

# **IGEM Standards**

March 2025



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; 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.

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- the Standards are always up to date
- search facility in the Standards is provided
- new publications onto the system are notified on the Home page
- the company does not have to manage a 'library'
- is accessible through the internet, so not confined to the office
- a help page is provided.

The price of this service is determined by what standards are required, for how many users.

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All withdrawn Technical Standards are retained for reference and may be purchase on request.

### **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Edition X	Where an edition number is stated, the previous edition is superseded i.e. not current and is obsolete.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 <u>www.igem.org.uk</u> or by email to <u>technical@igem.org.uk</u> .
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. 1

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#### **IGEM STANDARDS** TITLE (COMMUNICATION NO.) DATE **ITEM** and **STANDARD** MEMBER/I **EDITION** 2025 A 2025 PRICE £ PRICE £ **HYDROGEN** IGEM/H/1 Reference Standard for low pressure hydrogen utilisation 2023 FRFF FRFF with amendments June 2022 and June 2023 (1877) Download for free at www.igem.org.uk TRANSMISSION AND DISTRIBUTION IGEM/TD/1 Ed 6 with Amendments May 2024 423 33 282 22 Steel pipelines for high pressure gas transmission (1892) 2024 IGEM/TD/1 Ed 5 Supplement 1 Ed 2 Holding, transport and storage of steel pipe (1825) 2018 108.15 72.10 IGEM/TD/1 Ed 6 Supplement 2 High pressure Hydrogen pipelines (1849) 2021 119.48 79.65 IGEM/TD/2 Ed 3 Assessing the risks from high pressure Natural Gas 2024 184.37 122.91 pipelines (1895) IGEM/TD/3 Ed 5 with Amendments Steel and PE pipelines for gas distribution (1780) 2015 280.16 186 77 October 2015 Repurposing of Natural Gas (NG) pipelines with MOP not exceeding 7 bar for NG/Hydrogen blends (1856) IGEM/TD/3 Ed 5 Supplement 1 2022 119.48 79.65 187.46 IGEM/TD/4 Ed 5 with amendments March PE and steel gas services and service pipework (1902) 2025 281.19 2025 IGEM/TD/12 Ed 3 Pipework stress analysis for gas industry plant (1834) 2021 232.78 155.19 Pressure regulating and exceeding 7 bar pipeline installations' (1872) IGEM/TD/13 Ed 3 2023 363.59 242.39 Pressure regulating installations for hydrogen at pressures exceeding 7 bar (1889) IGEM/TD/13 Ed 3 Supplement 1 2024 119.48 79.65 IGEM/TD/13 Ed 3 Supplement 2 Pressure regulating installations (PRIs) for new and 2024 119.48 79.65 repurposing of existing PRIs for transmission of Natural Gas/Hydrogen blends for pressures not exceeding 7 bar (1890) IGEM/TD/16 Ed 2 Biomethane injection (1833) 2019 150.38 100.25 Steel and PE pipelines for biogas distribution (1769) 2014 108.15 72.10 IGEM/TD/17 Reinforced thermoplastic pipelines for high pressure gas transmission (1812) IGEM/TD/19 2019 142.14 94.76 Reference Standard for Hydrogen distribution for new stee 2023 207.03 138.02 IGEM/TD/21 and PE mains and services (1879) IGEM/TD/22 2023 140.08 93.39 Reference Standard for repurposing Natural Ga distribution mains and services for Hydrogen (1884) IGEM/TD/23 Reference Standard Hydrogen pressure regulating 2024 363.59 242.39 installations not exceeding 7 bar (1885) IGEM/TD/101 Ed 3 142.14 94.76 Adoption of pipe systems by GT- management of UIP 2018 activities (1802) **GAS MEASUREMENT** Flowmetering practices. Inlet pressure exceeding 38 bar 2019 268.83 180.12 IGEM/GM/4 Ed 3 and not exceeding 100 bar (1815) Electronic gas meter volume conversion systems (1817) 115.94 2023 173.04 IGEM/GM/5 Ed 4 268.83 180.12 IGEM/GM/6 Ed 3 Non-domestic meter installations. Standard designs 2022 (1864) 2018 150.38 100.75 Electrical connections for gas metering equipment (1803) IGEM/GM/7A Ed 2 Hazardous area classification for gas metering 2018 190.55 127.67 IGEM/GM/7B Ed 2 equipment (1804) 268.83 180.12 Non-domestic meter installations: IGEM/GM/8 Part 1 Ed 2 Flow rate exceeding 6 m<sup>3</sup>h<sup>-1</sup> and inlet pressure not 2016 exceeding 38 bar Design (1795) 2016 142.14 95.23 Locations, housings and compounds (1796) IGEM/GM/8 Part 2 Ed 2

