



FAMAT
ENGINEERED VALVES



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VALVES FOR POWER GENERATION
«HIGH PERFORMANCE TURBINE VALVES»



MORE THAN
35 YEARS
OF EXPERIENCE



FAMAT SA



COMPANY PROFILE

We add value to your Power Plant!

FAMAT SA is a leading manufacturer and marketer of valves and actuators providing market-leading products, services and solutions for the most challenging applications throughout the Power Generation.

We endeavour to deliver the highest quality products and value-added services that improve our customer's business efficiency.



With more than 35 years of experience and knowledge in development and manufacturing as well as marketing of valves FAMAT has equipped more than 150 Power Plants with it's valves.

Certified ISO 9001 FAMAT can guarantee total quality management of products and services.

The efficient selection of suppliers as well as the fully optimized supply chain management system allows FAMAT to supply high quality products with very attractive prices.

FAMAT allows up to 5 years of guarantee on it's leading products!





CONTENT

1. Gate valves type **P/K** for redundant supply of the main steam line to turbine
2. Steam control valve type **RVD** as turbine inlet valve
3. Steam stop valve type **ASD** as safety valve for turbine inlet
4. Steam conditioning valve type **DZE** as control valve in-between main steam line
5. Steam conditioning valve type **DZE** as turbine bypass system
6. Steam conditioning valve accord. TRD421 type **SUV** as turbine bypass system
7. Spraywater control valve type **ESV** as inlet valve to steam conditioning valve
8. Spraywater stop valve type **ASV** as inlet valve to spraywater control valve



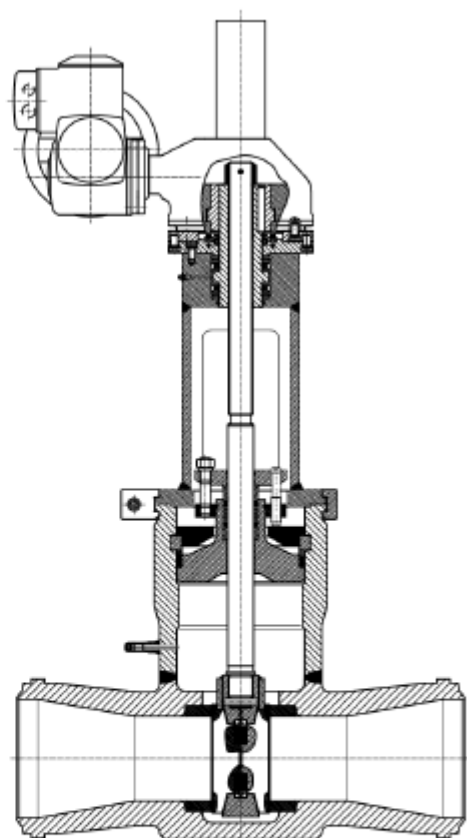


Parallel Slides Gate Valve type P

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 80 – 800
- PN 150 - 500
- Parallel slides
- High steam temp. acceptable
- High water temp. acceptable
- Bypass on request

DN:	80 / 3" – 800 / 32" other sizes as requested
PN:	150 – 500
Control Range:	- according to specifications
Control characteristic:	on / off
Design:	forged steel-welding construction, straight pattern
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, electric actuators, manual operated according to specifications



All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4541	1.4571
	1.4922	1.5415	1.7335	1.7380

Material according to specification!

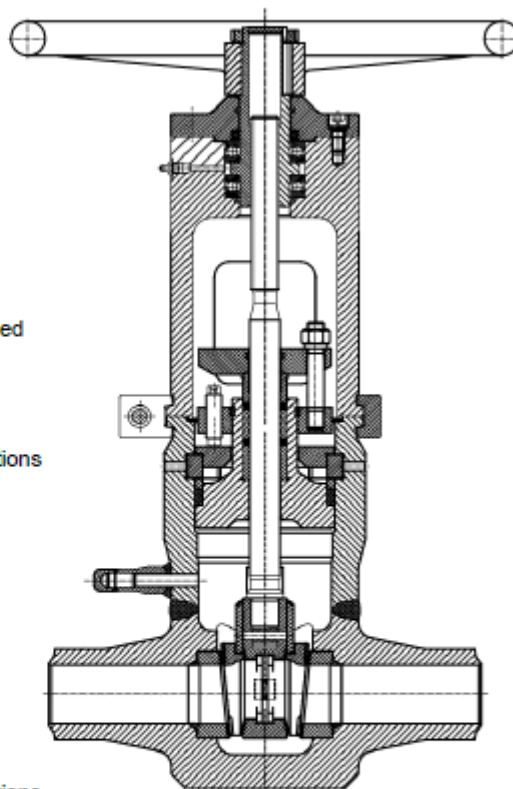


Wedge Gate Valve type K

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 80 – 800
- PN 150 - 500
- Wedge plug
- High steam temp. acceptable
- High water temp. acceptable
- Bypass on request

