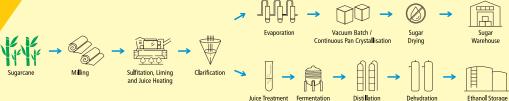




Sugarcane to Sugar/ Ethanol Process



Product Matrix	Butterfly Valves (Elastomer-lined)	Butterfly Valves (Triple-offset)	Ball Valves (Soft - seated)*	Forged Steel Gate, Globe & Check Valves*	Cast Steel Gate, Globe & Check Valves*	Knife Gate Valves
Milling and Extraction	✓		✓	✓	✓	✓
Clarification & Filtration	✓					
Evaporation	✓	✓	✓	✓	✓	✓
Crystallisation	✓		✓	✓	✓	✓
Centrifuging / Sugar Drying	✓					
Molasses Heating	✓					✓
Juice Treatment	✓			✓	✓	
Fermentation	✓		✓			
Distillation	✓		✓			
Ethanol Storage	✓	✓	✓		✓	
Co-gen Plant		✓		✓	✓	
Utilities	✓		✓	✓	✓	



Butterfly Valves (Elastomer-lined)

Size & Class: 2" to 36" / PN 10, PN 16, PN 25, #150 End Connection: Wafer, Lugged & Double Flanged

Body Material: Cast Iron with integral EPDM / Black Nitrile-lined Disc Material: SG Iron (Nylon coated), CF8M (Edge polished)

Key Features

- Integrally moulded elastomer-lined
- Bubble-tight sealing
- Xylan coated shaft for low operating torque



Forged Steel Gate, Globe & Check Valves

Size & Class: ½" to 1 ½" / #800, #1500 End Connection: Socket Weld, Screwed, Butt Weld Body Material: A105 / F22; Trim 8, 5

Key Features

- Design comply to API 602 / ASME B16.34 with corrosion & wear resistance
- Fugitive emission qualified as per API 624
- Integral hardfaced body seat for Globe and Check Valves



Ball Valves (Soft-seated)

Size & Class: ½" to 8" / #800, #150 - #600 End Connection: Socket Weld, Screwed, Flanged Body Material: WCB / CF8M; Ball: CF8M

Kev Features

- High integrity stem sealing ensures leak-free flow
- Mirror-finished solid stainless steel balls
- Seats with pressure relieving slots



Knife Gate Valves

Size & Class: 2" to 54" / PN 10, #150

End Connection: Wafer, Lugged & Double Flanged

Body Material: Cast Iron, Ductile Iron, Carbon Steel, Stainless Steel

Gate Material: Duplex Stainless Steel

Key Features

- Heavy-duty knife edge cuts through solid sediments
- Customised gate surface coatings hardfacing, nitriding, chrome-plating
- Metal & Soft seat Easy to maintain at site



Cast Steel
Gate, Globe & Check Valves

Size & Class: 2" to 72" / #150 - #2500 End Connection: Flanged, Butt Weld Body Material: Carbon Steel, Alloy Steel,

Stainless Steel / Trim 8, Trim 5

Key Features

- Guided disc arrangement for all Globe Valves
- Internal hinge pin arrangement (Puncture-less body) for Check Valves
- Fugitive emission qualified as per API 624



Butterfly Valves (Triple-offset)

Size & Class: 3" to 100" / #150 - #2500 End Connection: Wafer, Lugged, Flanged,

Butt Weld

Body Material: Carbon Steel, Alloy Steel,

Stainless Steel

Disc Material: Carbon Steel, Stainless Steel

Key Features

- Triple Offset geometry minimises seat seal contact
- Body seat hardfaced with Stellite #21
- Replacable laminar seal

Industry References

- Andhra Sugars
- Avadh Sugar & Energy
- Bajaj Hindustan Sugar
- Balrampur Chini Mills
- Bannari Amman SugarsDhampur Sugar Mills
- Dwarikesh Sugar Industries
- EID Parry
- Madhucon Sugar and Power Industries
- Triveni Engineering & Industries
- Ugar Sugar Works



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