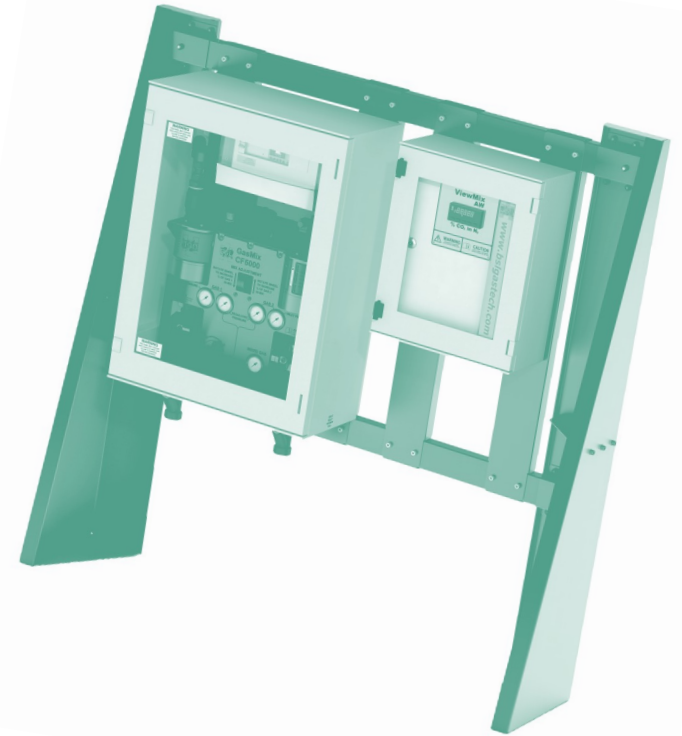


Catalogue 2021 / 2022

Short Form



BSL
GAS TECHNOLOGIES



Mix Well, Choose BSL!

www.bslgastech.com

WHY CHOOSE BSL?

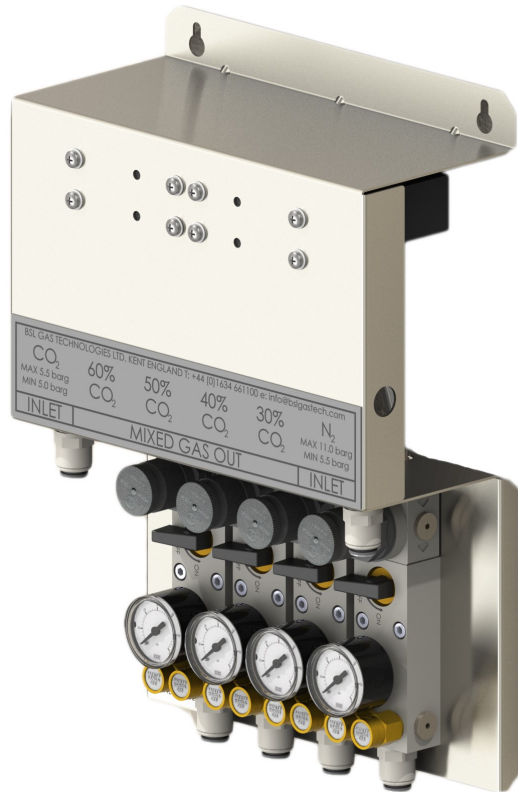
BSL has been delivering solutions to the industrial gases community worldwide for 30 years. If you are using, delivering, generating or installing mixed gas systems, we will have an excellent solution for you. If you can't find exactly what you are looking for, we will design and build it for you using our core products and engineering know how.

We have equipment of Gas Mixing Valves, Gas Flow Control Valves, Gas Mixing Panels and systems, Gas Analysis, Gas Filtration and Gas Safety and Gas Management Systems.

We also manufacture customer specific and branded designs. Thus making the equipment more personal to your company. We provide Equipment Refurbishment programs too which we tailor to suit what you want and need. If you need spare parts, we sell components from our own stocks for quick deliveries. We source the components from good quality companies and do quality assurance checks as well. Since we are buying them ourselves, we have an excellent number of sources. We offer other services such as calibration, servicing and re-certification of equipment.

