



Technical Information Sheet 18

Revision 2: 2013

Gas Equipment Inspection / Replacement Date Marking

Objective

Members have expressed a view that some manufacturers and suppliers use various systems of date marking or inspection / replacement stamps to identify the age of industrial gas equipment. This causes confusion sometimes making it difficult to establish the age of equipment, which is required to be known to comply with various British Compressed Gases Association (BCGA) Codes for maintenance recommendations. BCGA Code of Practice 7 provides guidance on the maintenance requirements and the periodicity between maintenance for industrial gas equipment.

Scope

Industrial pressure regulators, flashback arrestors, pipeline safety relief valves and high pressure flexible hoses attached to mobile systems or manifolds.

Terminology

Pressure regulator.

Fitted to the outlet of the gas cylinder valve or manifold, the pressure regulator reduces the pressure of the gas from the cylinder pressure to the lower pressure required for the operation of the process equipment.

Flashback arrestor.

A device which arrests a flame front (caused by flashback or decomposition) and which is suitable for the most severe type of flame which may occur, i.e. detonation.

High-pressure flexible hose.

A flexible connection between the cylinder valve and manifold header.

Date Codes

The following pages show for each of the main BCGA member companies who supply such equipment how their system for date coding operates.

1. Gas Control Equipment Ltd.

For further information: www.gcegroup.com



Regulators



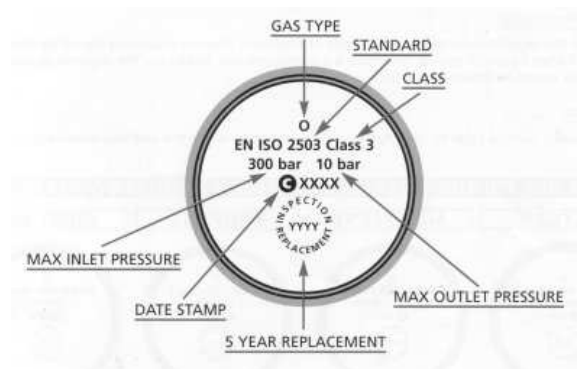
Marking on rear face
(see Figure 1.3)

Figure 1.1: Series 300 Multi-Stage Regulators



Marking on rear face
(see Figure 1.3)

Figure 1.2: Series 300 Multi-Stage Regulators



See also
Table 1.1

Figure 1.3: Example of marking on the rear face of a regulator

Flashback Arrestors



Figure 1.4: Resettable 36ec Flashback Arrestors

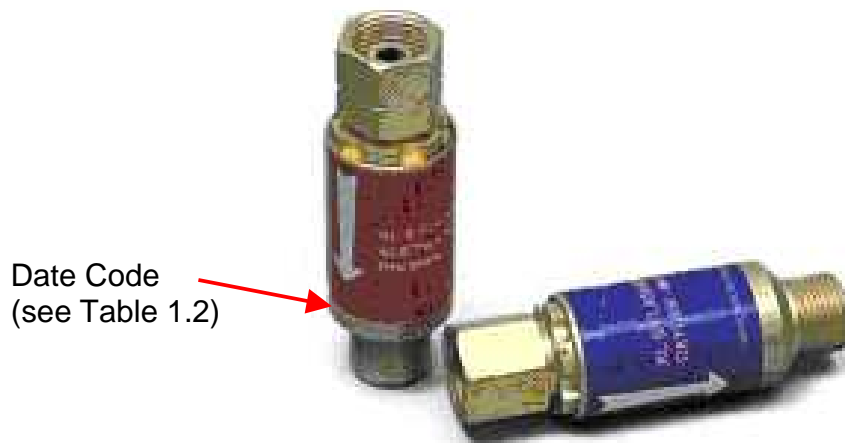


Figure 1.5: Barrel XL5 Flashback Arrestors

2. Gas-Arc Group Ltd

For further information: www.gas-arc.co.uk



Regulators

Single-Stage Regulator

Inspection/Replacement date is marked on the side of the regulator body, next to the inlet connection as shown in Figure 2.1.

