



BSI Standards Publication

Gas cylinders — Identification of gas cylinder manufacturer marks and their assigned radio frequency identification (RFID) codes

National foreword

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TECHNICAL REPORT

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Gas cylinders — Identification of gas cylinder manufacturer marks and their assigned radio frequency identification (RFID) codes

*Bouteilles à gaz — Identification des marques de fabricant
de la bouteille de gaz et leurs codes d'identification (RFID) de
fréquences radio*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 58, *Gas cylinders*, Subcommittee SC 4, *Operational requirements for gas cylinders*.

Introduction

The purpose of this Technical Report is to provide the gas cylinder manufacturing industry, the approval authorities, the inspection bodies, the gas industry and all associated industry branches dealing with gas cylinders a tool for identifying gas cylinders with their manufacturer's marks and their assigned radio frequency identification (RFID) codes.

Gas cylinders — Identification of gas cylinder manufacturer marks and their assigned radio frequency identification (RFID) codes

1 Scope

This Technical Report provides an inventory, as far as known at time of publication, of manufacturer's identification marks and their assigned radio frequency identification (RFID) codes according to ISO 21007-1 and ISO 21007-2. The listing includes marks of existing gas cylinder manufacturers, as well as cylinder manufacturers which have ceased production in the past, but whose cylinders can still be in service today.

NOTE It is intended to revise [Annex A](#) of this Technical Report from time to time in order to update the list of codes and identification marks of gas cylinder manufacturers in accordance with the progressing commercial and economic development in the cylinder manufacturing industry.

Any request for inclusion or modification of these identifications is to be made to the ISO/TC 58/SC 4 Secretariat, who would update the information in [Annex A](#) after consultation with the committee leadership.

2 General

There is a general marking requirement by national or international regulations and standards to identify gas cylinders with the cylinder manufacturer's identification (name, trademark and/or logo), e.g. by stamp marking, or for composite cylinders, by labelling, in order to guarantee their traceability. In certain circumstances, it is very important to enable a distinctive identification of the origin of the cylinder. Normally for a given manufacturer, the identification is specific to a manufacturing location.

When, in addition to the above marking requirements, the cylinders are identified by radio frequency identification (RFID) codes, the technologies and RFID codes in accordance with ISO 21007 are used. The first three digits of the RFID codes listed in Column 1 of [Annex A](#) are the country code as listed in ISO 3166-1. The subsequent two digits are assigned consecutively in the country's listing. Once assigned, the RFID code designation does not change.

[Annex A](#) lists cylinder manufacturers by countries which are currently known to produce or have produced gas cylinders. The list does not claim to be complete and is valid only as of the date of the publication of this Technical Report. Manufacturers that no longer produce cylinders remain in [Annex A](#) as their cylinders could still be in service and need to be identified.

It is expected that the manufacturers are using manufacturer's marks which identify unambiguously the manufacturing plant/facility to clearly identify the plant to which the type approval of the concerned cylinder was assigned. [Annex A](#) clearly indicates the date when the manufacturing at the old plant/facility ends and the date when the new plant/facility begins manufacturing cylinders. Names of manufacturers may have changed over time; however, these manufacturers may have continued using the same manufacturer's mark provided the approval criteria for the cylinders in question have not changed. Vice versa, a change of the manufacturer's mark may have taken place or alternative marks may be used by one and the same manufacturer.

[Clause 3](#) explains the information provided in each column of [Annex A](#).

To provide updates to the list of manufacturers, use the link provided in [Annex B](#) for instructions to submit new/revised information. These revisions, once approved by ISO/TC 58/SC 4 and designated with an RFID code, will be provided on Standards Maintenance Portal at the link provided in [Annex C](#).

3 Explanation of columns

The column entitled “**Code**” designates the RFID code for a manufacturer.

Note This code is assigned by the experts of ISO/TC 58/SC 4.

The column entitled “**Manufacturer name**” designates the official name of the gas cylinder manufacturer. It should be noted that the name may have changed over time.

The column entitled “**Location of manufacturing plant/facility**” designates the plant/facility responsible for manufacturing and to which the mark is assigned.

The column entitled “**Year(s) of manufacture**” designates the years for which the manufacturer’s mark(s) were used, if known.

For example,

- “→ 1927” means the mark was used inclusive of 1927,
- “1927 → 1961” means the mark was used from some time in 1927 to some time during 1961, and
- “2002 →” means the mark has been used starting some time during 2002 to present.

The column entitled “**Manufacturer’s mark**” provides the official manufacturer’s identification that is marked on the cylinder as required by ISO 13769 (stamp marking 3 in ISO 13769, Table 1).

Country: XXXXX				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer’s mark

Annex A (informative)

List of codes and identification marks for gas cylinder manufacturers

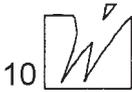
The following list does not claim to be complete and is current as of 2014-07-24.

