

Your Definitive Guide to Safe and Effective Double Isolation of Plant and Equipment



Being able to safely and effectively



isolate, whether for planned maintenance tasks or unforeseen critical repair jobs, is of prime importance for you and your team. The aim is to safely and effectively rectify the problem to get back to operating at peak performance.

Angelo Giambrone Business Development Manager at Spirax Sarco.



Single isolation: Is one enough for safe and effective isolation?

It is not uncommon to see some installations in the UK making use of a single valve adjacent to the plant as a means of isolation. There may indeed be a second isolation valve somewhere in the preceding pipework, but it might not be close to the plant in question, it may isolate other items of equipment, while only being accessible through a myriad of pipework. Single valve isolation is no longer adequate, as all the responsibility to provide a safe, leak-free environment in which to work, falls onto that one valve seat.

Health and Safety Executive (HSE) guidance states that single block and bleed (SBB) can be used in conjunction with a complete detachment of the plant; in effect, spading off the steam supply to guarantee isolation, which brings its own challenges around isolating the supply beforehand. In my opinion, you should seriously consider an alternative, but before doing so it's important to know what options are available to you.







Double block and bleed (DBB): A move in the right direction

Safe and effective isolation has taken a leap forward with the introduction of Double block and bleed (DBB) using three separate valves. Typically, this has involved the use of two main-line valves separated by a spool piece, into which a small bleed with a third valve is fitted. With the bleed open and both the two main isolation valves closed, you can carry out your essential work safe in the knowledge that there is no pressure on the second valve. Ensuring there is no risk to you or your team, any leaks which are present in the first valve, are vented via the bleed.

This configuration does however require more space than a single isolation valve, due to the inclusion of extra valves. You may need to invest heavily in rearranging the plant's pipework to accommodate the extra valves – adding extra cost.



The quick and compact way to safe and effective double isolation

So, at this point you're probably asking yourself what other alternative there is to single isolation and double block and bleed?

SafeBloc[™] provides a safe, effective and reliable means of DBB isolation but without the need for additional space, as it provides two separate valve seats in the face-face of one valve body. It can be easily fitted into the former location of a single isolation valve so there is no need to go about the costly process of modifying the pipework. If DBB has not been a viable option because of space restrictions, it is certainly an option for you now.

When compared to using separate valves, SafeBloc[™] has fewer flanged connections, minimising the potential number of flange leak paths. Additionally, an added benefit is the valve's use of bellows sealed stems, resulting in zero stem emissions and eliminating the maintenance required with conventional gland stem sealing.





The Final Word

I've seen maintenance teams in numerous facilities work tirelessly to maintain continuous plant operation with minimal down-time – safe and effective isolation of plant is critical to this.

If you're looking to take the next steps on the path to safer and more effective isolation of your plant and equipment, then why not get in touch with the Spirax Sarco team at lets.talk@ uk.spiraxsarco.com and let us help you.



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