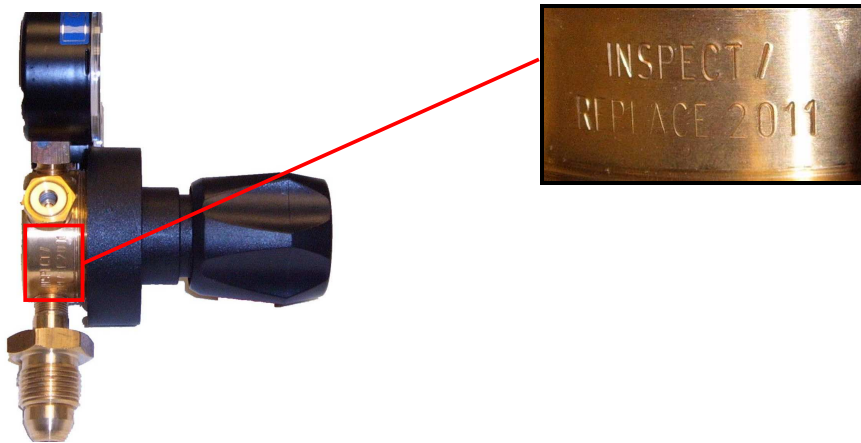


Figure 2.1: Single-Stage Regulator

The mark in Figure 2.1 identifies that the product is due for replacement by 31st December 2011.

Multi-Stage Regulator

Inspection/Replacement date is marked on the side of the regulator body, next to the inlet connection as shown in Figure 2.2.

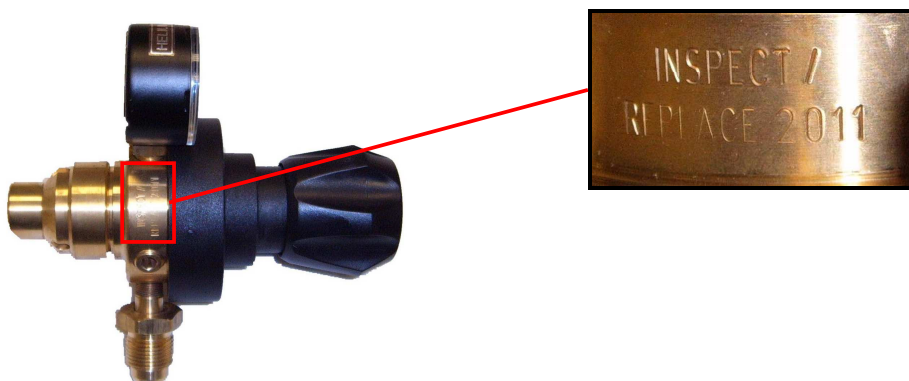


Figure 2.2: Multi-Stage Regulator

The mark in Figure 2.2 identifies that the product is due for replacement by 31st December 2011.

Flashback Arrestors

Model GA-D99 Flashback Arrestor

All Gas-Arc Flashback Arrestors are marked with the date of manufacture shown as month and year. The example in Figure 2.3 is marked “07 06” and would have been manufactured in July 2006.

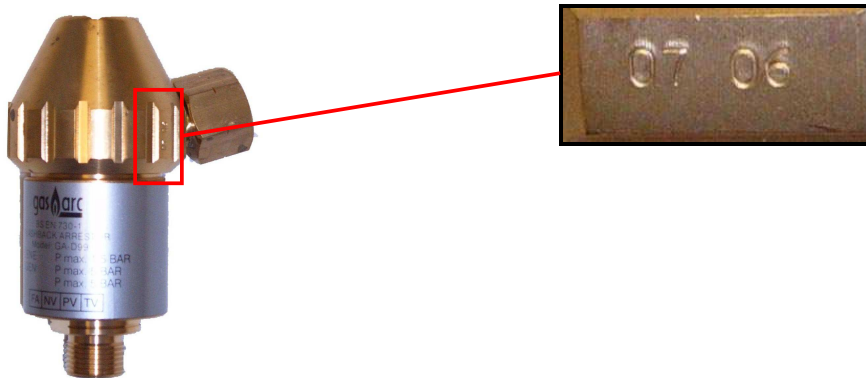


Figure 2.3: Model GA-D99 Flashback Arrestor

This product would be due for replacement five years from the end of the year of manufacture i.e. 31st December 2011.