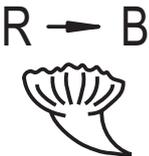
Country: ALGERIA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
012 01	F.E.R.A.P. (Fabrication et entretien de récipients à pression)	Algiers		

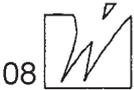
Country: ARGENTINA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
032 01	L'Air Liquide	Buenos Aires		
			1960 → 1985	
032 02	Drago	Buenos Aires	1938 →	
032 03	Fabricacion Militar			
032 04	Gas Carbonic Argentina			G.C.A.
032 05	Gonzalez & Chiesa Changed to Inflex Argentoil S.A.	San Luis	1967 →	INFLEX
				
032 06	Pablo Casale		1958 → 1986	CASALE
032 07	Saravia Y Lopez	Buenos Aires	→ 1993	

Country: ARGENTINA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
032 08	Oxi — Luz			
032 09	Acetylene	Buenos Aires	1972 → 1992	
032 10	Miguel Balbona			M.R.B.
032 11	R. Batalles S.A.	Buenos Aires	1944 →	YUKON
032 12	Propulsora San Luis	San Luis		PISL
032 13	Luis Pasquinelli e Hijos	Buenos Aires	1947 →	LPH
032 14	Kioshi Compresion	Buenos Aires	2005 →	
032 15	Mozart	Buenos Aires	1995 →	
032 16	INPROCIL S.A.	Entre Rios	2007	
032 17	CIDEGAS S.A.	Buenos Aires	2004 →	

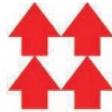
Country: AUSTRALIA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
036 01	Manchester Tank & Equipment CO	Echuca		MANCHESTER
036 02	CIG Gas Cylinders		→ 1996	CIG
036 03	Luxfer Gas Cylinders	Sydney	1997 → 2004	LUXFER

Country: AUSTRIA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
040 01	Jos. Heiser Changed to Worthington Heiser Changed to Worthington Cylinders GmbH	Kienberg	→ 1927	
			1927 → 1961	
			1961 → 1976	
			1976 → 2001	HEISER 
			2002 →	
040 02	iSi GmbH	Wien	1994 → (3 alternative symbols used)	
				
				

Country: BELGIUM				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of Manufacture	Manufacturer's mark
056 01	S.A. Ateliers Belges Réunis (formerly S.A. des Ateliers de la Dyle)	La Dyle-Louvain	→ 1962	
056 02	Établissements Champy	Antwerp	→ 1940	
056 03	S.A. Comet	Mechelen	→ 1980	S.A.COMET.Malines
			→ 1980	
056 04	S.A. Standard Van Leer (formerly S.A. Usines Standard)	Lierre		
056 05	S.A. Des Usines A Tubes de la Meuse	Flémalle-Haute (Liège)		
				

Country: BRAZIL				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
076 01	Worthington Cylinders	Itu	2002 → 2003	
076 02	Worthington Tank	Itu	2002 → 2003	
076 03	MAT A/A	São Paulo		

Country: CANADA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
124 01	Canadian Cylinder Company, Ltd	Brantford, Ontario		
124 02	Engineering Products of Canada Ltd	Boucherville, Québec		
				E.P.C.L
124 03	Forges HPC Ltee	Cap-de-la-Madeleine Québec		FHPC
124 04	Hugh Canning Industries, Inc.	Toronto, Ontario		H.C.I.
124 05	Aircom Industries ('76) Ltd	Edmonton, Alberta		M4803
124 06	Bruin Engineered Parts, Inc.	Midland, Ontario		BRUIN
				M8802
124 07	Gas Cylinder Technologies	Tecumseh, Ontario		M9001
124 08	Kadet Engineering, Inc.	Mississauga, Ontario		KENG
124 09	Metal-Flo Corporation Canada Limited	Guelph, Ontario		MFCCL
124 10	Wolfedale Engineering, Ltd	Mississauga, Ontario	→ 2007	WENG or M8903
124 11	Steel Cylinder Manufacturing changed to Worthington Cylinders	Tilbury, Ontario	→ 1996	SCM or M8004
			1996 → 2002	M8004
			2002 →	M8004 or 
124 12	Dynetek Industries Ltd. changed to Luxfer Canada Limited	Calgary, Alberta	→ March 1, 2007	M5550
			March 1, 2007 →	M0501