We are a UK based company but can usually deliver to every major country in the world. Our equipment is extremely hard-wearing and reliable and needs little attention once installed. Our Gas Mixing Panels will work in temperatures between -10°C (14°F) and $+50^{\circ}\text{C}$ ($+122^{\circ}\text{F}$) so they will have no problems working in most climates.

Cellar Mix



The Cellar Mix range of our Gas Mixing panels include a Gas Blender/Mixing Valve, a stainless steel formed back-plate with mounting holes, inlet and outlet connections and low pressure outlet gas regulators.

The Cellar Mix Panels are supplied already pre-set and certified for their mixed gas settings.

There are many variations on this theme for you to choose from. We have customers that take lots of different pre-set outlets each at low flows of 2 or 3 m³/hr. We also have panels that can mix gases at 80 to 100 l/min each mix.

You can have up to 4 different outlets from one of these panels and some of our customers place two or three of these panels together!

This makes the Cellar Mix very versatile and easy to use.



GMB, GMT & Twin Mix

The Gas-Mix GM range of Gas Mixing Panels, use our Gas Blenders added to a more compact but completely user friendly package.

These assemblies include a Gas Blender, inlet and outlet connections and low pressure outlet gas regulators. They also use twin ferrule connections and hard-wearing design.

These units are available to mix 2 gases from the typical industrial gases. They are supplied already pre-set and certified for their mixed gas settings or you can have an adjustable version. We now have a Twin Mix unit as well, this gives you 2 different mixed gas ratios that you can easily switch from one to the other.

The GMB unit will typically give you flow of around 10 m³/hr maximum. Whereas the GMT unit will typically give you flow of around 20 m³/hr maximum.

Gas-Mix FW

The Gas-Mix FW range of our Gas Mixing Panels are a very popular design and extremely versatile.

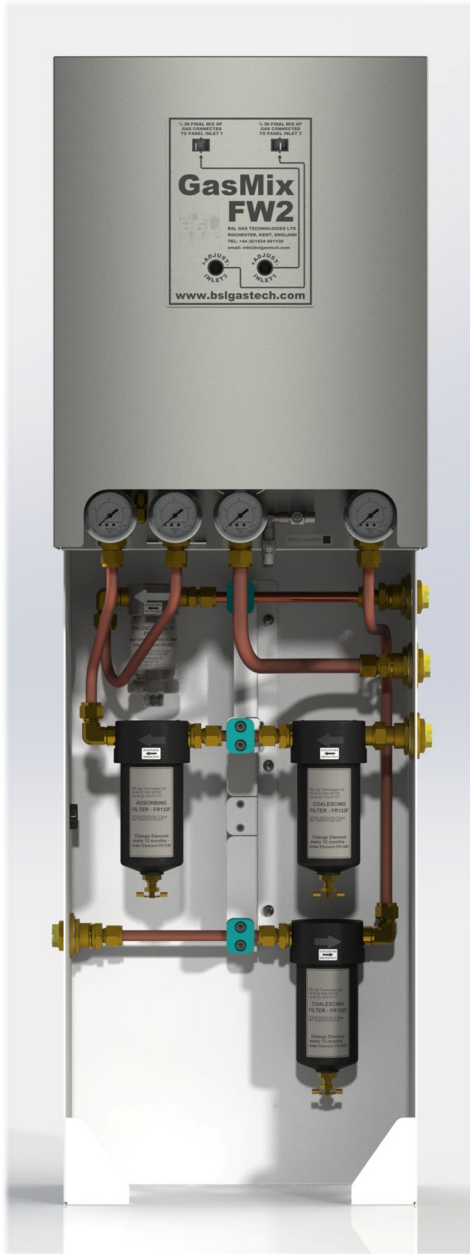
The Gas-Mix FW 1, 2, 3 are available for medium to high flows of mixed gas, 25, 50 and 100 m³/hr at normal pressures.

They are available in 2 and 3 gas designs and come as pre-set or adjustable.

The panels are normally wall mounted and are often located outside with the gas supply system. However they can also be used inside and we have the adjust-a-frame for if you don't want to fix the panel to your walls. Alternatively, you could have Gas Filters included in your set up to protect your process. This set up is configured into a free-standing unit, like the one in the picture called the FWX.