Model GA-D97 Flashback Arrestor

All Gas-Arc Flashback Arrestors are marked with the date of manufacture shown as month and year. The example in Figure 2.4 is marked “07 06” and would have been manufactured in July 2006.

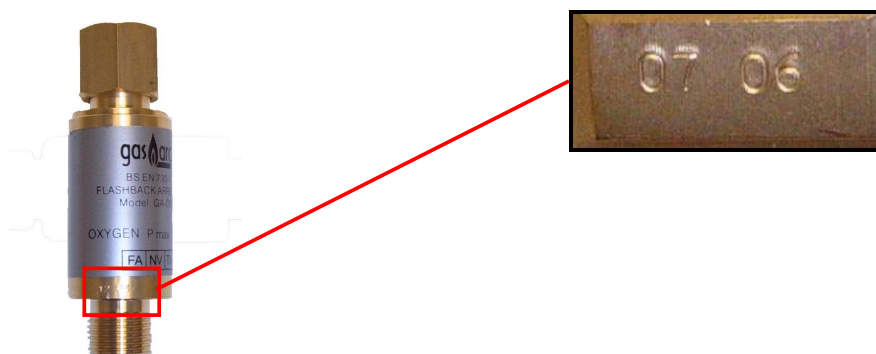


Figure 2.4: Model GA-D97 Flashback Arrestor

This product would be due for replacement five years from the end of the year of manufacture i.e. 31st December 2011.

High Pressure Flexible Hose

Gas-Arc High Pressure Flexible Hoses are marked with their recommended replacement date, shown below as 10/2011 in Figure 2.5.

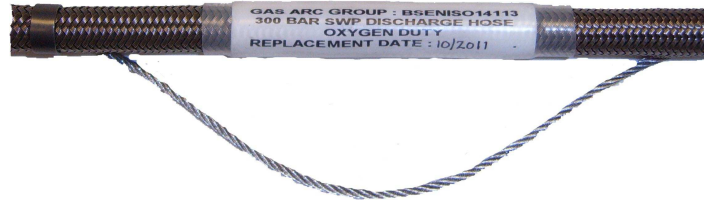


Figure 2.5: High Pressure Flexible Hose

This hose would be due for replacement on 30th October 2011.

3. BOC Gases



For further information: www.boconline.co.uk

Member of The Linde Group

Regulators

All BOC UK regulators are stamped with the recommended year of replacement, which is approximately six years after the year of manufacture. BOC Series 8500 laboratory regulators are stamped around the sand-blasted body of the regulator. Other BOC Series regulators will be stamped on the flat, sand-blasted body back as shown in Figure 3.1.



Figure 3.1: BOC Regulator Stampmarking

Flashback Arrestors

All BOC flashback arrestors are stamped with a two letter code showing the month and year in which they were manufactured. See Table 3.1.

The BOC Standard and Premier Flashback arrestors carry the two letters below the BOC label, on the main body of the unit. On the BOC Resettable, the letters are found on the smooth portion below the ridges around the main body.

As an example, a flashback arrestor marked A3 would have been manufactured in January 2013.