Country: CHINA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
156 01	Beijing Tianhai Industry Co., Ltd.	Beijing	1978 →	JP
156 02	Changzhou Aircraft Manufacture Co., Ltd.	Changzhou, Jiangsu Province	1980 →	CAF
156 03	Chengdu Great High Pressure Vessel Co., Ltd.	Chengdu, Sichuan Province	1978 →	CG
156 04	Chongqing Yifeng High-pressure Container Co., Ltd.	Chongqing	1987 →	YM
156 05	Juhua Group Corp-Engineering Co., Ltd.	Quzhou, Zhejiang Province	2002 →	JG
156 06	Ningbo Meike Acetylene Cylinders Co., Ltd.	Cicheng Town, Ningbo	1984 →	NB
156 07	Shanghai Ronghua High-Pressure Vessel Co., Ltd.	Shanghai	1979 →	HT
156 08	Shanghai Huasheng Enterprises (Group) Co., Ltd.	Shanghai	2002 →	SG
156 09	Tianjin Tianhai High Pressure Container Co., Ltd.	Tianjin	2003 →	JP1
156 10	Shanghai Tianhai Dekun Composite Cylinders Co., Ltd.	Shanghai	2005 →	JP2
156 11	Langfang Tianhai High Pressure Container Co., Ltd.	Langfang, Hebei Province	2008 →	JP3
156 12	Luxfer Gas Cylinders (Shanghai) Co. Ltd.	Shanghai	2005 →	

Country: CROATIA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
891 01	Djuro Djakovice Oour Changed to Cilinder Sistem D.o.o	Slavonski Brod	1972 → 2007	
			2007 →	
891 02	Slavonski Partizan	Slavonski Brod	1956 → 1972	

Country: CZECH REPUBLIC				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
203 01	Eisenwerke Podbrezová A.G.		1916 →	PODBREZOVÁ
203 02	Witkowitz Bergbau und Eisenhütten- Gewerkschaft Changed to VÍTKOVICE CYLINDERS a.s.	Ostrava-Vítkovice	1925 → 1928	WITK
			1929 → 1938	
			1939 → 1991	
			1991 →	
203 03	Gastec, Changed to Worthington Gastec Changed to Worthington Cylinders a.s.	Hustopece	1992 → 1999	GTH
			1999 → 2001	WGH
			2002 →	
203 04	Plynokov	Brno		JMP BRNO

Country: DENMARK				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
208 01	Brdr. Degn	Besser	→ 1973	BD
208 02	Cylindric Denmark A/S	Bieghusvej		
208 03	Dalso Maskinfabrik A/S	Langedalsvej	→ 1973	DM
			→ 1973	Dalsø Maskinfabrik
208 04	Kosan Cylindric	Middelfart		
208 05	Metal Møller	Hadsten		

Country: FINLAND				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
246 01	Mekes Oy	Parkano	1964 → 1967	MEKES
246 02	Mkt — Tehtaat Oy	00700 — Helsinki 70	04/1958 →	
246 03	Oy Vähäsilta Ab	21530 — Paimio	1975 →	
246 04	Oy Wärtsilä Ab	Helsinki	13/08/1958 → 1973	WÄRTSILÄ

Country: FRANCE				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
250 01	Brunon Vallette & Cie	Rive-de-Gier	→ 1962	BV RIVE DE GIER
250 02	Établissements Freudenberg et Sté de Fabrication de Bouteilles	Region 75 — Paris	1945 → 1950	SFB
250 03	Établissements Pecquet-Tesson	Region 2 — Crouy		P.Tesson.C^{ie}
250 04	Établissements Roth	Region 69 — Mions	1983 → 2007	ROTH-MIONS
		Region 59 — Wignehies		
		Region 92 — Colombes	1972 →	ROTH-COLOMBES
250 05	S.A. des Anciens Établissements Poulet	Region 93 — Pantin	1920 →	AP
250 06	Société d'Escaut et Meuse	Region 59 — Anzin		EM ANZIN
250 07	Société de Forgeage de Rive-de-Gier	Region 42 — Rive-de-Gier	1962 →	SFR
250 08	Société Lorraine-Escaut	Region 59 — Anzin		EM ANZIN
250 09	Société Louvroil — Montbard — Aulnoye	Region 21 — Montbard	→ 1945	
250 10	Société Métallurgique de Gerzat Changed to Luxfer Gas Cylinders, France	Region 63 — Gerzat	→ 1989	
			→ 2005	S.M.GERZAT
			1989 → 2005	SMG
			2005 →	LUXFER
250 11	Société Olaer	Region 69 — Mions	1976 → 1983	
250 12	La Soudure Autogène Française	Region 60 — Pont-Ste-Maxence	1920 → 1940	SAF

Country: FRANCE				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
250 13	Vallourec	Region 59 — Louvroil	1945 → 1963	LMA LOUVROIL
				
		Region 21 — Montbard	→ 1945	
				
Region 59 — Aulnoye				
250 14	Schneider (GLI)	Region 67 — Bischwiller	1961 →	SCHNEIDER
			1991 →	
			1961 →	SCHNEIDER BISCH
250 15	CB Moulins Chevalier Bertrand	Region 3 — Moulins	1990	CB MOULINS
250 16	Liotard	Region 37 — St Pierre des Corps	→ 1980	SMLF
			1980 →	 LIOTARD