DN:	80 / 3" – 800 / 32" other sizes as requested
PN:	150 – 500
Control Range:	- according to specifications
Control characteristic:	on / off
Design:	forged steel-welding construction, straight pattern
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, electric actuators, manual operated according to specifications



All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4541	1.4571
	1.4922	1.5415	1.7335	1.7380

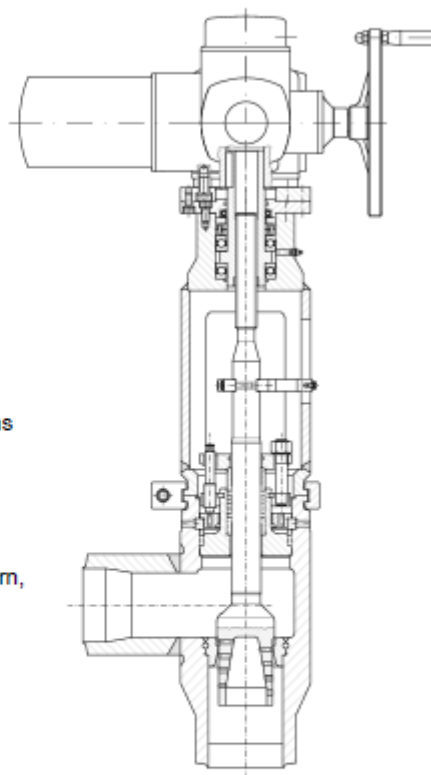
Material according to specification!



Steam Control Valve type RVD

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 50 - 400
- Flow to close plug
- Perforated plug
- Parabolic plug
- Fownstream injection
- Short mixing and evaporation path
- High steam temp. acceptable



DN:	50 / 2" – 400 / 16" other sizes as requested
Control Range:	1:25, 1:30, 1:50 according to specifications
Control characteristic:	equal percentage
Design:	forged steel-welding construction, angle form, straight pattern, z-type
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, pneumatic actuators, electric actuators according to specifications

All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4922	1.5415
	1.7335	1.7380		

Material according to specification!

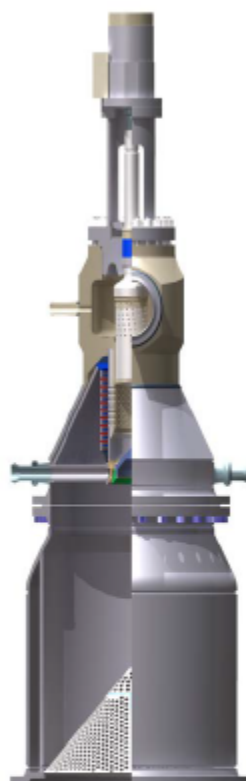


Steam Conditioning Valve type DZE

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 80-400 inlet
- DN 250-1000 outlet
- Steam atomised spraywater
- Water injection up to 30% of steam
- Flow to close plug
- Downstream injection
- Short mixing and evaporation path
- Low water temp. acceptable
- Low spraywater pressure required

DN:	25 / 1" – 1000 / 40" other sizes on request
Control Range:	1:25, 1:30, 1:50 according to specifications
Control characteristic:	linear or equal percentage linear
Design:	forged steel-welding construction, angle form, straight pattern, z-type
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, pneumatic actuators, according to specifications



All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4922	1.5415
	1.7335	1.7380		

Material according to specification!

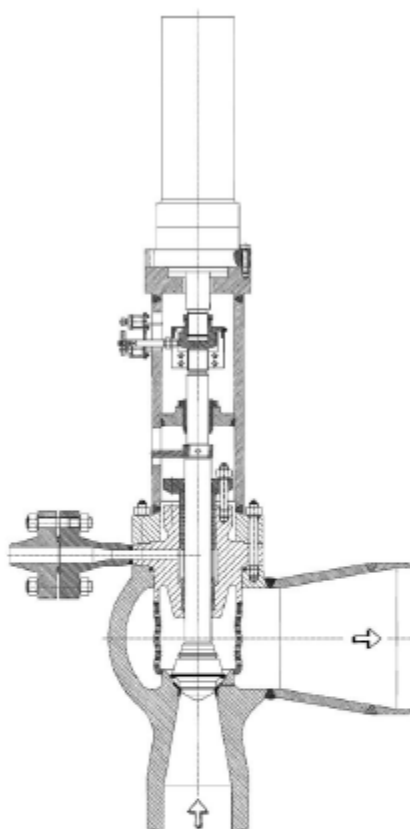


Valve accord. TRD 421 type SUV

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve with safety function
- DN 80-400 inlet, 250-800 outlet
- PN 100-630
- Steam atomised spraywater
- Water injection up to 30% of steam
- Flow to open plug
- Downstream injection
- Short mixing and evaporation path
- Low water temp. acceptable
- Low spraywater pressure required

DN:	25 / 1" – 800 / 32"
PN:	100 – 630 other sizes on request
Control Range:	1:25, 1:30, 1:50 according to specifications
Control characteristic:	linear or equal percentage linear
Design:	forged steel-welding construction, angle form
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, according to specifications



