

# Spirax SafeBloc™

double block and bleed bellows sealed stop valve



**spirax**  
**/sarco**

# Spirax SafeBloc™

## a single solution for safe double isolation

The Spirax SafeBloc™ is a safe isolation solution, with a unique space-saving design, offering reduced installation time and fewer leak paths.

This innovative, patented design incorporates two isolation valves and a bleed port in one compact assembly making it easy to use and commission, without pipework modifications, into the space left by an existing single isolation valve.

It has been developed to meet the increasing demands of health and safety requirements where traditional single isolation of plant is inadequate.

The compact design of the Spirax SafeBloc™ makes it the ideal first choice for new sites, where safety and space is at a premium.

### An evolution of proven technology

This unique double block and bleed valve is based on proven technology from the Spirax Sarco range of bellows sealed globe valves, which have been used across industry for decades and especially within severe service areas.

### Spirax SafeBloc™ – a patented design that features:

- Double isolation in the space of one valve.
- Quick and easy installation.
- Low pressure drop.
- Zero leakage.
- Optional bleed connection facility.
- Proven technology.

Providing personnel with a high degree of safety in the space of a single valve that is easy to install.



# A simpler and more cost effective solution for safe double isolation

## Single isolation of plant

Traditionally, a single isolation valve would have been used to isolate a system or piece of equipment. However, this method of isolation does not offer full protection. There is no secondary isolation should the valve fail and no bleed available to eliminate system pressure to provide personnel with full, safe, isolation of equipment downstream of plant.

As a general rule single isolation valves should not be used as a final isolation for work on live steam plant.

## A traditional double block and bleed system

A double block and bleed system consists of two separate isolation valves and a bleed valve assembled on a pipe tee. When an engineer needs to isolate a system or piece of equipment, an upstream isolation valve would be closed and the bleed valve opened to bleed off downstream system pressure. The downstream valve would then be closed and by monitoring the bleed outlet, confirmation of correct isolation can be determined.

Whilst these fabricated valve block systems work effectively, they do have a number disadvantages such as:

- Increased installation time resulting in increased cost and plant downtime.
- Large overall face to face dimension.
- Increased number of joints, which are potential leak paths.
- Major pipework modifications required when upgrading from single isolation.
- Large number of components to be purchased.