Month:	A = January	G = April	P = July	V = October
	B = February	K = May	S = August	X = November
	E = March	N = June	T = September	Z = December
Year:	A = 1990	K = 1998	V = 2006	4 = 2014
	B = 1991	L = 1999	W = 2007	5 = 2015
	C = 1992	M = 2000	X = 2008	6 = 2016
	D = 1992	N = 2001	Z = 2009	7 = 2017
	E = 1994	P = 2002	0 = 2010	8 = 2018
	H = 1995	S = 2003	1 = 2011	9 = 2019
	I = 1996	T = 2004	2 = 2012	
	J = 1997	U = 2005	3 = 2013	

Table 3.1: BOC marking format for flashback arrestors

Nexus

Regulators

The Nexus range of regulators will be stamped as shown in Figure 3.2 and the making format is shown in Table 3.2.

As an example, a regulator marked EG would have been manufactured in July 2013.



Figure 3.2:
Nexus Regulators

Flashback Arrestors

The Nexus range of flashback arrestors are marked in accordance with Table 3.3 and as illustrated in Figure 3.3. They have a serial number above the flow direction arrow with a three digit date code below. As an example, a flashback arrestor marked E3C = 2013 March. The product label in Figure 3.3 is provided with a section for marking the last inspection date (year/ month).

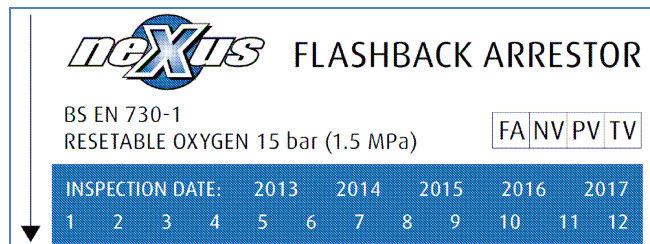


Figure 3.3: Nexus flashback arrestors marking scheme

Blowpipes

The Nexus range of blowpipes will be stamped as shown in Figure 3.4 and the making format is shown in Table 3.2



Figure 3.4:
Nexus Cutting Blowpipes

Month:	A = January B = February C = March D = April E = May F = June	G = July H = August J = September K = October L = November M = December
Year:	<u>E</u> = 2013 <u>G</u> = 2014 <u>H</u> = 2015 <u>J</u> = 2016 <u>K</u> = 2017 <u>L</u> = 2018	<u>M</u> = 2019 <u>N</u> = 2020 <u>P</u> = 2021 <u>Q</u> = 2022 <u>R</u> = 2023 <u>S</u> = 2024

Table 3.2: Nexus marking format for regulators and cutting blowpipes.

Month:	A = January B = February C = March D = April E = May F = June	G = July H = August J = September K = October L = November M = December
Year:	E3 = 2013 E4 = 2014 E5 = 2015 E6 = 2016 E7 = 2017 E8 = 2018	E9 = 2019 F0 = 2020 F1 = 2021 F2 = 2022 F3 = 2023 F4 = 2024

Table 3.3: Nexus marking format for flashback arrestors

RYVAL

Regulators

The RYVAL range of regulators will be stamped as shown in Figure 3.5. The date shown is the year by which they are to be replaced.



Figure 3.5: RYVAL Regulators

Flashback Arrestors

The RYVAL range of flashback arrestors are marked in accordance with Figure 3.6. These flashback arrestors are marked with the year of manufacture.

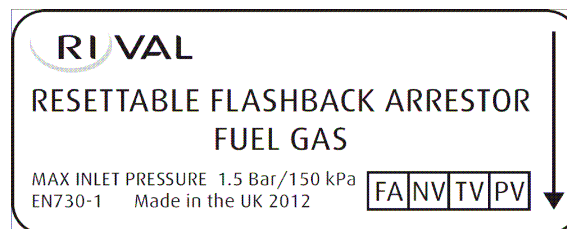


Figure 3.6: RYVAL flashback arrestors marking scheme

Blowpipes

The RYVAL range of blowpipes will be stamped as shown in Figure 3.7. These blowpipes are marked with the year of manufacture.

On the example shown "1010" - this is week 10 of 2010.