Country: GERMANY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
276 01	Acieries et usines a tubes de la Sarre	Bous-s/Sarre	1918 → 1935	
276 02	August Thyssen Hütte	Dinslaken	1918 → 27/07/1919	
			28/07/19 → 5/07/28	
				
276 03	Berlin Seegefelder Industrie A.G.	Falkensee-bei Berlin	1937 →	
276 04	A. Borsig	Berlin-Tegel	1921 → 1936	
			1936 → 1941	
276 05	Carlshütte Maschinen und Stahlbau G.m.b.H	Waldenburg Altwasser	1936 →	
276 06	Deutsche Röhrenwerke A.G. (Poensgen)	Düsseldorf	1938 → 1948	
276 07	Deutsche Röhrenwerke A.G. (Thyssen)	Dinslaken	1934 → 1948	
276 08	Deutsche Waffen und Munitions Fabriken A.G.	Posen works (Karlsruhe)	1936 →	
276 09	Eschebach Werke A.G.	Radeberg-bei Dresden	1936 → 1941	
276 10	Flaschengeräte G.m.b.H.	Elterlein im Erzgebirge	1925 →	
276 11	Gelsenkirchner Bergwerks A.G.	Düsseldorf	1915 → 1922	

Country: GERMANY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
276 12	Gewerkschaft Deutscher Kaiser	Dinslaken	10/11/1911 → 12/02/1913	
			13/02/1913 → 1918	
276 13	Hager & Weidmann A.G.	Bergisch Gladbach bei Köln	08/1936 →	
276 14	Huldschinsky Werke	Gleiwitz	1904 →	SHS
276 15	Industrie Werke Karlsruhe Aktiengesellschaft	Karlsruhe		
276 16	Julius Pintsch K.G.	Berlin-Fürstenwalde	1936 → 1938	
			1938 → 06/1942	
			06/1942 →	
276 17	Mannesmann Stahlblechbau A.G.	Berlin Langschede (Ruhr)	1939 →	
276 18	Mannesmann Röhrenwerke Changed to Mannesmann Cylinder	Düsseldorf (Rath)	1923 →	
		Düsseldorf (Bous-a.d. Sarre)	→ 1918 1935 → 2000	
		Komotau	→ 1923	
			→ 1931	
			1931 → 1945	
		Dinslaken	1970 → 2000 2000 → 2003	
276 19	Mauser K.G.	Waldeck	1937 →	

Country: GERMANY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
276 21	Oberschlesische Eisenbahnbedarf A.G.	Gleiwitz	1905 → 1925	OEB
				„0“
276 22	Phönix A.G. für Bergbau und Hüttenbetrieb	Duisburg	1907 → 1922	PHX
				SSAD ^o PHX
276 23	Phoenix-Rheinrohr A.G. Vereinigte Hütten- und Röhrenwerke	Düsseldorf Dinslaken	1955 → 1965	
276 24	Press- und Walzwerk A.G.	Düsseldorf-Reisholz		
276 25	Rheinische Röhrenwerke A.G.	Düsseldorf Dinslaken	5/08/1948 → 1955	
276 26	Rheinmetall Borsig	Berlin-Tegel	1941 →	
276 27	Rheinmetall Borsig A.G.	Düsseldorf	15/01/1939 →	
276 28	Rheinmetall-Rheinische Metallwaren und Maschinen Fabrik	Düsseldorf	1898 → 1910	
			1910 →	
276 29	Sächsische Gussstahlwerke Döhlen A.G.	Freital in Sachsen (Saxe)	18/12/1908 →	
			10/11/1927	
276 30	Thyssen Röhrenwerke A.G.	Dinslaken	1965 1970	
276 31	Vereinigte Oberschlesische Hüttenwerke	Gleiwitz	1926 →	
276 32	Vereinigte Stahlwerke August Thyssen Hütte	Dinslaken	07/1928 → 1934	

Country: GERMANY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
276 33	Wilheim Siebel	Freudenberg	01/1936 →	
				
276 34	VEB Feuerlöschgerätekwerk Apolda	Apolda	1956 → 1990	FWA
	Changed to Apoldaer Feuerlöschgeräte GmbH (1991)		1991 → 1995	AFG
	Changed to Apoldaer Stahlflaschen GmbH (1996)		1996 → 2001	AS
276 35	Changed to eurocylinders systems GmbH		2002 →	ecs
276 36	Hahn Metallbau GmbH	Stuttgart	1978 → 1995	
276 37	Welz Industrieprodukte GmbH	Stuttgart	1995 → 2003	
276 38	Welz Gas Cylinder GmbH	Rathenow	2003 →	
276 39	Basflaschen Werk Grünhain GmbH	Grünhain-Beierfeld	1990 →	
276 40	MCS International GmbH	Dinslaken	2003 →	
276 41	LBM Techno Gas GmbH	Langenfeld	01.07.1987 →	ЛБМ

