

IGEM Standards

Marchv2 2024



Founded 1863 Royal Charter 1929



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
- 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.

In order to subscribe to the full service either apply online https://www.igem.org.uk/ or contact technicalenquiry@igem.org.uk for a quotation. The scopes for all of the standards are also available on the IGEM website https://www.igem.org.uk/technical-services/technical-standards/.

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

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			PRICE £	PRICE £	
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 DISTR					
IGEM/TD/1 Ed 6	Steel pipelines for high pressure gas transmission (1848)	2021	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	2015	179	119.93	
IGEM/TD/3 Ed 5 with Amendments October 2015	(1779) 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 installations for Natural Gas, Liquefied Petroleum Gas and Liquefied Petroleum Gas/Air (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	
GEM/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 activities (1802)	2018	138	92.46	
IGEM/TD/102	Competence framework (1761)	2012	138	92.46	
GAS MEASUREMENT					
	Flowmetering practices. Inlet pressure exceeding 38 bar	2019	261	174.87	
IGEM/GM/4 Ed 3	and not exceeding 100 bar (1815) Electronic gas meter volume conversion systems (1817)	2023	168	112.56	
IGEM/GM/5 Ed 4	, , ,		0.51		
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	2016	261	174.87	
IGEM/GM/8 Part 2 Ed 2	exceeding 38 bar Design (1795) 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	
	Meter Installation fittings (1793)	2017	156	104.52	
IGEM/GM/PRS/1					

