

# Valves for fertiliser production

Fertiliser production –  
Expertise in demanding applications



# The right selection for your fertiliser production processes

Process	Media	Pressure range	Temperature range	Abrasion	Corrosion	Valve
Urea production						
	Ammonia gas	140 - 250 bar	180 - 210°C	Low	High	Ball or globe valves
	Carbon dioxide	140 - 250 bar	180 - 210°C	Low	Moderate	Ball or globe valves
	Ammonium carbamate	140 - 250 bar	180 - 210°C	Low	Moderate	Ball or globe valves
	Urea (aqueous solution)	1 - 5 bar	135 - 155°C	Low	Low	Desponia® with SS disc and ET liner
	Water	1 - 5 bar	180 - 210°C	Low	Low	Elara with SS body and disc and MPTFE seat
MAP and DAP production						
	Ammonia	10 - 30 bar	70 - 100°C	Low	High	Elara with SS body and disc and MPTFE seat
	Phosphoric acid	Ambient	70 - 100°C	Low	High	Bianca with PFA overmoulded disc and PTFE liner
	MAP or DAP slurry	Ambient	100 - 110°C	Moderate	Moderate	Desponia® with PEKK coated disc and FT liner
	Cooling water	Ambient	Ambient	Low	Low	Desponia® with SS disc and E liner
	Water/steam	5 - 10 bar	120 - 180°C	Low	Low	Desponia® with SS disc and ET liner or Elara with SS body and disc and MPTFE seat
Potassium chloride production						
	Brine	Ambient	50 - 100°C	Low	Moderate	Desponia® with SS disc and EC liner
	Water	Ambient	Ambient	Low	Low	Desponia® with SS disc and E liner
	Steam	5 - 10 bar	120 - 180°C	Low	Low	Elara with SS body and disc and MPTFE seat
	Salt (KCl)	Ambient	Ambient	High	Low	Desponia® with Ultralene Coating™ overmoulded disc and FP liner
Ammonia production						
	Hydrogen and nitrogen	150 - 300 bar	400 - 500°C	Low	Low	Ball or globe valves
	Ammonia	10 bar	Ambient	Low	High	Desponia® with SS disc and E liner
	Water/steam	25 - 40 bar	700 - 1000°C	Low	Low	Globe valves
	Air	Ambient	Ambient	Low	Low	Saturnia with SS disc and seat

Desponia®

## Elastomer-lined butterfly valve



Body construction	Wafer, Lug, U-Section
Nominal diameter	DN 25–1600 (1"–64")
Max. working pressure	Up to 16 bar
Flange connection	PN6, PN10, PN16, ANSI cl. 150, JIS, AS, etc.
Temperature range	–20°C to 200°C
Body material	Ductile iron
Disc material	Stainless steel, PEKK coating, Ultralene Coating™
Liner material	EPDM, Flucast
Special executions	Execution for explosive atmospheres

Bianca

## PTFE-lined butterfly valve



Body construction	Wafer, Lug, U-Section
Nominal diameter	DN 32–900 (1¼"–36")
Max. working pressure	Up to 16 bar
Flange connection	PN10, PN16, ANSI cl. 150, AS 2129 table D + E, JIS 10K
Temperature range	–20°C to 200°C
Body material	Ductile iron, Stainless steel
Disc-shaft (one piece)	PFA overmoulded
Liner material	PTFE
Special execution	Execution for explosive atmospheres

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## Other products



### Elara

Double eccentric butterfly valve, DN 50 - DN 600, Carbon steel or Stainless steel body.



### Saturnia

Damper valve, DN 50 – 600  
Stainless steel, Carbon steel and Boiler steel.



### Ball valves

2- way valves in stainless steel, available with 2- or 3-piece body.



### Actuators and accessories

Actuators and a large range of accessories are available to complete the system.

**We are there for you.** With our global expertise in industrial applications, we understand your requirements and offer expert advice at every stage of your project. At the same time, you can benefit from our international product standards thanks to our global know-how. Our highly skilled technical team, coupled with the quality and durability of our products, makes us a reliable partner for industrial valve solutions.