2016

2016

2016

2017

2022

173.04

142.14

142.14

160.81

100.94

115.94

95.23

95.23

107.66

67.63

Fabrication, installation, testing and commissioning

Meter Regulators for gas flow rates not exceeding 6m<sup>3</sup> h<sup>-1</sup>

and inlet pressures not exceeding 75 mbar (1859)

Operation and maintenance (1798)

Meter Installation fittings (1793)

Notices and labels (1799)

(1797)

IGEM/GM/8 Part 3 Ed 2

IGEM/GM/8 Part 4 Ed 2

IGEM/GM/8 Part 5 Ed 2

with amendments July 2022

IGEM/GM/PRS/1

IGEM/GM/PRS/3

IGEM/GM/PRS/6	Meter connectors (1794)	2016	130.81	87.64
IGEM/GM/PRS/11	Purchasing specification for diaphragm gas meters (1853)	2024	115.36	77.29
IGEM/GM/PRS/28	Medium pressure single-stage regulators for gas flow rates not exceeding $6m^3h^{-1}$ (1791)	2016	142.14	95.23
IGEM/GM/PRS/29	Medium pressure two-stage meter regulators for gas flow rates not exceeding $6m^3 h^{-1}$ (1790)	2016	142.14	105.23
IGEM/GM/PRS/33	Meter regulators of nominal diameter 32mm (11/4 inch) and not exceeding 150mm (6 inch) and for inlet	2016	100.94	67.63
IGEM/GM/PRS/40	pressures not exceeding 75 mbar (1792) Medium pressure meter installation kits for flow rates not exceeding 6 m <sup>3</sup> h <sup>-1</sup> (1807)	2019	142.14	105.23
IGEM/GM/PRS/41	Low pressure meter installation kits (1808)	2019	142.14	105.23
IGEM/GM/PRS/50	Meter and converter serial numbering and model names (1811)	2019	100.94	67.63
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	195.70	131.12
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	160.68	107.66
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	184.37	123.53
IGEM/UP/1C	Strength testing, tightness testing and direct purging of Natural Gas and LPG meter installations (1751)	2011	150.38	100.75
IGEM/UP/2 Ed 3	Installation pipework on industrial and commercial premises (1771)	2014	357.41	239.46
IGEM/UP/3 Ed 3	Gas fuelled spark ignition and dual fuel engines (1781)	2015	173.04	115.94
IGEM/UP/4 Ed 4	Commissioning of gas fired plant on industrial and commercial premises (1801)	2016	108.15	72.46
IGEM/UP/6 Ed 3	Application of compressors to Natural Gas fuel systems	2020	173.04	115.94
IGE/UP/7 Ed 2 with Amendments October 2008	(1813) 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	173.04	115.94
IGEM/UP/9 Ed 3	Application of Natural Gas and fuel oil systems to gas turbines and supplementary and auxiliary fired burners (1863)	2022	173.04	115.94
IGEM/UP/10 Ed 4 with Amendments March 2016 and February 2017	Installation of flued gas appliances in industrial and commercial premises (1800)	2017	255.44	171.14
IGEM/UP/11 Ed 3	Gas installations for educational establishments (1821)	2018	150.38	100.75
IGEM/UP/11 Ed 3 Supplement 1	Operation and management of gas installations within educational establishments (1845)	2022	29.87	20.01
IGEM/UP/12 Ed 3	Application of burners and controls to gas fired process plant (1873)	2023	254.14	170.27
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	142.14	105.23
IGEM/UP/17 Edition 2	Shared chimney and flue systems for domestic gas appliances (1826)	2018	184.37	123.53
IGEM/UP/18	Gas installations for vehicle repair and body shops (1758)	2012	107.12	71.77
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	150.38	100.75
IGEM/UP/19 Edition 2 Supplement 1	Catering equipment engineers guide to relevant sections of IGEM/UP/19 (1876). Download for free at www.igem.org.uk	2024	28.98	19.42
IGEM/UP/20	CNG Fuelling Stations (1775)	2014	178.19	119.39
IGEM/UP/20 GAS LEGISLATION	CNG Fuelling Stations (1775)	2014	178.19	119.39
GAS LEGISLATION	Planning of gas distribution systems of MOP not exceeding	2014	178.19 150.38	119.39 100.75
GAS LEGISLATION IGEM/GL/1 Ed 3	Planning of gas distribution systems of MOP not exceeding 16 bar (1847) Planning of transmission and storage systems operating			
	Planning of gas distribution systems of MOP not exceeding 16 bar (1847) Planning of transmission and storage systems operating at pressures exceeding 16 bar (1816) Procedures for managing new works, modifications	2021	150.38	100.75
IGEM/GL/1 Ed 3 IGEM/GL/2 Ed 3	Planning of gas distribution systems of MOP not exceeding 16 bar (1847) Planning of transmission and storage systems operating at pressures exceeding 16 bar (1816)	2021 2018	150.38 108.15	100.75 72.46