with amendments July 2022 IGEM/GM/PRS/6 Modeling IGEM/GM/PRS/11 Puter IGEM/GM/PRS/28 Modeling IGEM/GM/PRS/29 Modeling IGEM/GM/PRS/29	nd inlet pressures not exceeding 75 mbar (1859) leter connectors (1794) urchasing specification for diaphragm gas meters (1853)	2016	127	85.09
IGEM/GM/PRS/11 PL IGEM/GM/PRS/28 Mr IGEM/GM/PRS/29 Mr IGEM/GM/PRS/29	, , ,	2023		
IGEM/GM/PRS/28 Me ra IGEM/GM/PRS/29 Me filo	urchasing specification for diaphragin gas meters (1853)		112	74
ra IGEM/GM/PRS/29 M flo				
flo	ledium pressure single-stage regulators for gas flow lates not exceeding 6m ³ h ⁻¹ (1791)	2016	138	92.46
M	ledium pressure two-stage meter regulators for gas ow rates not exceeding 6m³ h-1 (1790)	2016	138	92.46
IGEM/GM/PRS/33 ar	leter regulators of nominal diameter 32mm (11/4 inch) and not exceeding 150mm (6 inch) and for inlet ressures not exceeding 5 mbar (1792)	2016	98	65.66
IGEM/GM/PRS/40	ledium pressure meter installation kits for flow ates not exceeding 6 m ³ h ⁻¹ (1807)	2019	138	92.46
IGEM/GM/PRS/41	ow pressure meter installation kits (1808)	2019	138	92.46
IGEM/GM/PRS/50	eter and converter serial umbering and model names 1811)	2019	98	65.66
UTILISATION	1611)			
	trength testing, tightness testing and direct purging of industrial and commercial gas installations (1716)	2005	190	127.30
Reprint with Amendments March 2005 lo	trength and tightness testing and direct purging of small by pressure industrial and commercial Natural Gas istallations (1717)	2005	156	104.52
IGEM/UP/1B Ed 3	ightness testing and direct purging of small Liquefied etroleum Gas/Air, Natural Gas and Liquefied Petroleum as installations. (1759). Set of amendments issued 2012	2012	179	119.93
Na Ga	trength testing, tightness testing and direct purging of atural as and LPG meter installations (1751)	2011	146	97.82
	nstallation pipework on industrial and commercial remises (1771)	2014	347	232.49
IGEM/UP/3 Ed 3	as fuelled spark ignition and dual fuel engines (1781)	2015	168	112.56
co	ommissioning of gas fired plant on industrial and ommercial remises (1801)	2016	105	70.35
IGEM/UP/6 Ed 3 Ap	pplication of compressors to Natural Gas fuel systems 1813)	2020	168	112.56
IGE/UP/7 Ed 2 Go with Amendments October 2008 bu	as installations in timber framed and light steel framed uildings (1722). Set of amendments issued 2008.	2006	168	112.56
tu	pplication of Natural Gas and fuel oil systems to gas urbines nd supplementary and auxiliary fired burners (1863)	2022	168	112.56
	nstallation of flued gas appliances in industrial and ommercial premises (1800)	2017	248	166.16
IGEM/UP/11 Ed 3	as installations for educational establishments (1821)	2018	146	97.82
	peration and management of gas installations within ducational establishments (1845)	2022	29	19.43
	pplication of burners and controls to gas fired process lant (1873)	2023	238	159.46
IGEM/UP/16 Ed 2 Amendments November 2023	esign for Natural Gas installations on industrial and ommercial premises with respect to DSEAR (1882) he amendments may be Downloaded for free t www.igem.org.uk	2023	138	92.46
Sh	hared chimney and flue systems for domestic gas ppliances (1826)	2018	179	119.93
IGEM/UP/18 Ga	as installations for vehicle repair and body shops (1758)	2012	104	69.68
IGEM/UP/19 Edition 2 sy	esign and application of interlock devices and associated ystems used with gas appliance installations in ommercial catering establishments (1865).	2022	146	97.82
IGEM/UP/20 CI	NG Fuelling Stations (1775)	2014	173	115.91
GAS LEGISLATION				
	lanning of gas distribution systems of MOP not exceeding 6 bar (1847)	2021	146	97.82
IGEM/GL/2 Ed 3 PI	lanning of transmission and storage systems operating t pressures exceeding 16 bar (1816)	2018	105	70.35
	as system assets – safety management system (1820)	2018	146	97.82
	rocedures for managing new works, modifications and repairs (1783)	2015	127	85.09
	Safe Control of Operations for Gas Networks (1814)		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 Ed 2	A standard for IGEM standards (1842)	2022	FREE	FREE
IGEM/G/1 Ed 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 Ed 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 Ed 2	Definitions for the gas industry (1763)	2012	FREE	FREE
IGEM/G/6	Gas supplies to mobile dwellings (1728)	2009	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://gassafetyshop.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)	2023	FREE	FREE
CAFETY	Download for free at <u>www.igem.org.uk</u>			
SAFETY	N - 1	2014	202	126.01
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) Integrity of safety-related systems in the gas industry	2010	168	112.56
IGEM/SR/15 Ed 5 with Amendments November 2015	(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 2 nd Impression	Purging operations for fuel gases in transmission, distribution and storage (1625)	1999	146	97.82
IGE/SR/23 2 nd Impression	Venting of Natural Gas (1623)	1995		
IGEM/SR/25 Ed 2 with	Hazardous area classification of Natural Gas	2013	146	97.82
Amendments IGEM/SR/25 Ed 2 with Amendments-	installations (1748). Set of amendments issued 2013 Hazardous area classification of installations using	2022	289	193.63
Hydrogen Supplement 1	Hydrogen or blends of up to and including 20% by volume Hydrogen in Natural Gas (1871)		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				32.10
IGEM/IG/1 Edition 2	Standards of training in gas work (1839).	2021	34	22.78
IGEM/IG/1 Supplement 1	Download for free at www.igem.org.uk 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/2	Catering equipment engineers guide to relevant sections of IGEM/UP/19 (1772). Download for free at www.igem.org.uk	2014	28	18.76
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 STRENGT	H AND TIGHTNESS TESTING AND DI	RECT PUF	RGING TO IGE/	UP/1 EDITION
2 AND IGE/UP/	1A EDITION 2 (shrink wrapped pads	of 25 tri	plicate certifica	tes)
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
StT/UP/1	Certificate of strength testing for IGE/UP/1	2004	29	19.43
TT/UP/1	Certificate of tightness testing for IGE/UP/1	2004	29	19.43
DP/UP/1	Certificate of direct purging for IGE/UP/1	2004	29	19.43

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

PLACING ORDERS (Subject to availability of the Standard)

Orders can be placed using the following methods:

- Online www.igem.org.uk
- Phone +44 (0) 1509 678183
- Email technicalsales@igem.org.uk

Payment must be received before goods can be dispatched. Dispatch of goods is normally within 2 working days of payment. The following methods of payment are accepted:

- credit card (MasterCard or Visa).
- cheque sent to the above address. Please mark correspondence "IGEM Standards Sales"
- through bank transfer (overseas customers will incur a charge for this method). Please request this on the Order Form.

The list of Standards (on page 2, 3 and 4) will be updated when amendments and new editions have been issued. Prices are reviewed annually (1^{st} January) but IGEM reserves the right to change prices at other times and without notice.