These panels are rated at 30 bar g, for pressure safety reasons, although they are typically working in applications with pressures around 10 to 12 bar g.

A feature of these units is that they can be upgraded. That is, we can supply them to do 25 m³/hr flow, but with the addition of more of our Gas Blenders we can take them up to a 100 m³/hr flow.



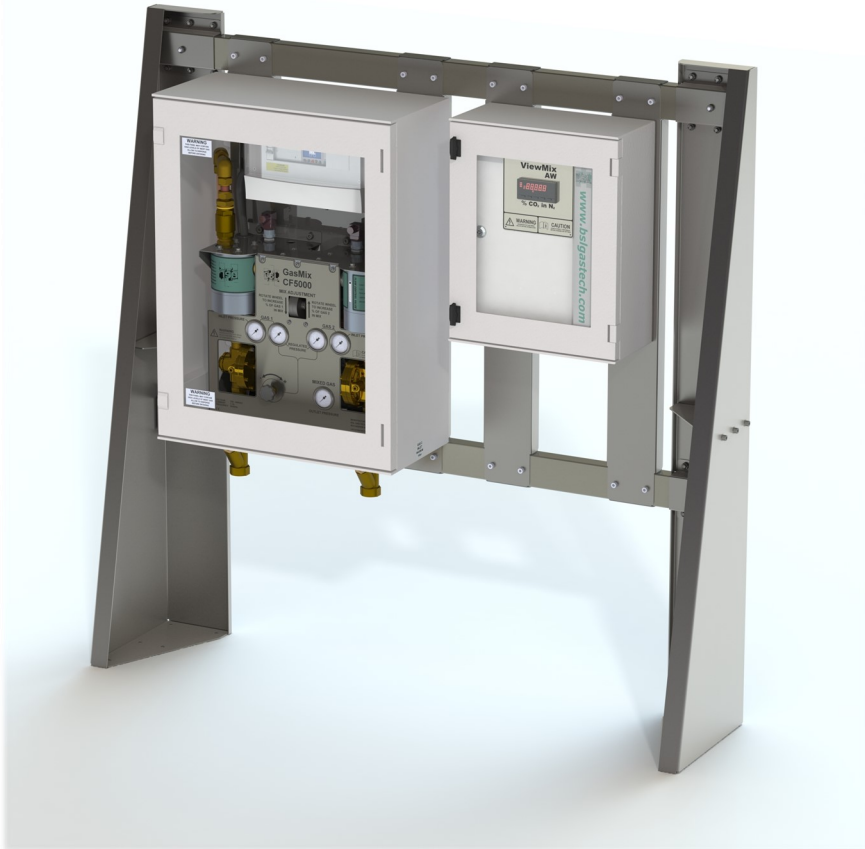
CF 5000

The CF 5000 is for very high flows greater than 250 m³/hr.

This Gas Mixing System uses either our Gas Flow Control Valves or our High Flow Gas Mixing Orifice blocks to go into a mixed gas storage tank. This will then feed the process on demand.

In this scenario a buffer tank/ storage tank and electrics are required. However for very large installations the additional costs associated with running these parts are a smaller part of the overall package and begin to become cost effective very quickly.

To keep costs down further, the buffer tank and any other peripheral equipment can be supplied locally and it is always our suggestion for that to be looked at first. There is little point in shipping large and heavy tanks around the World, especially if they are being made to an acceptable standard locally.





Hand held CO₂ Gas Analyser

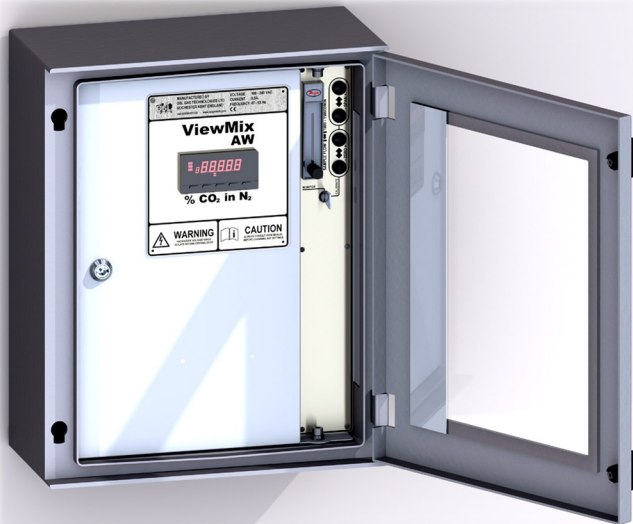
The Beer-Check or Hand held CO₂ Analyser units are used to measure the CO₂ content in CO₂ / Nitrogen gas mixtures used in the Brewing, Food and Beverage Industries. They are used to check mixes from gas cylinders with adaptors, mixtures from Gas Mixers and from Gas Generation Systems too. The measurement range is 0 to 100% CO₂.