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IGEM/GL/9 Ed 2	Guidance for large consumers in dealing with Natural Gas	2018	FREE	FREE
	supply emergencies. (1806) <b>Download at</b> www.igem.org.uk			
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 <u>www.igem.org.uk</u>	2013	150.38	100.75
IGEM/G/5 Edition 3 with amendments April 2023	Gas installations in multi-occupancy buildings (1874) Amendments are available to download for free at <u>www.igem.org.uk</u>	2023	237.93	159.41
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	142.14	95.23
IGEM/G/7	Risk assessment techniques (1787)	2016	201.88	135.26
IGEM/G/8	Handling, transport and storage of PE pipe and fittings (1749)	2010	142.14	95.23
IGEM/G/10	Non-return valves (1785)	2016	100.94	67.63
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://gassafetyshop.co.uk/	2022	60	60
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) <b>Download for Free at</b> <u>www.igem.org.uk</u>	2022	FREE	FREE
IGEM/G/12	Universally adopted graphical symbols (1852)	2023	207.03	138.71
IGEM/G/13 with amendments August 2023	Domestic supply capacity and operating pressure at the outlet of the meter (1875)	2023	FREE	FREE
IGEM/G/14 (original version was IGEM/TD/102)	Download for free at <u>www.igem.org.uk</u> Competency framework (1886)	2024	142.14	95.23
SAFETY				
IGEM/SR/4 Ed 3	Variable volume gasholders storing lighter than air gases (1752)	2011	209.09	140.09
IGEM/SR/14 Ed 2	Fixed volume storage for lighter than air gases (1742)	2010	173.04	115.94
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	190.55	127.67
IGEM/SR/16 Ed 2	Odorant systems for gas transmission and distribution (1734)	2008	142.14	95.23
IGEM/SR/18 Ed 3	Safe working practices to ensure the integrity of gas assets and associated installations (1828)	2019	108.16	72.47
IGEM/SR/22 Edition 2	Purging operations for fuel gases in transmission, distribution and storage (1901)	2025	184.37	122.91
IGE/SR/23 2 <sup>nd</sup> Impression	Venting of Natural Gas (1623)	1995	150.38	100.75
IGEM/SR/25 Ed 2 with Amendments	Hazardous area classification of Natural Gas installations (1748). Set of amendments issued 2013	2013	297.67	199.44
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	2022	176.13	199.44
IGEM/SR/28 Ed 2	volume Hydrogen in Natural Gas (1871) Trenchless techniques (1753)	2011		
IGEM/SR/29 Ed 2	Dealing with gas escapes (1827)	2019	207.03	138.71
INDUSTRY GUIDANCE		-	142.14	95.23
IGEM/IG/1 Edition 2	Standards of training in gas work (1839).	2021	35.19	23.58
IGEM/IG/1 Supplement 1	Download for free at <u>www.igem.org.uk</u> Non domestic training specification (1788).	2021	35.19	23.58
	Download for free at www.igem.org.uk			

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IGEM/IG/1 Ed 2 Supplement 2	Domestic Natural Gas training specification (1846) Download for free at www.igem.org.uk	2022	116.96	78.36
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	35.19	23.58
IGEM/IG/1 Ed 2 Supplement 5	Interim Hydrogen training specification (1878) Download for free at www.igem.org.uk	2023	35.19	23.58
IGEM/IG/3	Response to LNG road tanker emergencies (1810)	2023	151.11	101.24
IGEM/IG/4 with amendments February 2024	Bulk transport of LNG – By Road (1883)	2024	151.11	101.24
	STRENGTH AND TIGHTNESS TESTIN	-		-
IGE/UP/1 EDITION 2 AND	IGE/UP/1A EDITION 2 (shrink wrap	pped pade	s of 25 triplicate	certificates)
StT/UP/1A	Certificate of strength testing for IGE/UP/1A	2004	30	20.10
TT/UP/1A	Certificate of tightness testing for IGE/UP/1A	2004	30	20.10
DP/UP/1A	Certificate of direct purging for IGE/UP/1A	2004	30	20.10
StT/UP/1	Certificate of strength testing for IGE/UP/1	2004	30	20.10
TT/UP/1	Certificate of tightness testing for IGE/UP/1	2004	30	20.10
DP/UP/1	Certificate of direct purging for IGE/UP/1	2004	30	20.10

Ed = Edition. Imp = Impression. Supp = Supplement.

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