ORDER FORM FOR IGEM STANDARD HARDCOPIES

Standard	Qty	Standard	Qty	Standard	Qty	Standard	Qty
IGEM/H/1 with amendments June 2022 and June 2023		IGEM/GM/5 Ed 4		IGEM/UP/6 Ed 3		IGEM/G/6	
IGEM/TD/1 Ed 6		IGEM/GM/6 Ed 3		IGE/UP/7 Ed 2		IGEM/G/11 Ed 2	
IGEM/TD/1 Ed 6 Supplement 2		IGEM/GM/7B Ed 2		IGEM/UP/12 Ed 3		IGEM/G/11 Supplement 1	
IGEM/TD/1 Ed 5 Supp 1		IGEM/GM/8 Part 5 Ed 2		IGEM/UP/16 Ed 2 with Amendments November 2023		IGEM/G/12	
IGEM/TD/2 Ed 2		IGEM/GM/PRS/1		IGEM/UP/17 Ed 2		IGEM/G/13	
IGEM/TD/3 Ed 5		IGEM/GM/PRS/3		IGEM/UP/18		IGEM/SR/4 Ed 3	
IGEM/TD/3 Ed 5 Supp 1		IGEM/GM/PRS/6		IGEM/UP/19 Ed 2		IGEM/SR/14 Ed 2	
IGE/TD/4 Ed 5		IGEM/GM/PRS/28		IGEM/UP/20		IGEM/SR/15 Ed 5	
IGEM/TD/12 Ed 3		IGEM/GM/PRS/29				IGEM/SR/16 Ed 2	
IGEM/TD/13 Ed 3		IGEM/GM/PRS/33		IGEM/GL/1 Ed 3		IGE/SR/18 Ed 3	
IGEM/TD/13 Ed 3 Supplement 1		IGEM/GM/PRS/40		IGEM/GL/2 Ed 3		IGE/SR/22	
IGEM/TD/13 Ed 3 Supplement 2		IGEM/GM/PRS/41		IGEM/GL/4 Ed 3		IGE/SR/23	
IGEM/TD/16 Ed 2		IGEM/GM/PRS/50		IGEM/GL/5 Ed 3		IGEM/SR/25 Ed 2	
IGEM/TD/17		IGE/UP/1 Ed 2		IGEM/GL/6 Ed 3		IGEM/SR/25 Ed 2 WA Hydrogen Supplement 1	
IGEM/TD/19		IGE/UP/1A Ed 2		IGEM/GL/8 Ed 3		IGEM/SR/28 Ed 2	
IGEM/TD/21		IGEM/UP/1B Ed 3		IGEM/GL/9 Ed 2		IGEM/SR/29 Ed 2	
IGEM/TD/22		IGEM/UP/1C		IGEM/G/0 Ed 2		StT/UP/1A	
IGEM/TD/101 Ed 3		IGEM/UP/2 Ed 3		IGEM/G/1 Ed 2		TT/UP/1A	
IGEM/TD/102		IGEM/UP/3 Ed 3		IGEM/G/4 Ed 2		DP/UP/1A	
IGEM/GM/4 Ed 3		IGEM/UP/4 Ed 4		IGEM/G/5 Ed 3 with amendments April 2023		StT/UP/1	

IGEM/GM/7A Ed 2	IGE/UP/9 Ed 3	IGEM/G/7	TT/UP/1
IGEM/GM/8 Part 1 Ed 2	IGEM/UP/10 Ed 4	IGEM/G/8	DP/UP/1
IGEM/GM/8 Part 2 Ed 2	IGEM/UP/11 Ed 3	IGEM/G/10	IGEM/IG/1 Ed 2
IGEM/GM/8 Part 3 Ed 2	IGEM/UP/11 Ed 3 Supp 1		IGEM/IG/1 Supp 1
IGEM/GM/8 Part 4 Ed 2			IGEM/IG/1 Ed 2 Supp 2
			IGEM/IG/2
			IGEM/IG/4

Credit card orders - After your order is received, our dispatch team will contact you for card details.	
Cheque payments – Please make cheque payable to IGEM publications	
Bank transfer - If you wish to pay via a bank transfer please tick this box \square	
For more information on IGEM Standards, please see our website; <u>www.igem.org.uk</u> .	

Member Discounts:

Member discounts apply on all Standards. To process member discounts (IGEM Members and Industrial Affiliates) we will need your membership or industrial affiliate number. If no details are entered here, items will be priced at the <u>standard</u> rate.