Country: GREECE				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
300 01	Cylindric Hellas Ltd	Athens Artaki-Halkis (Isle of Euba)	1961 →	ΚΥΛΙΝΔΡΙΚΗ.Ε.Π.Ε
300 02	Viofial S.A.	Athens Petrooupolis Athens	1962 →	ΒΙΟ Φ Ι Α Α

Country: HUNGARY				
Code	Manufacturer Name	Location of manufacturing plant/facility	Year(s) of Manufacture	Manufacturer's mark
348 01	CzepeI			
348 02	Aluminiumárugyár Rt.	Budapest		ALUMINIUMÁRUGYÁR RT.

Country: INDIA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
356 01	Rama Cylinders	Bhimasar	12/2005 →	RCL
356 02	Rama Cylinders	Kandla SEZ	9/2009 →	RCL K
356 03	Everest Kanto	Mumbai		EKC

Country: ISRAEL				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
376 01	Soda Club Israel			ILMAP

Country: ITALY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
380 01	Acciaierie E Tubificio di Brescia	Brescia	1960 →	
380 02	Corpi Cavi	Milano	→ 1954	C.C.
380 03	Faber Industrie SpA	Cividale del Friuli (Udine) and Castelfranco Veneto	1972 →	FABER
380 04	Ghezzi Fratelli	Curnasco di Trevolio (Bergamo)		GHEZZI F. LLI
380 05	I.L.L. SpA	Pontedera (Pisa)	1981 →	O.B.P. I.L.L.
380 06	Incoge SpA	Milano		
380 07	Industria Metal-Meccanica Zane' I.M.Z. F.lli Illesi SpA Changed to CMV Srl Costruzioni Meccaniche Venete	Zane (VI)	→ 2006	
			2006 → (2 alternative symbols used)	
380 08	Officine Meccaniche Italiane	Reggio Emilia	→ 1954	OMI
380 09	Simmel Changed to Faber	Castelfranco Veneto	1976 → end date not known	SIMMEL
380 10	Societa Tubi Mannesmann	Ora Dalmine		 ou STM

Country: ITALY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
380 11	Stabilimenti Di Dalmine Changed to Tenaris Dalmine	Dalmine (Bergamo)	1906 → 1928	
			1928 → 1939	
			1940 → 1980	
			1981 → 2000	Dalmine 
			2001 → 2002	DALMINE
			2003 →	TDL
380 12	Tubi Togni	Brescia		
380 13	ISER	Solbiate Arno (VA)		ISER

Country: JAPAN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
392 01	Akamatsu Seisaku Sho	Osaka	1937 → 1938	
392 02	Asahi Seisakusho Company, Ltd	Saitama	1953 →	
				Export 
392 03	Chugoku Kogyo Company, Ltd	Hiroshima/Kure	1955 →	
392 04	Dainihon Aga Gas Seizosho	Nagoya	1942 →	
392 05	Fuso Kinzoku Kogyo K.K. Kokan Seizo Sho	Osaka Amagasaki	1945 → 1952	
392 06	Fuso Kinzoku Kogyo	Osaka/Amagasaki	1945 → 1949	
392 07	Honda Tekkosho (Tokai Koatsu Kiki.)	Gifu	1939 → 1950 1938 → 1939	

Country: JAPAN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
392 08	Ito Koatsu Yoki Seizo Sho	Tokyo	1936 → 1943	
392 09	Kanto Koatsu Yoki Mfg. Company, Ltd	Maebashi	1960 → 2000	
			2000 →	
392 10	Kawasaki Seitetsu K.K.	Kobe	1954 → 1961	
392 11	Kawatetsu Container K.K.	Itami	1961 →	
392 12	S.A. Kogyo K.K.	Tokyo	1941 → 1942	
392 13	Kyokukosha	Tokyo/Kawasaki	1952 → 1953	
392 14	Nichia Seiko K.K.	Tokyo/Amagasaki	1943 → 1944	
392 15	Nippon High Pressure Cylinders Company, Ltd		1979 → 2001	
392 16	Nihon Koatsu Gas Yoki K.K.	Osaka	1936 → 1942	
392 17	Nihon Koatsu Yoki Company, Ltd	Amagasaki	1953 → 1978	
392 18	Nihon Rikagaku Kogyo	Tokyo	1939 →	
392 19	Sakusabe Kogyo Sho	Tokyo	1941 → 1953	
			1936 →	
392 20	Sansen Tekko Sho	Osaka	1936 → 1942	
392 21	Shin Fuso Kinzoku Kogyo	Osaka/Amagasaki	1949 → 1952	
392 22	Shinko Koatsu Kiki K.K. Company, Ltd	Osaka/Yokohama	1938 → 1942	
			1939 → 1943	