Single isolation valve



A traditional double block and bleed system



The solution: Spirax SafeBloc™

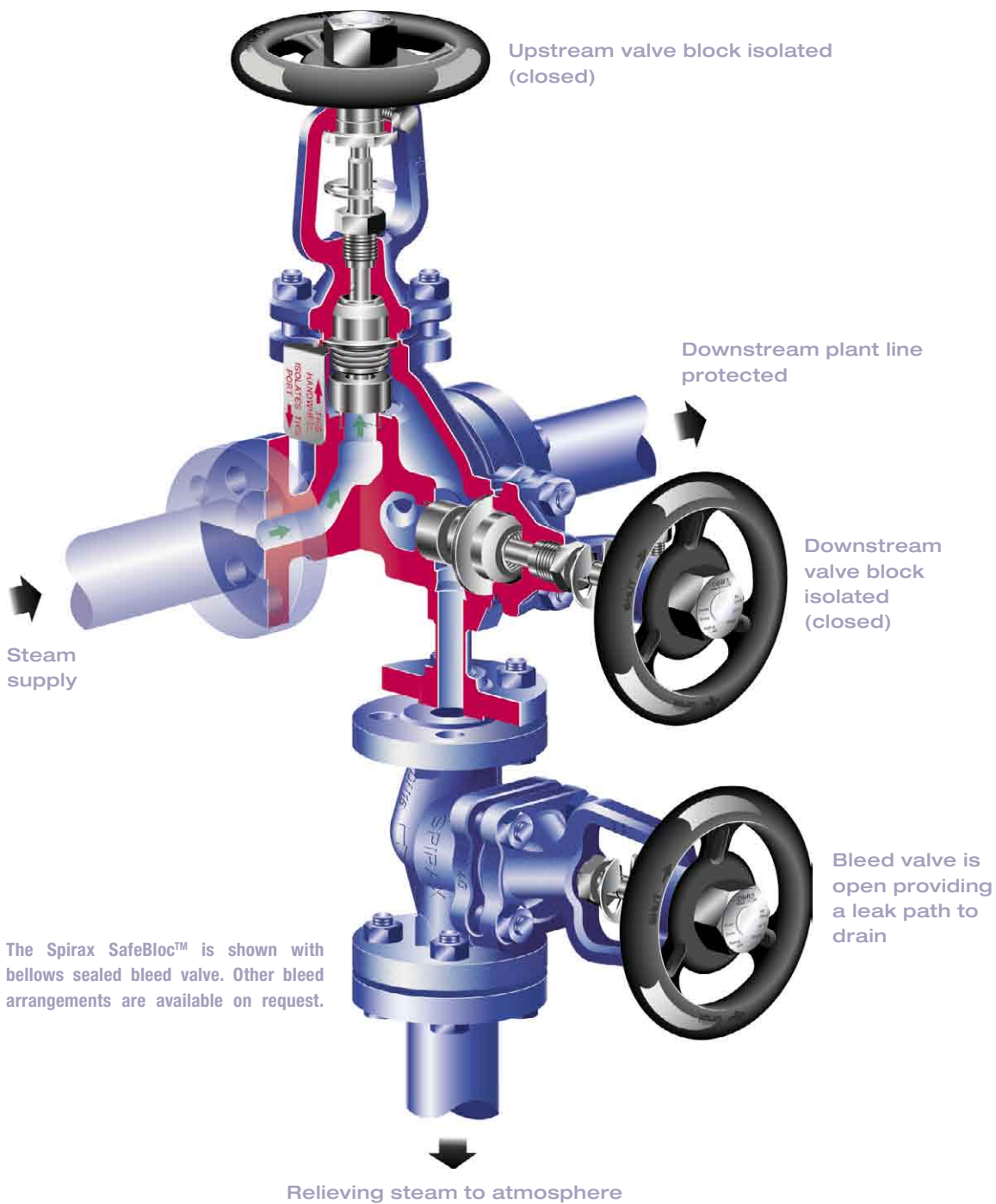


## The solution

The Spirax SafeBloc™ is the solution that fits within the space of a single isolation valve and the perfect alternative to traditional double block and bleed installations; it minimises leakage when systems and processes need to be isolated or maintained. It was designed in conjunction with customer requirements to meet specific site and company safety requirements.

It is a cost effective double isolation solution that protects users and maintenance personnel across a wide range of applications and industries and meets best practice requirement to comply with the most stringent risk assessments.

# How the Spirax SafeBloc™ works



One major use of the Spirax SafeBloc™ valve is to isolate the steam supply from downstream plant providing a high degree of safety to personnel working in that location.

The Spirax SafeBloc™ valve is used to give double isolation protection with fail-safe bleed to drain, ensuring complete protection for personnel working downstream.

Any potential steam leaks passing through the upstream valve block cannot build up pressure due to the bleed valve relieving steam to atmosphere. The downstream valve block provides double isolation for the downstream plant.

## Range and options

Model	Size	Connections	Body design rating	Material	Bleed connection
DBB3	DN15 - DN100	Flanged PN40 or Flanged ANSI 300	PN40 or ANSI 300	Body and Bonnet - Steel	Flanged DN15 Screwed ½" BSP/NPT Socket weld ½"

## Key features and benefits



Key features	Key reasons	Key benefits
<b>Double isolation in the space of one valve</b>	Contains two isolation valves and a bleed option.	<p>Little space required.</p> <p>Reduced possibility of leak paths from the Spirax SafeBloc™ in comparison with the traditional two-valve solution.</p> <p>Safer than relying on the integrity of a single isolation valve.</p>
<b>Quick and easy installation</b>	Same face-to-face dimension as a standard isolation valve.	Reduced installation time resulting in lower labour costs and less plant downtime.
<b>Low pressure drop</b>	Designed using in-house computational fluid dynamics and rapid prototyping to optimise flow paths.	Excellent performance across a wide range of pressures and applications.
<b>Zero leakage</b>	<p>Proven bellows sealed technology.</p> <p>Double isolation.</p> <p>Bleed facility.</p> <p>All valves are 100% leak tested to European Industry Standard.</p>	<p>Eliminates fugitive emissions protecting the environment.</p> <p>Safety of personnel.</p>
<b>Optional bleed connection facility</b>	<p>Removes system pressure to atmosphere.</p> <p>Confirms isolation of both valves.</p>	<p>Safely bleeds off downstream system pressure.</p> <p>Safety of personnel.</p> <p>Prevents product spoilage.</p>
<b>Proven technology</b>	Uses proven bellows sealed technology from the Spirax Sarco range of isolation valves.	<p>Energy efficient.</p> <p>Eliminates fugitive emissions protecting the environment.</p> <p>Fit and forget.</p>

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Some products, services or solutions may not be available in certain markets

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