All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4922	1.5415
	1.7335	1.7380		

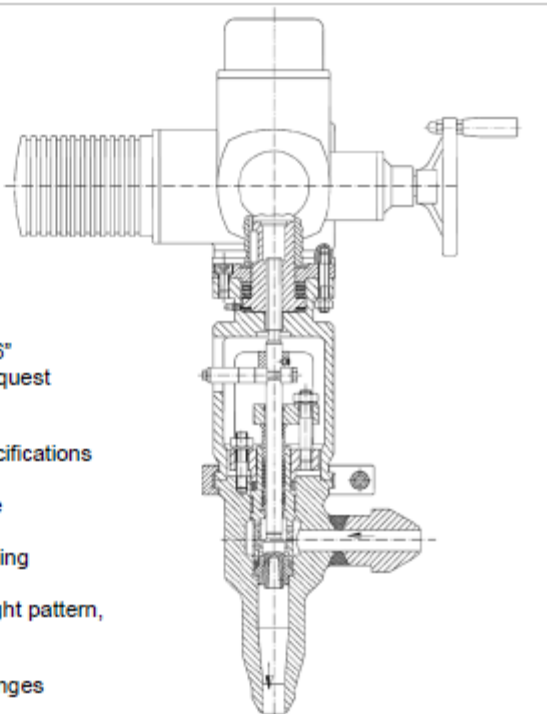
Material according to specification!



Spraywater Control Valve type ESV

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 15 - 150
- Flow to close plug
- Perforated plug
- Parabolic plug
- Low actuating force
- Low maintenance efforts



DN:	15 / 1/2" – 150 / 6" other sizes on request
Control Range:	1:25, 1:30, 1:50 according to specifications
Control characteristic:	equal percentage
Design:	forged steel-welding construction, angle form, straight pattern, z-type
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, pneumatic actuators, electric actuators according to specifications

All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4922	1.5415
	1.7335	1.7380		

Material according to specification!

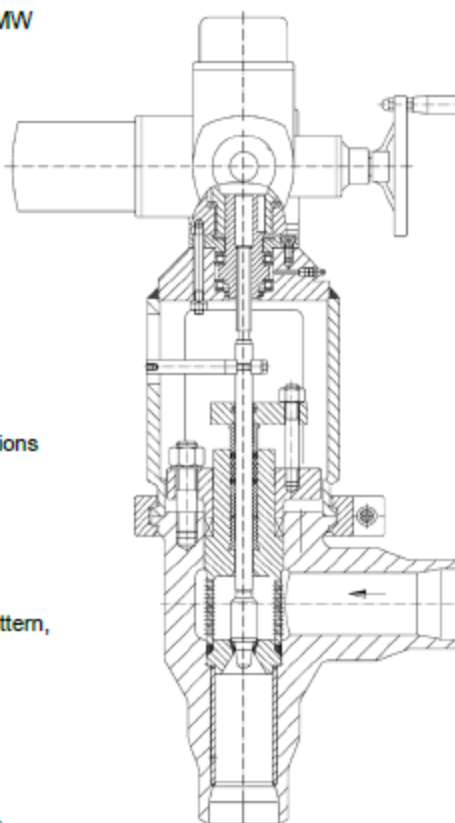


Spraywater Stop Valve type ASV

200 MW / 300 MW / 600 MW / 750 MW / 1000 MW

- High-pressure valve
- DN 15 - 150
- Flow to close plug
- Parabolic plug
- Low actuating force
- Low maintenance efforts

DN:	15 / 1/2" – 150 / 6" other sizes on request
Control Range:	1:25, 1:30, 1:50 according to specifications
Control characteristic:	equal percentage
Design:	forged steel-welding construction, angle form, straight pattern, z-type
Connections:	welding ends, flanges
Actuators:	hydraulic actuators, pneumatic actuators, electric actuators according to specifications



All materials according to DIN or ANSI / ASTM. For the main parts of our valves we use standard material as listed below or according to our customer specifications.

Standard materials

Forged material:	1.0460	1.4903	1.4922	1.5415
	1.7335	1.7380		

Material according to specification!



REFERENCES

Selected projects concerning the use of Turbine Bypass Systems :

YEAR	PROJECT	CUSTOMER
2003	HP Bypass	Solvay Rheinberg Station 3/4, Germany
2004	HP Bypass	Bayer Uerdingen, Germany
2005	HP Bypass	Banwhol, Korea
2006	HP Bypass	Teluk Salut, Malaysia
2007	HP, IP and LP Bypass	Hwaseong, Korea
2008	HP Bypass w. safety function (SUV)	Az Zhou, Kuwait
2008	HP Bypass	Media Yanbu, Kingdom of Saudi- Arabia
2009	HP Bypass	Mondi Paper Sytykvar, Russia
2009	HP and LP Bypass	Beijing PS, China
2010	HP and LP Bypass	Tanjung Awar-awar, Indonesia



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