Country: JAPAN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
392 23	HOKI SHINKO KOGYO KABUSHIKI KAISYA Changed to Shinko Kiki Kogyo Company, Ltd	Kurayoshi	1961 → 1989	
	Changed to Shinko JFE Industrial Co., LTD Changed to Shinko Industrial Co., LTD		1989 →	
392 24	Showa Koatsu Kogyo Company, Ltd	Tsuchiura	1952 → 2001	
392 25	Sumikin Kiko Company, Ltd	Amagasaki	1964 →	
392 26	Sumitomo Kinzoku Kogyo	Osaka/Amagasaki	1952 → 1958	
392 27	Sumitomo Kinzoku Kogyo K.K. Kokan Seizo Sho	Osaka/Amagasaki	1958 → 1965	
392 28	Sumitomo Kinzoku Kogyo Ltd Kokan Seizosho	Osaka/Amagasaki	1931 → 1935	
392 29	Sumitomo Kinzoku Kogyo	Osaka	1935 → 1945	
392 30	Tohoku Denki Tekko	Sakata/Yamagata	1952 →	
392 31	Toyo Bombe Company, Ltd (Tokai Bombe Company, Ltd)	Kameyama/ Lameyama	1969 → 1978	
392 32	Totsuka Cylinder Corporation	Tokyo	1937 →	
392 33	Yamao Kinzoku Kogyo K.K.	Tokyo/Amagasaki	1938 → 1952	
392 34	Yamato Kinzoku Kogyo K.K.	Kawasaki	1943 → 1952	
392 35	Koatsu Showa Cylinders Company, Ltd	Kameyama and Tsutiura	2001 →	
392 36	CHUO SEIKI CO., LTD	Anjyoh	1961 →	

Country: JAPAN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
392 37	HAGIO HIGH PRESSURE CONTAINERS CO., LTD	Niihama	1961 →	
392 38	FUJIKOHKI CO., LTD	Nagoya	1977 →	

Country: REPUBLIC OF KOREA				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
410 01	Alloforge CO., LTD	Wanju		
410 02	CS CO., LTD	Gwangju		
410 03	Dae Hung Precision Industrial CO., LTD	Inchon		
410 04	Duck Jin Kiyoen CO., LTD	Inchon		
410 05	HanBee CO., LTD	Ulsan		
410 06	Han Kuk Fibre Glass CO., LTD	Milyang		
410 07	Korea Halon CO., LTD	Kimpo		
410 08	Korea High Pressure Cylinder CO., LTD	Ichun		
410 09	Kyung Hee Steel CO., LTD	Taegu		
410 10	Nail CO., LTD	Hampyeong		
410 11	NGVI, INC	Chuncheon		
410 12	NK CO., LTD	Busan		
410 13	Sewang CO., LTD	Whasung		
410 14	Shin Heung Special Machinery Industry CO., LTD	Pyungtaek		SHINHEUNG
410 15	Shin Kwang Industrial NK CO., LTD	Chungju		
410 16	Sungshin Industrial CO., LTD	Pyungtaek		
410 17	Win Tech CO., LTD	Jincheon		

Country: LEBANON				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
422 01	Cie Industrielle du Gaz	Beyrouth		

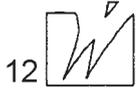
Country: MEXICO				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
484 01	Metalver			

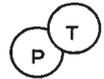
Country: MOROCCO				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
504 01	Sté Chérifienne D'installations Ferroviaires (S.C.I.F.)	Casablanca		SCIF
504 02	Sté Chérifienne des Pétroles (S.C.P.)	Rabat Siki Kacem		S.C.P.
504 03	Métaghreb	Mohammedia		TISSIRGAZ

Country: NORWAY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
578 01	RAGASCO AS	Raufoss	1990 →	

Country: POLAND				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
616 06	GZWM (Grodzkie Zakłady Wyrobów Metalowych)			GZWM
616 07	Towarzystwo Zakładów Metalowych B. Hantke Huta Aleksander	Sosnowiec	1882 → 1883	
	Milowitzer Eisenwerk AG	Sosnowiec	1883 → 1911	
	Walcownia Milowice	Sosnowiec	1911 → 1925	

