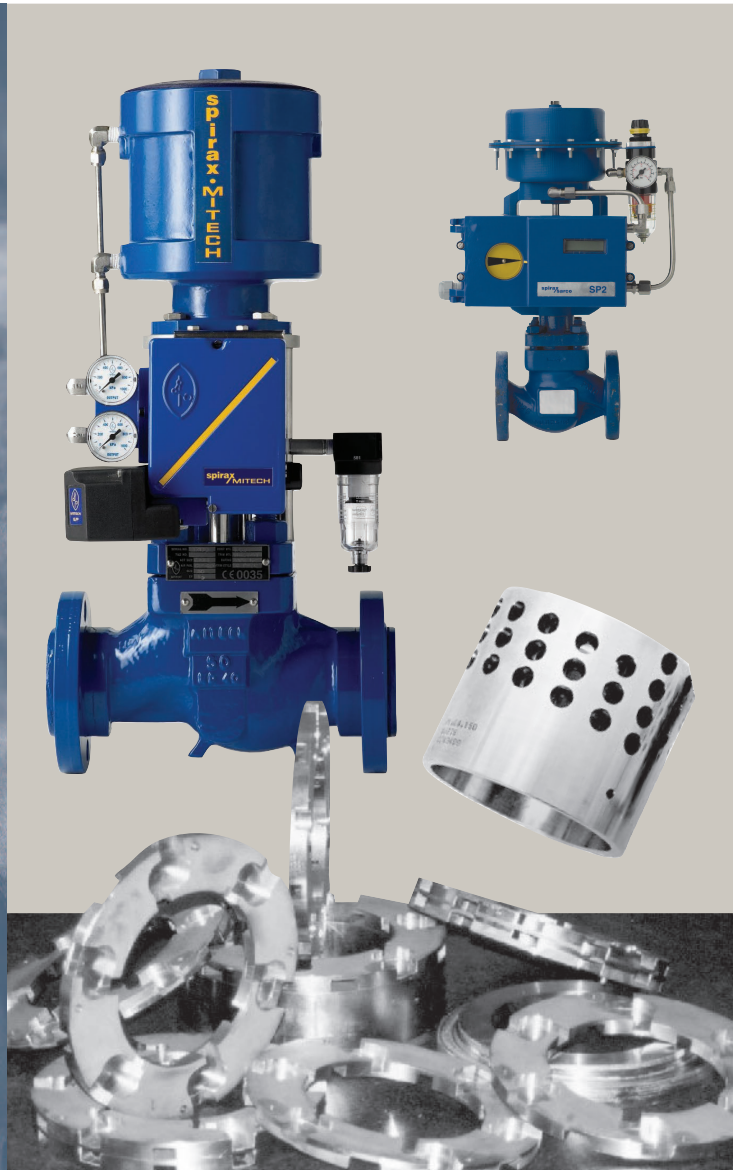


# Globe Control Valves



# GLOBE CONTROL VALVES

The modular, flexible option

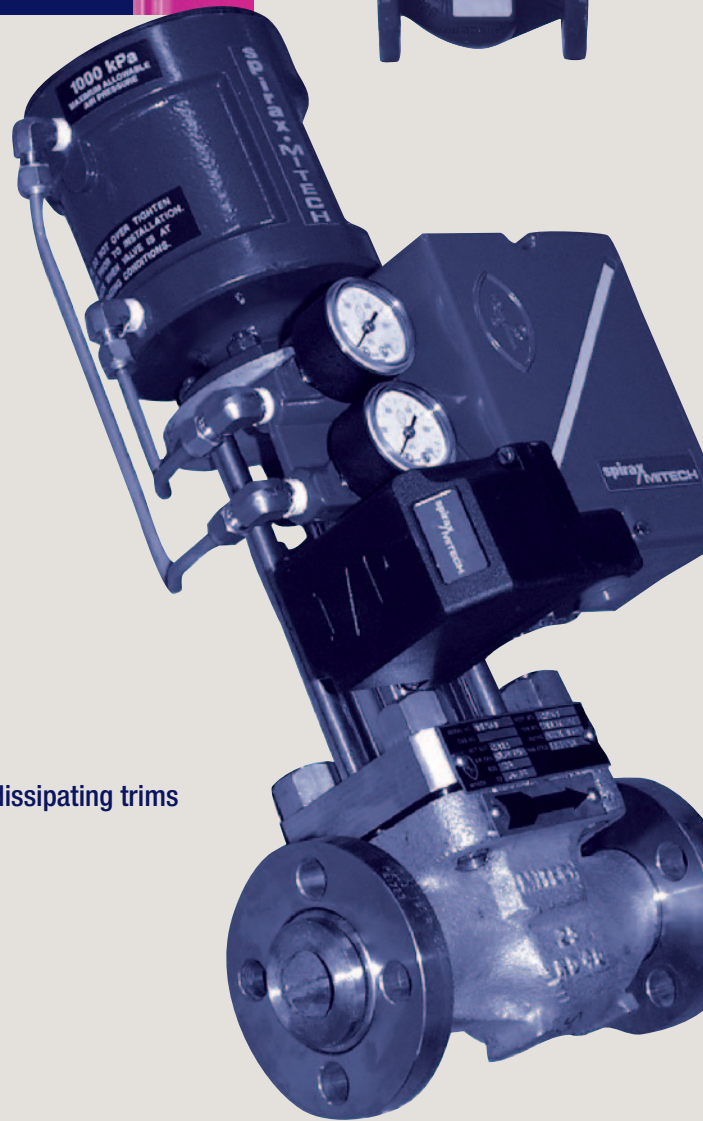
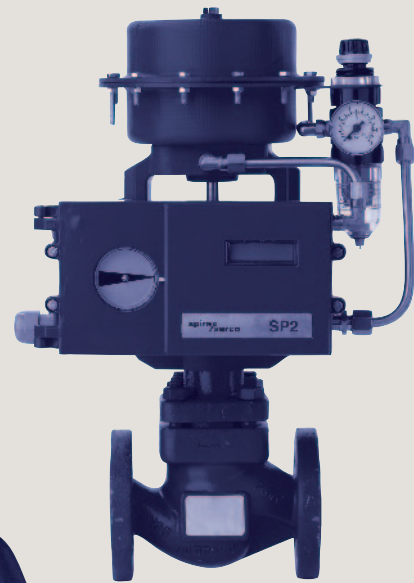
## ABOUT GLOBE CONTROL VALVES

