installations for educational establishments (1821)	2018	146	97.82
IGEM/UP/11 Ed 3 Supplement 1	Operation and management of gas installations within educational establishments (1845)	2022	29	19.43
IGEM/UP/12 Ed 3	Application of burners and controls to gas fired process plant (1873)	2023	238	159.46
IGEM/UP/16 Ed 2 Amendments November 2023	Design for Natural Gas installations on industrial and commercial premises with respect to DSEAR (1882) The amendments may be Downloaded for free at www.igem.org.uk	2023	138	92.46
IGEM/UP/17 Edition 2	Shared chimney and flue systems for domestic gas appliances (1826)	2018	179	119.93
IGEM/UP/18	Gas installations for vehicle repair and body shops (1758)	2012	104	69.68
IGEM/UP/19 Edition 2	Design and application of interlock devices and associated systems used with gas appliance installations in commercial catering establishments (1865).	2022	146	97.82
IGEM/UP/19 Edition 2 Supplement 1	Catering equipment engineers guide to relevant sections of IGE/UP/19 (1876). Download for free at www.igem.org.uk	2024	28	18.76
IGEM/UP/20	CNG Fuelling Stations (1775)	2014	173	115.91
GAS LEGISLATION				
IGEM/GL/1 Ed 3	Planning of gas distribution systems of MOP not exceeding 16 bar (1847)	2021	146	97.82
IGEM/GL/2 Ed 3	Planning of transmission and storage systems operating at pressures exceeding 16 bar (1816)	2018	105	70.35
IGEM/GL/4 Ed 3	Gas system assets – safety management system (1820)	2018	146	97.82
IGEM/GL/5 Ed 3	Procedures for managing new works, modifications and repairs (1783)	2015	127	85.09

IGEM/GL/6 Ed 3	Safe Control of Operations for Gas Networks (1814)	2018	168	112.56
IGEM/GL/8 Ed 4	Reporting and investigation of gas related-incidents (1869)	2022	168	112.56
IGEM/GL/9 Ed 2	Guidance for large consumers in dealing with Natural Gas supply emergencies. (1806) Download at www.igem.org.uk	2018	FREE	FREE
GENERAL				
IGEM/G/0 Edition2	A standard for Igem standards (1842)	2022	FREE	FREE
IGEM/G/1 Edition 2	Defining the end of the Network, a meter installation and installation pipework (1765). Download for free at www.igem.org.uk	2013	146	97.82
IGEM/G/5 Edition 3 with amendments April 2023	Gas installations in multi-occupancy buildings (1874) Amendments are available to download for free at www.igem.org.uk	2023	231	154.77
IGEM/G/4 Edition 2	Definitions for the gas industry (1763)	2012	FREE	FREE
IGEM/G/6 Edition 2	Gas supplies to mobile dwellings (1862)	2024	138	92.46
IGEM/G/7	Risk assessment techniques (1787)	2016	196	131.32
IGEM/G/8	Handling, transport and storage of PE pipe and fittings (1749)	2010	138	92.46
IGEM/G/10	Non-return valves (1785)	2016	98	65.66
IGEM/G/11 Edition 2 with amendments July 2019 and July 2022	Gas Industry Unsafe Situations Procedure (1866). Hard copy of this document is available at https://qassafetyshop.co.uk/	2022	57	38.19
IGEM/G/11 Edition 2 with amendments July 2019 and July 2022	Gas Industry Unsafe Situations Procedure (1866) Download for free at www.igem.org.uk	2022	FREE	FREE
IGEM/G/11 Supplement 1	Responding to domestic CO alarm activations/reports of fumes after attendance by the emergency service provider or the Liquefied Petroleum Gas supplier (1851) Download for Free at www.igem.org.uk	2022	FREE	FREE
IGEM/G/12	Universally adopted graphical symbols (1852)	2023	201	134.67
IGEM/G/13 with amendments August 2023	Domestic supply capacity and operating pressure at the outlet of the meter (1875) Download for free at www.igem.org.uk	2023	FREE	FREE
IGEM/G/14 (original version was Igem/TD/102)	Competency framework (1886)	2024	138	92.46
SAFETY				
IGEM/SR/4 Ed 3	Variable volume gasholders storing lighter than air gases (1752)	2011	203	136.01
IGEM/SR/14 Ed 2	Fixed volume storage for lighter than air gases (1742)	2010	168	112.56
IGEM/SR/15 Ed 5 with Amendments November 2015	Integrity of safety-related systems in the gas industry (1784). Set of amendments issued 2015	2015	185	123.95
IGEM/SR/16 Ed 2	Odorant systems for gas transmission and distribution (1734)	2008	138	92.46
IGEM/SR/18 Ed 3	Safe working practices to ensure the integrity of gas assets and associated installations (1828)	2019	105	70.35
IGE/SR/22 2nd Impression	Purging operations for fuel gases in transmission, distribution and storage (1625)	1999	146	97.82
IGE/SR/23 2nd Impression	Venting of Natural Gas (1623)	1995	146	97.82
IGEM/SR/25 Ed 2 with Amendments	Hazardous area classification of Natural Gas installations (1748). Set of amendments issued 2013	2013	289	193.63
IGEM/SR/25 Ed 2 with Amendments-Hydrogen Supplement 1	Hazardous area classification of installations using Hydrogen or blends of up to and including 20% by volume Hydrogen in Natural Gas (1871)	2022	171	114.57
IGEM/SR/28 Ed 2	Trenchless techniques (1753)	2011	201	134.67
IGEM/SR/29 Ed 2	Dealing with gas escapes (1827)	2019	138	92.46
INDUSTRY GUIDANCE				