This unit uses ultrasonic technology to measure how much CO₂ is in a mix.

Gases

0 to 100% CO₂ in Nitrogen

ViewMix Gas Analyser



BSL have a range of Wall Mounted Mixed gas monitors and analysers.

We have simple display and alarm only systems and we have the View-Mix range, which are designed to give you an analog output 4-20mA signal. This means the output can be put into data logging software.

Systems are available for the following mixtures of gases.

Gases

0 to 100% CO₂ in Nitrogen

0 to 30% CO₂ in Nitrogen

0 to 30% CO₂ in Argon

0 to 25% O₂ in Argon



Coalescing filters for the typical Industrial gases
Pressures to 30 bar g
0.01 micron filter element size
-10°C to + 50°C
Spare elements available



Adsorbing filters for the typical Industrial gases
Pressures to 30 bar g
0.01 micron filter element size
-10°C to + 50°C
Spare elements available



Combination coalescing and adsorbing filters for the typical Industrial gases
Pressures to 30 bar g
0.01 micron filter element size
-10°C to + 50°C
Spare elements available



Our Mass Flow Control Valves are simple, clever, reliable and extremely hard wearing. They are a completely pressure mechanical design which provides a constant flow of gas. This is given that you have a constant upstream supply gas pressure and a constantly changing downstream system pressure.

-A good example of this is when you are filling a storage tank and as you fill it the pressure increases. Our Mass Flow Control Valves are used to keep the flow constant as the pressure builds up.



-These are often used to control the operation of processes like Gas Generation Systems, where the gas separation elements need to operate at a constant pressure and flow. They are used to regulate the flow for the process given these conditions and our units are very good at doing this job.

-Obviously they do not rely on electrical power to operate which is hugely beneficial and cost effective. We have four main sizes in the Mass Flow Control Valve family. At 14 bar g, we have the valves that will deliver flows of 30, 500, 1600 and 5000 l/per minute of your gas.

- These can be used with gases such as CO₂, N₂, Ar, He, H₂, O₂ and clean dry air.

-The valves have a built in needle valve so that you can set the flow you need for your process or we can set them for you.



We have a few Leak Detector systems available for detecting, quantifying and locating leaks.

In some applications this is easier than others but also in some applications it is critical (For example in the Beer Dispense application). For example, where you have a Nitrogen generator which is generating gas to be used in mixed gas dispense, the Nitrogen is generated at sometimes only a few litres per minute.

To lose more than 1 litre per minute of that gas will cause all sorts of problems. The publican will not have the gas they need for dispensing beer and the generator will be working much harder than necessary.

BSL have available, a simple in-line Leak Detector for the purpose of highlighting a leak and giving an idea of the size of it.

For larger gas installations, leaks will cause different problems. Even small leaks can cost a lot of money over time and the problem with very large installations is that the leak or combination of leaks may be difficult to find. This is because of the complexity and route taken by the gas feed pipework.

Some installations we have monitored are losing more than 20% of all the gases they purchase, through leaks and other reasons. BSL's range of industrial in-line Leak Detectors and monitors are a simple, visual and mechanical method to allow you to quantify and fix leaks. And of course, save you leaking money!

BSL produce custom built Smart Gas Management Systems to allow the largest users to quantify, locate and fix leaks in their systems. Often these units include the Gas Mixer element too, so mixing the gas supplies, monitoring the mix ratios, checking for leaks, producing information about the gas use and communicating with you so you can see what is happening on-site.