The SPIRA-TROL and M-Series Globe Control valves are general purpose control valves that can be engineered to solve both complex and basic requirements. Their robust construction makes them long-lasting and easy to maintain, while their modular design makes them easy to specify, reducing spares inventory requirements.




- From standard to severe service
- ½" to 16" NB
- PN16 to ANSI 2500
- Tight shut-off, low noise, cavitation control, energy dissipating trims

## INDUSTRIES AND APPLICATIONS

- Oil and gas
- Chemical
- Food
- Breweries
- Pulp and paper
- Power generation



## THE RANGE AT A GLANCE

Valve name	Valve type	Body materials	Valve sizes	Connections	Flow characteristics	Special trims	Stem seals	Actuation
<b>SPIRA-TROL</b> 	2-port globe to ANSI or EN	SG iron Carbon steel Stainless steel Cast iron NACE	DN15 to DN100 ½" to 4" Larger sizes to order	Flanged: ANSI 125 ANSI 150 ANSI 300  PN16 PN25 PN40  JIS 10 JIS 20  KS 10 KS 20  Screwed: BSP NPT  Socket weld	Equal percentage  Linear  Fast opening  Reduced flow including microflute	Low noise  Soft seal  Hard facing	Spring loaded chevron and 'O' ring  Graphite  Bellows  Bonnet extension	Pneumatic diaphragm spring return  Electric  Modulating  On / off
<b>M-Series</b> 	2-port globe 3-way globe 2-port angle Sweep angle	Carbon steel Stainless steel Bronze Chrome moly Special alloys	DN15 to DN400 ½" to 16"	ASME 600 Separable up to 100 NB  Integral in all sizes  Butt weld	Equal percentage  Linear  Fast opening	Low noise  Anti-cavitation  Soft seat  Pressure balance	PTFE  Graphite  Bellows  Live loading  Cryogenic  Heat extended	Pneumatic piston spring return or double acting  Electric  Modulating  On / off
<b>Severe Service</b> 	2-port globe 3-way globe Sweep angle	Carbon steel Stainless steel Chrome moly Special alloys	DN15 to DN400  ½" to 16"  On request up to 24"	ASME 600-4500  Separable up to 100 NB  Integral in all sizes  Butt weld	Linear  Bi-linear  Tri-linear	ED trims  200:1 turndown  Pressure balance	Graphite  Bellows  Custom made when required	Pneumatic piston spring return or double acting  Electric  Modulating  On / off

