

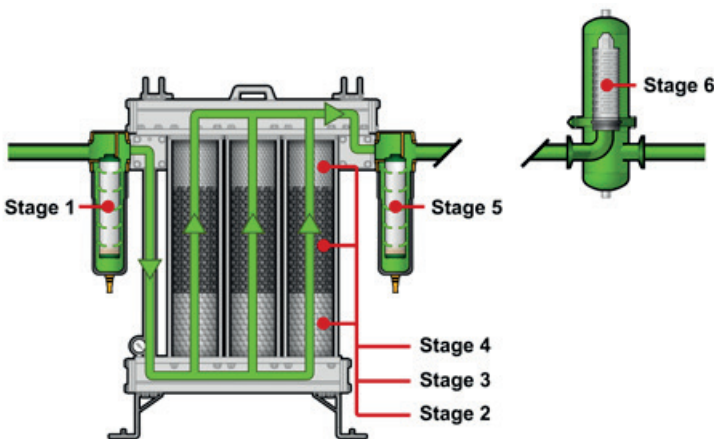
PCO2: Sterile Filtration Options

The Parker PCO2 system is a Quality Incident Protection device that is installed to protect against poor quality contaminated gas which may pass through the supply chain and into the beverage. Established within the global bottling community for over 20 years, Parker are the number one choice for CO₂ quality incident protection and are the trusted partner for bottling plants across the globe.

The PCO2 is a static adsorption bed constructed from specially selected adsorbents to remove trace contamination from CO₂. Designed as a quality incident protection device; it will treat 'out of specification' CO₂ to return it back to within the limits of the specification. The PCO2 system will treat CO₂ with up to 10 times the ISBT / EIGA levels of the named contaminants for a specified quantity of processed CO₂ gas.



Every Parker model is supplied with integrated filtration as standard. Stage 1 and stage 5 is provided at both the inlet and outlet points of the system. Pre filtration ensures protection of the adsorbent beds from Non-Volatile Organic Residue (NVOR) that may be present in the gas supply and other contaminants down to 0.01 micron. Post filtration ensures no carry-over of particles from the adsorbent beds to 0.01 micron particle filtration.



Stage 1

0.01 micron particle filtration
Removal of non-volatile organic residue (NVOR) and other contaminants down to 0.01 ppm

Stage 2

Removal of water vapour and partial removal of hydrocarbons

Stage 3

Primary removal of aromatic hydrocarbons (Benzene, Toluene etc and Acetaldehyde)

Stage 4

Removal of sulphur compounds (COS, H₂S, DMS etc)

Stage 5

0.01 micron particle filtration

Stage 6*

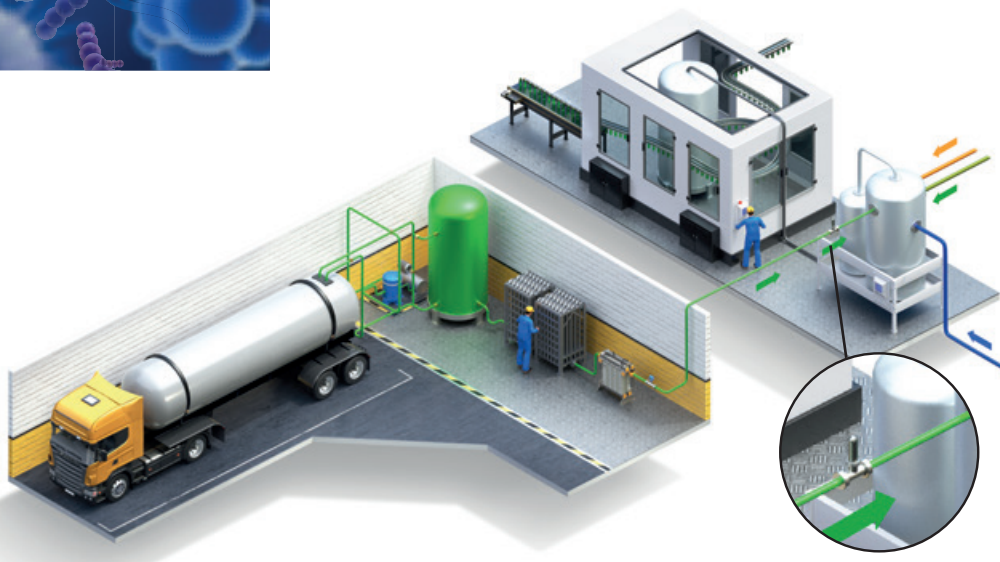
Point of use PHB beverage grade housing and HIGH FLOW BIO-X sterilising grade filter



Sterile Filtration*

In certain conditions, microorganisms can be present in the CO₂ piping and storage vessels this can lead to contamination of the product. Sterile filtration may be required in these applications to prevent the introduction of microbial contaminants, such as moulds and bacteria, via the CO₂. These conditions may occur where the source of the CO₂ is derived from a fermentation process or if the source of CO₂ is unknown. In these conditions Parker supply a solution with an optional sterile grade 6th stage.

An optional - Sterilising Grade gas filter is typically installed at point of use, as close to the filling operation as possible.



PARKER HOUSING CODE	PHB601K7SH77M8T0151	PHB60117SH77M8T0151	PHB601ATSH77M8B0101
CODING	PHB 6 01 K 7 S H 77 M 8 T015 1	PHB 6 01 1 7 S H 77 M 8 T015 1	PHB 6 01 AT S H 77 M 8 B010 1
DESIGN PRESSURE (bar)	16	16	16
CARTRIDGE STYLE	Ø 72 mm - C-Style / 226	Ø 72 mm - C-Style / 226	Ø 55 mm - Truseal / 126
NOMINAL CARTRIDGE HEIGHT (inch)	5"	10"	5"
SEAL MATERIAL	Silicone	Silicone	Silicone
CLOSURE	Double bolted clamp	Double bolted clamp	Double bolted clamp
"INTERNAL ROUGHNESS (µm RA) (Guaranteed down stream only)"	< 0.8	< 0.8	< 0.8
INLET / OUTLET	Tri-clamp (ASME BPE) DN 1.5"	Tri-clamp (ASME BPE) DN 1.5"	BSPF 1"
WITH / WITHOUT PLUGS & PTFE SEALS	With	With	With

Recommended reading:

PCO2 Carbon Dioxide Quality Incident Protection Systems for the sparkling beverage industry - production plant
PCO2 - Quality Incident Protection - FAQ's
PCO2 - Shepley Spring
CO2 Quality Incident Protection for Fountain Drink Dispense

PISPCO2
PISPC02FAQ
M.A.P
T.A.P

For full technical information regarding the Parker sterile CO₂ housing range and sizing for your applicational needs please contact bioscience.emea@parker.com



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