Figure 3.7: RYVAL Cutting Blowpipes

4. Aeroflex Hose & Eng Ltd

For further information: www.aeroflex.co.uk

The Aeroflex logo features the word "aeroflex" in a bold, black, sans-serif font. A teal-colored swoosh underline starts under the 'a', goes under the 'e', and then curves back up under the 'x'. The background of the logo is a light teal with a subtle grid pattern.

High pressure flexible hose assemblies

Typical data on coloured sleeving. Individual customers specify their marking requirements; however, where possible the following data is used:

- Design pressure.
- Nominal bore.
- Nominal length.
- Test date.
- Test pressure.
- Batch number.
- When allowed the Aeroflex name or initials.
- Any relevant specification and the gas duty.



Figure 4.1: Aeroflex hose identification – Sleeve

The colour selection unfortunately differs from customer to customer; but wherever possible yellow is used for oxygen and unlimited shelf life and blue is used for inert gases.

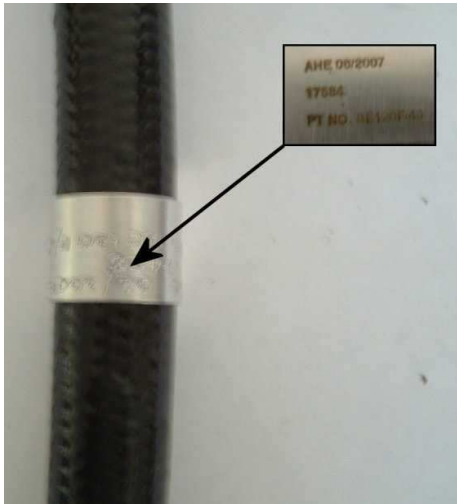


Figure 4.2: Aeroflex hose identification – Metal tag



Figure 4.3: Aeroflex hose identification – Hard stamped

Figure 4.2 is an example of a metal tag used where a coloured polyoflin sleeve cannot be used such as cryogenics etc. (Variable data, but always AHE (Aeroflex Hose & Eng Ltd.), batch number and date).

Additionally, as well as coloured sleeving and metal tagging the product will be hard stamped (Figure 4.3) or roll marked or etched (Figure 4.4) with the following data: AHE, Batch No. and Month & Year.



Figure 4.4: Aeroflex hose identification – Roll marked or etched

5. Black Teknigas Ltd.

For further information:
www.blackteknigas.com



Regulators

Tekniflo Autochange Regulator

Replacement date is marked on the top of the regulator body, next to outlet connection, where shown in Figure 5.1.

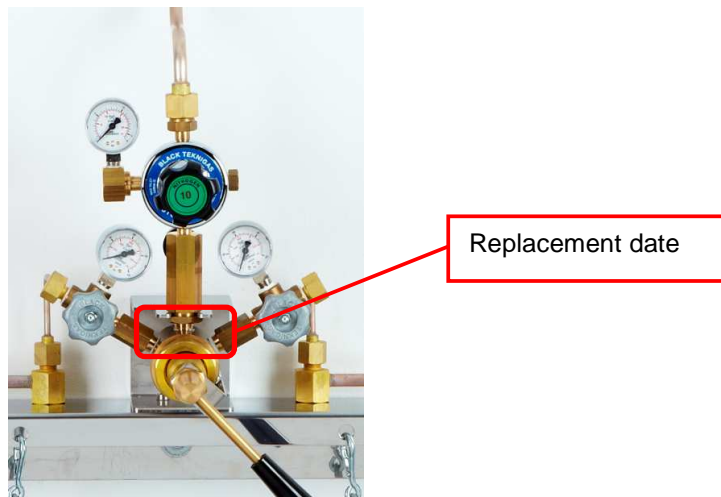


Figure 5.1: Tekniflo Autochange Regulator

Multi-Stage Regulator

Replacement date is marked on the side of the regulator body, where shown in Figure 5.2.