Country: POLAND				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
616 08	Zakłady Wyrobów Kutych „Huta Milowice”	Sosnowiec	1925 → 1939 1945 → 1950	
			1950 → 1956	
			1956 → 1971	
616 09	Zakłady Przemysłu Precyzyjnego „Predom-Milmet”	Sosnowiec	1971 → 1975	
	Zakłady Przemysłu Precyzyjnego „Prema-Milmet”	Sosnowiec	1975 → 1981	
	Fabryka Łożysk Tocznych „Prema Milmet”	Sosnowiec	1981 → 1992	
	Fabryka Łożysk Tocznych „Prema Milmet” S.A.	Sosnowiec	1992 → 1996	
	Fabryka Butli Technicznych „Milmet” S.A.	Sosnowiec	1996 → 2008	
	Vitkovice Milmet S.A.	Sosnowiec	2008 →	

Country: PORTUGAL				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
620 01	Worthington Cylinders (formerly Progresso, Embalages Industriais de Gas)	Vale De Cambra	→ 1999	PROGRESSO
			1999	EIG
			late 1999 → 2001	WORTHINGTON
			2002 →	
620 02	Alfa Changed to Amtrol-Alfa Metalomecânica, S.A.	Guimarães — Portugal		ALFA
				
				
				AMTROL-ALFA
				M9701

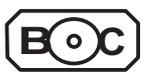
Country: SPAIN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
724 01	Fabio Murga	Valmaseda (Vizcaya)	1941 →	
724 02	Fabrica Nacional de Trubia	Trubia	1951 →	FABRICA DE TRUBIA
724 03	SEO			SEO
724 04	Société Babcock & Wilcox	Bilbao Gallinda-Sestao	1954 → 1988	B.W
724 05	Productos Tubulares	Bilbao	1988 → 2009	

Country: SWEDEN				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
752 01	Avesta Jernverks A B	Avesta	→ 1977	AVESTA
752 02	Primus-Sievert	Fien		PRIMUS
752 03	Composite Scandinavia AB	Piteå	1994 →	COMPOSITE SCANDINAVIA
				
752 04	ABB Power Technologies AB Plast	Piteå	1992 →	

Country: SWITZERLAND				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
756 01	Aluminium Schweiss Werk A G Schlieren	Schlieren	→ 1971	
756 02	Metallwaren Fabrik Zug	Zug	→ 1976	

Country: TUNISIA				
Code	Manufacturer Name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
788 01	Compagnie Générale de Metallurgie	Tunis		CGM
788 02	Société Générale Industrielle	Tunis		SGI

Country: TURKEY				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
792 01	B.K.S. Ithalat Ihracat San. ve Tic.Ltd.Sti			BKS
792 02	Bursan Bursa Sanayi Isletmeleri A.S.			BRS
792 03	MES Makina Elektrik Kimya Sanayi Anonim Sirketi			MES

Country: UNITED KINGDOM				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
826 01	Aga Signals	London		AGA
826 02	Air Products Ltd	Wrexham		
826 03	Bristol Aerojet Ltd	Bristol		B.A.J
826 04	British Aerojet Ltd	Bristol		B.A.J.V.
826 05	The British Oxygen Company BOC Ltd	London		
826 06	<p>Chesterfield Tube Company 1906–1972 (Joined Tube Investments Group) Changed to TI Chesterfield 1972–1988 Changed to UES Chesterfield Cylinders 1988 to 1997 (part of British Steel) Changed to UEF Chesterfield Cylinders Ltd. 1997–2001 (part of forgings group) Changed to Chesterfield Cylinders Ltd. 2001–2004 (part of Euro Cylinder Systems-Apolda)</p>	Chesterfield	1906 →	CTCO NOTE In ISO 21007-2:2005, RFID code 826 12 was also used with this mark
			1972 → 2004	
826 15	Changed to Chesterfield Special Cylinders Ltd.	Sheffield	2004 →	CTCO
826 07	Luxfer UK Ltd	Nottingham	1962 →	LUXFER
			1980 → 2005 (hoop-wrapped cylinders)	LUXFER GAS CYLINDERS LTD
			2001 →	
			1990 → 2001	
		Aldridge	1990 → 2001	LSC
		Aldridge	1980 → 2005 (hoop-wrapped cylinders)	

Country: UNITED KINGDOM				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
826 08	Metal Containers Ltd	Ellesmere Port		
826 09	Reynolds Tube Company Ltd	Birmingham		REYNOLDS
826 10	Rubery Owen & Company Ltd		→ 1981	A R O
826 11	Rubery Owen & Company Ltd		1981	RO
826 13	Van Leer Ltd (UK)	Ellesmere Port	→ 4/1982	VL
826 14	Lucas			LUCAS

Country: UNITED STATES				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
840 01	Acurex Corp	Mountainview, CA		ACUREX
840 02	Aetna Cylinders Incorporated	Détroit, MI		ACX
840 03	Amtrol	Rhode Island		M-1001 A
840 04	Bernzomatic	Medina, NY		BOM M-1004
840 05	Compressed Gas Cylinders Inc.	Los Angeles, CA		CGC
840 06	Coyne Cylinder Company	San Francisco, CA	1948 → 1989	COYNE 
	Changed to Taylor-Wharton	Memphis, TN	1957 → 1976	
	Changed to TW Cylinders LLC Changed to Norris Cylinder Company	Huntsville, AL	1975 →	
840 07	Creamery Package		1940 → 1945	CP

