

# Speciality Gases Equipment



# Speciality gases equipment

BOC has a range of pressure regulators and associated gas handling equipment specifically designed for speciality gases.

We offer bespoke equipment manufacture to meet your specific requirements, with all equipment being assembled and tested to order at our dedicated production facility in the UK.

## What is special about speciality gas equipment?

- It maintains the purity of your gas
- It protects the composition of your gas mixtures
- It is important for safety

## Why should you buy from BOC?

- Best quality/performance in the market
- ISO accreditation
- Traceable products
- Each regulator is assembled to your individual specifications, giving unrivalled flexibility to meet your exact requirements
- Local stock enables short lead times of 3-4 days
- Technical advice to get the right regulator for your application
- Each product is individually gas tested with helium to meet the leak rate specification
- Cleaned as minimum standard suitable for oxygen service
- Clean room assembly, where required



# BOC BASELINE<sup>®</sup>+ Series C106

This range of specialist regulators is intended for primary pressure control of high purity gases or liquefied gases (typically N5.0, 99.999%) and many gas mixtures.

- Available in single or two stage.
- Choose from many inlet and outlet options.
- Typically used for carrier gases, zero and span calibration gases, high purity chamber pressurisation and control of liquefied hydrocarbon gases.
- This range can be equipped with a diaphragm valve.
- For mild corrosive mixtures, a stainless steel option is available



## Technical data

Max primary pressure	207 or 310 bar	3000 or 4,500 psi
Outlet pressure	0-1 bar	0-15 psi
	0-3.5 bar	0-50 psi
	0-7 bar	0-100 psi
	0-10.5 bar	0-150 psi
	0-17 bar	0-250 psi
	0.3-35 bar*	5-500 psi

\*available as single stage regulator only

## Material

Body	Chrome-plated brass barstock or 316L stainless steel
Bonnet	Chrome-plated die cast zinc
Seat	PCTFE
Filter	10 micron sintered bronze or 10 micron stainless steel mesh filter (used in stainless steel regulators)
Diaphragm	316L stainless steel
Internal seals	PTFE

# BOC HP Series HP1500/1700

This range of specialist regulators is intended for primary pressure control of ultra high purity (up to N6.0, 99.9999%) gases or liquefied gases and high specification gas mixtures, typically with low levels of reactive components.

Advanced features make it suitable for the most demanding analytical requirements.

- Available in single or two stage.
- Choose from many inlet and outlet options.
- Bar stock brass or stainless steel body
- Hastelloy diaphragm with metal to metal seal for high leak integrity
- Precise, accurate pressure control
- Quick purging through low internal volume and internally threadless nozzle assembly
- 10 micron inlet filter for increased reliability
- Outlet isolation valve, outlet compression fitting and relief valve
- Option of fitting a purge
- Vacuum leak tested in addition to helium pressure test



## Technical data

Max primary pressure	230 bar	3300 psi
Outlet pressure	0.1–0.7 bar	0–10 psi
	0.1–2.0 bar	1–30 psi
	0.1–5.2 bar	1–75 psi
	0.2–17 bar	3–250 psi
	0.3–35 bar*	5–500 psi

## Material

Body	Brass barstock or 316L stainless steel
Bonnet	Nickel plated brass
Seat	PCTFE
Filter	10 micron copper and phosphor bronze or 10 micron stainless steel mesh filter (used in stainless steel regulators)
Diaphragm	Hastelloy C-22

\*available as single stage regulator only

# Additional products and services

## Application specific regulators

	Series
Corrosion resistant regulators: for HCl, Cl <sub>2</sub> and semi-conductor gases	
Laboratory scale applications	HP1500T
Process applications and F <sub>2</sub> mix	HP455
Point of use or in-line regulator	
Point of use BASELINE <sup>®</sup> + series	R104
Line regulator high purity series	HP1900
Heated regulator: for CO <sub>2</sub> , N <sub>2</sub> O and mixtures containing CO <sub>2</sub> or N <sub>2</sub> O	L130
Very Low Outlet pressure Regulator (<1psi)	L700
Very High Outlet Pressure	
Up to 172 bar	HP1800
Up to 300 bar	C492
High Flow Laboratory (<N4.6 gases) Regulator	C202
Flow Regulator	CFR/MOTMIX
Laser and Foodfresh Gas Equipment	
Cylinder-mounted and panel options	C106X

## Associated gas handling equipment

Changeover manifolds	Manual or automatic
Cylinder mounted control valves	Where no pressure reduction is required
Flow meters, pressure gauges	Providing measurement of gas flow and pressure
In-line control valves	Flow, isolation, non return
Particle filters	Sub-micron filtration
Tube and pipe fittings	Compression and NPT pipe fittings available



### Equipment servicing and repairs

In line with CP7 guidelines, pressure control equipment should be serviced or exchanged every five years.

- From our dedicated facility in the UK, we provide servicing and repair of our speciality gases equipment range.
- Equipment is returned to you with 'as new' shelf life.

We have many more regulators and associated gas handling equipment options in our range. Please contact us to discuss your requirements.

# How to buy



## BOC technical support “Ask the expert”

Please send your technical questions to us. Our experts are here to help.

E-mail your questions with “Ask the Equipment Expert” and your name/organisation in the subject field.

Phone 0800 02 0800

Fax 0800 13 6601

[specialproducts@boc.com](mailto:specialproducts@boc.com)

[boconline.co.uk/speciality-equipment](http://boconline.co.uk/speciality-equipment)

### Please provide the following information:

Gas use/inlet	Specific gas or mixture to be used Pressure from cylinder or line Connection to cylinder or line BS: cylinder connections standard, but DIN, CGA and compression fittings available
Outlet	Pressure required to deliver to process. Connection to process line. 1/8, 1/4 and 6mm compression fitting is standard but other fittings also available.
No of stages	Single Stage: Typically select if intermittent use Two Stage: Typically select for consistent pressure during extended use
Flow rate	The maximum flowrate that needs to be delivered by the equipment
Options	Purges, filters and non return valves are some of the options available

## BOC Limited

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