## SEVERE SERVICE SPECIAL TRIMS



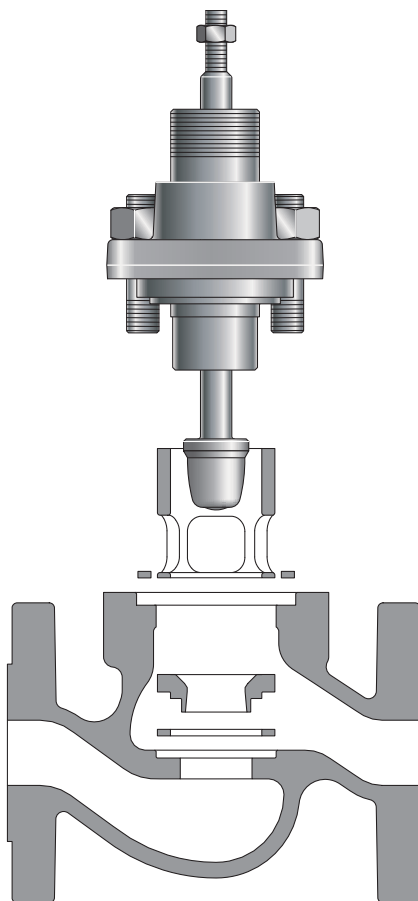
Spirax-Mitech can supply severe service trims to eliminate noise, vibration and cavitation. Applications include oil/gas, refining, power and major process industries.

Energy dissipating disk stack.

## CLAMP IN PLACE, FREE FLOAT DESIGN

The entire Spirax-Mitech range of control valves utilises the clamp in place, free float design. All trim components are designed to clamp in place so the valve can be quickly configured to the users specific process needs. The free float of the seat and plug during assembly means that stem, plug and seat alignment is easily achieved. When compared to alternative designs, the free float designs provides the user with longer stem seal life and better valve shut-off performance.

The simplicity of build also means that maintenance is quick and easy, with no special tools required to achieve the design performance of the valve.



## APPLICATIONS



**Angle body choke valve**

4" class 2500 angle valve  
Crude oil from P1=210 bar to P2=46 bar  
Tungsten carbide trim



**Soot blower valve**

2" class 2500 globe valve  
Steam at 540°C from 190 bar to 30 bar



**Recycle and pressure control valve**

8" class 300 globe valve  
Oxygen at 112°C from 36 bar to 1 bar



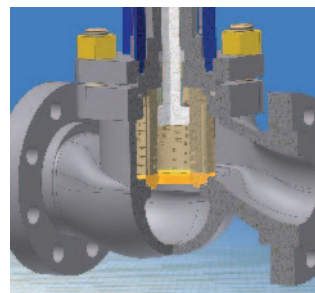
**Steam pressure reducing valve**

6" x 10" class 2500 x 600 angle valve  
Steam from P1=98 bar to P2=22 bar  
Flow = 46700 kg/h






**Turbine isolation**

Turbine isolation and warm-up station  
Steam at 430°C from 46 bar to 1 bar



**Energy dissipating disk stack**

## SUMMARY OF KEY FEATURES AND BENEFITS

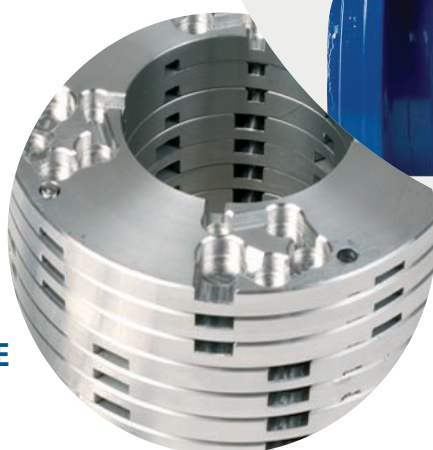
Model	Key features	Key benefits
<b>SPIRA-TROL</b> 	Precise control	Guaranteed control performance across a wide range of applications
	Universal application	Standardised control valve for your plant, which minimises maintenance training and spares inventory
	High performance long life stem seal	Low emissions from the valve stem, which means a better environment and no loss of valuable product or energy Infrequent seal replacement, consequently maintenance personnel are free for other work
	Long life valve internals	Fit and forget
	Low number of components	Highly flexible supply Minimises spares inventory
	Quick and easy maintenance	Limited plant downtime
	Low cost of ownership	Larger profits for you
<b>M-Series</b> 	General purpose valve	Solves basic and complex requirements
	Robust construction	Long lasting
	Modular design	Reduces spares
	Suitable for high pressure and extreme temperature conditions	Versatile and eliminates noise or cavitation problems
	Can be adapted for corrosive fluids	Versatile
	Various sizes	Versatile
	Pneumatic, electro-pneumatic or smart positioners	Versatile
<b>Severe Service</b> 	Local CFD design	Can be engineered to suit a specific application
	Linear / bi-linear / tri-linear	Suitable for large turndowns (200:1)
	Wide range of materials	Can be engineered to suit a specific application
	ZZ or disk stack	Potential cost reduction on smaller sizes
	Compact design	Suitable for retrofitting



**SPIRA-TROL**



**M-SERIES**



**SEVERE SERVICE**

UK-C&I-MITECH

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