Country: UNITED STATES				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
840 08	Cuneo Press		1941 → 1945	
840 09	Cylinders, Inc.			INC
840 10	General Fire Extinguisher, Corp.	Northbrook, IL		
840 11	General Processing			GM & DC GPC & GPD
840 12	Golay & Co			LEE, CONV
840 13	Goss Gas Co			GOSS, CGC
840 14	Harrisburg Steel Corporation Changed to Taylor Wharton Iron and Steel Company (see 840 32)	Harrisburg, PA		
840 15	HTL Industries, Inc. Advanced Technology Div.	Duarte, CA		
840 16	Independent Engineering Company	O'Fallon, IL		
				IECO
840 17	Kargard Industries	Marinette, WI		KAR
840 18	Lee Cylinders Inc.	Cambridge City, IN		CONV
840 19	The Linde Air Products Company	New York		POL
				P
840 20	Luxfer USA Ltd	Riverside, CA		LUXFER
840 21	The Marison Company	South Elgin, IL		

Country: UNITED STATES				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
840 22	National Cylinder Gas Company	Office: Chicago, IL Factory: Milwaukee, WI		NCG
				NCGC
840 23	National Tube Company	Pittsburgh, PA		
840 24	Norris Thermador Company			
840 25	Philips Industries			.P.I.
840 26	Pressure Park Inc.	Connecticut & Tennessee		M-1002 P
840 27	Pressed Steel Tank Company	New York Milwaukee, WI		
840 28	Scaife Company		1930 → 1945	SCAIFFE
840 29	Sprague Cylinders		1966 → 1976	SLPG
840 30	Steel Cooperage			LEE SERAC
840 31	Superior Air Products Company	Newark, NJ		SAPCO
840 32	Taylor Wharton Iron and Steel Company Changed to TW Cylinders LLC	Harrisburg, PA	1902 → 6/2010	
		High Bridge, NJ	Early 1900s → 1971	
		Easton, PA	1915 → 1983	
840 33	Tragessor Copper			
840 34	US. Cylinders	Citronelle, AL		UC
840 35	US. Steel Corp. Christy Park Works	McKeesport, PA		US

Country: UNITED STATES				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
840 36	Warren Brazing Company	Cranford, NJ		
840 37	Walter Kidde & Company	Belleville, NJ		WK
				LRFS
840 38	Weatherhead			WCO
840 39	Western Sales & Testing, Inc.	Amarillo, TX		AMA
840 40	Worthington Cylinders	Columbus, OH		WORTHINGTON
				WII
			2002 →	01 
		Claremore, OK	2002 →	02 
		Midland, GA	2002 →	03 
		Jefferson, OH	2002 →	04 
		Citronelle, AL	2002 →	05 
		Westerville, OH	2002 →	06 
	Chilton, WI			
840 42	Luxfer Gas Cylinders Ltd	Graham, NC Riverside, CA		M4141
840 43	Hydrospin (a division of Luxfer, Inc.)	Huntington Beach, CA		M5400
840 44	TW Cryogenics	Theodore, AL		M4081
840 45	FIBA Technologies, Inc.	Millbury, MA		M5635 FIBA
840 46	CP Industries	McKeesport, PA		M8001 CPI
840 47	Amtrol	Paducah, KY		M1144

Country: UNITED STATES				
Code	Manufacturer name	Location of manufacturing plant/facility	Year(s) of manufacture	Manufacturer's mark
840 48	Norris Cylinder Company	Longview, TX	1981 →	 or M0714
840 49	Manchester Tank & Equipment CO			M4499 or M4502

Annex B (informative)

Instructions to revise list of manufacturer marks

For the instructions to provide corrections, updates, or new information, use the following link to the ISO Standards Maintenance Portal: <http://standards.iso.org/iso/tr/17329/>.

Annex C (informative)

Current list of codes and identification marks for gas cylinder manufacturers

For the most current list of list of codes and identification marks for gas cylinder manufacturers, use the following link to the ISO Standards Maintenance Portal: <http://standards.iso.org/iso/tr/17329/>.

Bibliography

- [1] ISO 21007-1, *Gas cylinders — Identification and marking using radio frequency identification technology — Part 1: Reference architecture and terminology*
- [2] ISO 21007-2, *Gas cylinders — Identification and marking using radio frequency identification technology — Part 2: Numbering schemes for radio frequency identification*
- [3] ISO 13769, *Gas cylinders — Stamp marking*

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