GLOBE CONTROL VALVES







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The modular, flexible option



ABOUT GLOBE CONTROL VALVES

Mitech 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 24" NB
- Up to ANSI 4500
- Tight shut-off, low noise, cavitation control,
 energy dissipating trims

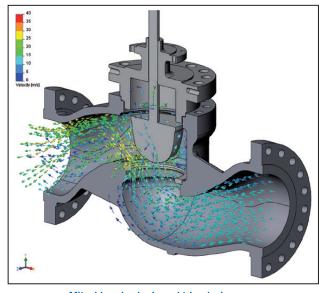
INDUSTRIES AND APPLICATIONS

- Petrochemical
- Mining
- 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
Mitech GCV	2-port globe	Carbon steel	DN15 to	ASME 600#	=%	Low noise	PTFE	Pneumatic
	3-way globe	Stainless steel	DN600	Separable up	Linear	Anti-cavitation	Graphite	piston spring
	2-port angle	Bronze	½" to 24"	to 100 NB	Quick opening	Cryogenic	Bellows	return
	Sweep angle	Chrome moly		Integral		Heat extended	Live loading	or
		Special alloys		All sizes		Soft Seat		Double acting
				Butt weld		Pressure		Electric
				All sizes		Balance		Modulating
								On / Off
Severe Service	2-port globe	Carbon steel	DN15 to	ASME	Linear	ED Trims	Graphite	Pneumatic
	3-way globe	Stainless steel	DN400	Up to 4500#	Bi-linear	ZZ	Bellows	piston spring
	Sweep angle	Chrome moly	1" to 16"	Separable up	Tri-linear	MHP	Custom	return
		Special alloys	0n	to 100 NB			made when	or
			request	Integral			required	Double acting
			up to 24"	All sizes				Electric
				Butt weld				Modulating
				All sizes				On / Off

GRAPHICAL REPRESENTATION OF A CFD ANALYSIS



Mitech's valve body and trim designs are supported by extensive Computational Fluid Dynamics (CFD) analysis

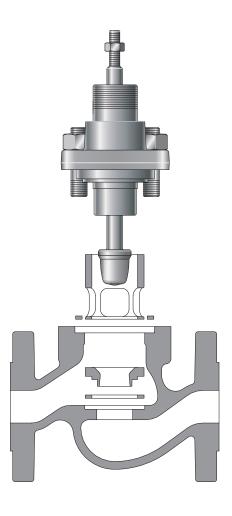
SUMMARY OF KEY FEATURES AND BENEFITS

Model	Key features	Key benefits			
Mitech GCV	General purpose valve	Solves basic and complex requirements			
	Robust construction	Long lasting			
Fig.	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			
147	Pneumatic, electro-pneumatic or smart positioners	Versatile			
SEVERE SERVICE	Local CFD design	Can be engineered to suit a specific application			
	Linear/Bi-Linear/Tri-Linear				
	Wide range of materials	Can be engineered to suit a specific application			
33	ZZ or disk stack	Potential cost reduction on smaller sizes			
	Compact design	Suitable for retrofitting			

CLAMP IN PLACE, FREE FLOAT DESIGN

The entire 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 design 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 2 500 Angle Valve Crude oil from P1=210 bar to P2=46 bar Tungsten Carbide trim



Soot Blower Valve

2" Class 2 500 Globe Valve Steam @ 540 °C from 190 bar to 30 bar



Recycle and Pressure Control Valve

8" class 300 Globe Valve Oxygen @ 112 °C from 36 bar to 1 bar



Steam Pressure Reducing Valve

6" x 10" Class 2 500 x 600 Angle Valve Steam from P1=98 bar to P2=22 bar Flow = 46 700 kg/h



Turbine Isolation

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



Energy Dissipating Disk Stack



Twin Pump Test Valve

24" Nominal Bore ANSI Class 600 in ASTM A 217 WCB Carbon Steel. Upstream pressure 102 bar with a differencial pressure of 16 bar. Full turndown of 50:1 for the 10,000 t/hour of water.





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