

VAAS

Model 970 Coal Mill Isolation Valves

Product Datasheet - 970

Isolation of pulverized fuel firing lines in thermal power plants presents one of the most demanding applications for valves. Specially designed knife gate valves are the most suitable valves for this application.

Typically these valves are used to isolate the coal mill from the boiler furnace and are normally kept open during service. They are closed to isolate the mill from the hot flames and gases in the boiler furnace during emergency shut downs and for routine maintenance. During normal operation, when the valve is open, mixture of air and fine pulverized fuel (eg., coal) at very high velocity passes through the valve. This is a very abrasive media and calls for a valve that offers minimum flow restriction and has internal parts with high erosion resistance.

Model 970 is a uni-directional flanged knife gate valve specially designed to meet these exacting service requirements. It features a body construction with the bore matching the pipeline bore which keeps the pressure drop in the valve to the minimum. This means there is no raised seat in the flow path as in the case of standard knife gate valves. The internal bore of the valve is usually hardfaced to provide high resistance to erosive wear.

Model 970 is designed to comply with the requirements of NFPA-85 (2001) standard which governs equipment used in coal mills and associated piping.

These valves are normally supplied with a powered actuator, usually pneumatic or electric. Other actuation options are also available where required.

DESIGN HIGHLIGHTS

Conformance to NFPA-8503 Designed to comply with requirements of NFPA-85 (2001)

Full bore Minimum resistance to flow with bore identical to pipe bore or more.

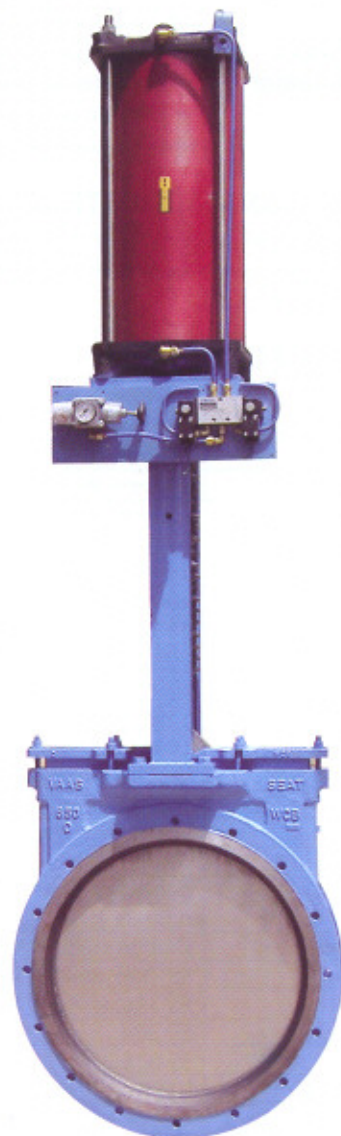
Custom flanges and drilling Made to suit coal mill equipment from all major OEM's such as BHEL, Babcock, Foster Wheeler, Alstom etc.

Hard faced valve bore For resistance to highly abrasive and continuous material flow the valve bore is provided with suitable hardfacing. Seat face stelliteing is also available as an option.

Stem protection bellows For reliable operation in dusty environment.

ORDER REFERENCES

BHEL/NTPC- WBPDC-Bakreswar; NTPC- Simhadri, Talcher, Ramagundam, Vindhyachal, Rihand; **Mitsui Babcock, UK** - Taiwan Power Co., Taichung; **Foster Wheeler, USA** - Dafang Project, China.



SPECIFICATIONS

Type	Uni-directional single seated Knife Gate Valve
Size range	100mm to 650mm (higher sizes on application)
Design	Full port design conforming to NFPA-85 (2001)
Rating	Designed to comply with the requirements of NFPA-85 (2001)
Endstyle	Wafer- flanged standard; lugged versions also available
Drilling	ANSI 150lb, Babcock & Wilcox, BHEL and others
Body	Carbon steel, stainless steel
Gate	304/316 Stainless steel
Packing	PTFE impregnated syntex fibre as standard; other packing materials and wiper packing options available.
Purges	Chest purges are provided as optional.
Actuator	Pneumatic double-acting cylinder with nitrile / viton energized PTFE piston seal or electric actuator Manual valves can be provided with rising stem handwheel or geared handwheel

OPTIONAL CONSTRUCTION

Model 970 valves can be offered with many optional features to suit different applications requirements. Following are some of the common options; other special constructions can be provided if required; please contact VAAS.

ORDERCODING

	Description	Ordercode	Remarks
Nominal size	100mm (4")	0400	
	150mm (6")	0600	
	200mm (8")	0800	
	250mm (10")	1000	
	300mm (12")	1200	
	350mm (14")	1400	
	400mm (16")	1600	
	450mm (18")	1800	
	500mm (20")	2000	
	600mm (24")	2400	
	650mm (26")	2600	
Model	Coal Mill Isolation valve, conforming to NFPA 85 (2001)	FIG 970	
Endstyle	Wafer, flanged with through holes except in chest area	WTM	Standard
	Wafer, lug, through holes except in chest area	LTM	Optional
	Wafer, two lug, through holes except in chest area	TT	Optional
Drilling	ANSI 150lb	F	
	Babcock / BHEL / Foster Wheeler / Mitsui-Babcock / Alstom /Others	Fx	
Body	Carbon steel, stellited flow bore	B7-STB	
	SS 304, stellited flow bore	S1-STB	
	SS 316, stellited flow bore	S2-STB	
Gate	SS 304	S1	
	SS 316	S2	
Packing	PTFE syntex fibre	C	Standard
Seat leakage	As per ANSI Class IV	S	Others on request
Chest purges	Two on either side of body	C2	Option
Actuator	Direct handwheel	CHG	
	Open bevel gear handwheel	CGG	
	Enclosed bevel gear handwheel	CEG-xx	
	Double acting pneumatic cylinder; x inch diameter cylinder	CCGCx / CCMCx / CCMCx / PAX	
Face-to-face	As per requirement	SPx	
Specials		SPx	

DIMENSIONS & WEIGHTS

Please request certified drawings from VAAS.



VAAS INDUSTRIES PVT LTD

5/216, Old Mahabalipuram Road,
Kandanchavadi, Chennai - 600 096, India
Tel: + 91 44 2496 4656/2496 5500. Fax: + 91 44 5215 2473
E-mail: support@vaasval.com Web : www.vaasval.com



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VAAS/970/INTL/2000/10/2004