IGEM/IG/1 Edition 2	Standards of training in gas work (1839). Download for free at www.igem.org.uk	2021	34	22.78
IGEM/IG/1 Supplement 1	Non domestic training specification (1788). Download for free at www.igem.org.uk	2016	34	22.78
IGEM/IG/1 Ed 2 Supplement 2	Domestic Natural Gas training specification (1846) Download for free at www.igem.org.uk	2022	113	75.71
IGEM/IG/1 Ed 2 Supplement 3	Metering/emergency service provider Natural Gas training specification - Utilisation sector (1870) Download for free at www.igem.org.uk	2023	32	21.44
IGEM/IG/1 Ed 2 Supplement 5	Interim Hydrogen training specification (1878) Download for free at www.igem.org.uk	2023	32	21.44
IGEM/IG/3	Response to LNG road tanker emergencies (1810)	2023	146	97.82
IGEM/IG/4 with amendments February 2024	Bulk transport of LNG – By Road (1883)	2024	146	97.82
CERTIFICATES OF STRENGTH AND TIGHTNESS TESTING AND DIRECT PURGING TO IGE/UP/1 EDITION 2 AND IGE/UP/1A EDITION 2 (shrink wrapped pads of 25 triplicate certificates)				
StT/UP/1A	Certificate of strength testing for IGE/UP/1A	2004	29	19.43
TT/UP/1A	Certificate of tightness testing for IGE/UP/1A	2004	29	19.43
DP/UP/1A	Certificate of direct purging for IGE/UP/1A	2004	29	19.43
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TT/UP/1	Certificate of tightness testing for IGE/UP/1	2004	29	19.43
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Ed = Edition. Imp = Impression. Supp = Supplement.

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IGEM/TD/1 Ed 5 Supp 1		IGEM/GM/8 Part 5 Ed 2		IGEM/UP/16 Ed 2 with Amendments November 2023		IGEM/SR/4 Ed 3	
IGEM/TD/2 Ed 2		IGEM/GM/PRS/1		IGEM/UP/17 Ed 2		IGEM/SR/14 Ed 2	
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