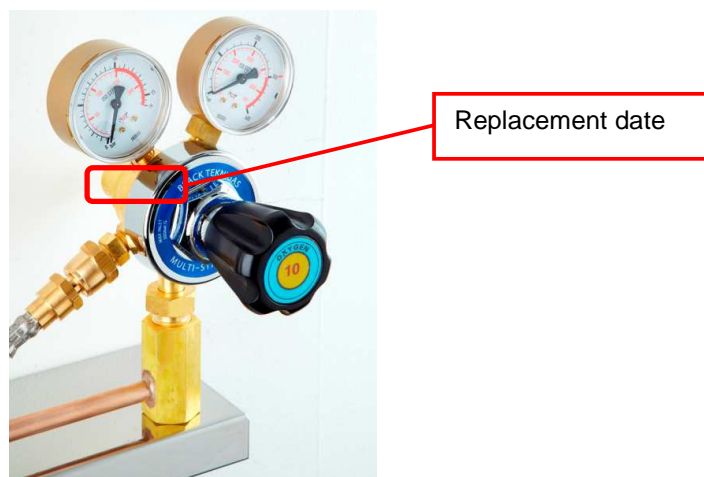


Figure 5.2: Multi-Stage Regulator

Single-Stage Regulator

Replacement date is marked on the side of the regulator body, where shown in Figure 5.3.

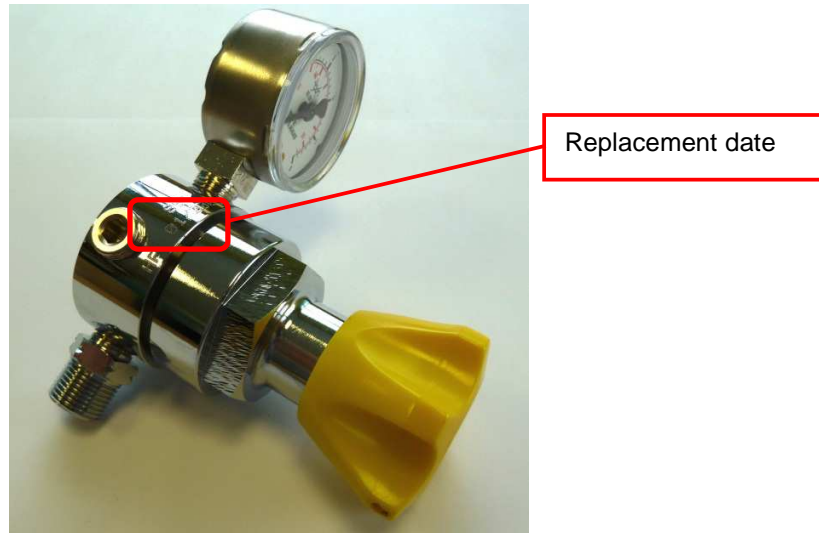


Figure 5.3: Single-Stage Regulator

Flashback Arrestor

Model DGN MC00197 Flashback Arrestor

Black Teknigas Ltd Flashback Arrestors are marked with the year of manufacture, where shown in Figure 5.4. The product would be due for replacement five years from the end of the year of manufacture.



Figure 5.4: Model DGN MC00197 Flashback Arrestor

6. Air Liquide Welding Ltd.



For further information:

<http://www.airliquidewelding.com>

Regulators

Figure 6.1 showing the stamping on a regulator, indicating the month and year of manufacture.



Figure 6.1: Air Liquide Regulator Marking

Figure 6.2 provides a close-up view of the stamping on a regulator, showing month and year of manufacture



Figure 6.2: Air Liquide Regulator Marking – Close-up

Flashback Arrestors



Figure 6.3: Air Liquide Flashback Arrestor Marking

Citoguard R5 resettable flashback arrestors, showing year of manufacture marking.

For more information:

Please refer to our website: www.bcgaco.uk

BRITISH COMPRESSED GASES ASSOCIATION
4a Mallard Way, Pride Park, Derby, DE24 8GX
Tel: +44 (0) 1332 225120
Fax: +44 (0) 1332 225101
E-mail: bcga.admin@bcga.co.uk

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