Steam Engineering Solutions for Industries.

PureSys India

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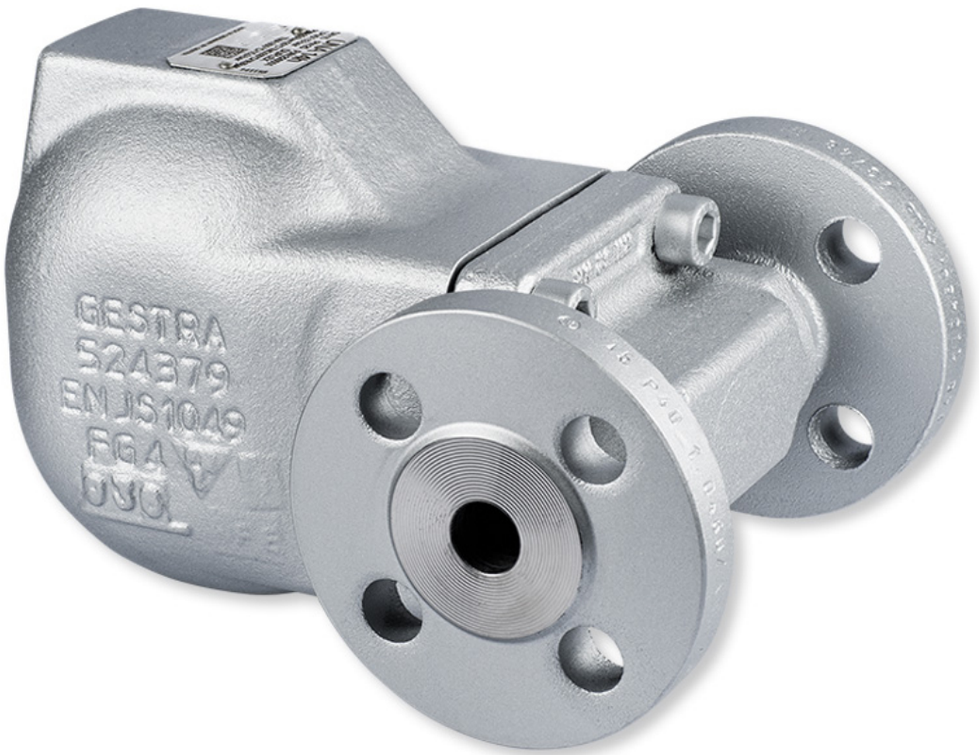
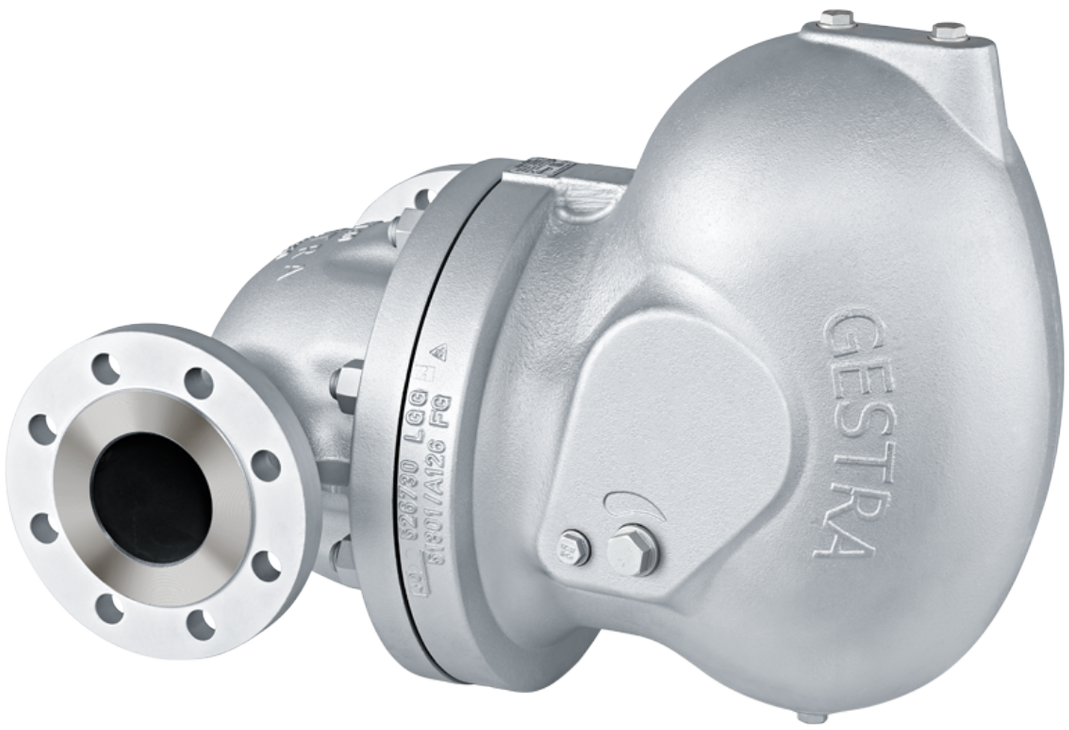




Steam Traps in Industry

Steam Traps are the heart of any distribution system and the process applications for any industry.

Steam is used directly and indirectly in all the major industries. It is used to heat water, oil, chemicals, air and in various other industrial applications.

For maximum efficiency dryness fraction of the steams should be 98% or more and to maintain that dryness fraction condensate removal from the distribution lines is important. Furthermore condensate and trapped gases removal from process machines and vessels ensures rapid and efficient heating, no water hammering and long life of the machines.

Efficient steam consumption is essential for achieving plant efficiency. This can be achieved only by using Steam traps which remove all the condensate and the trapped gases.

How we can Help you?

Get in touch...

Condensate removal and recovery, mainline and process traps

Zero leak isolation valve technology

Flow Measurement

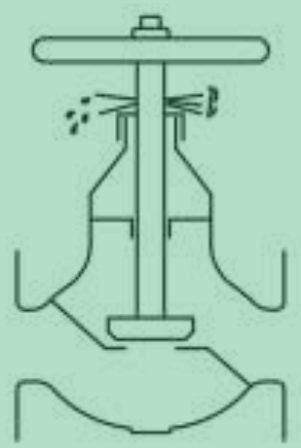
Pressure and Temperature control

Bellow Sealed Valves **3 years of unconditional guarantee!**

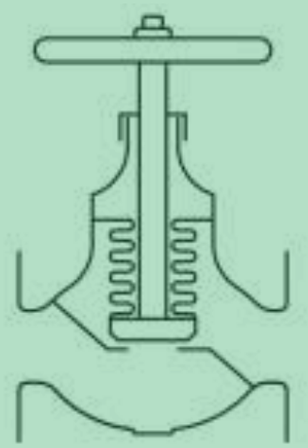
We are confident.. Are you?

These Valves manufacture with savings and maintenance free life in mind. They work with exceptionally low friction and therefore have very low actuating forces. They are durable and guarantee maximum tightness.

One of the most frequent and serious problems valves face is gland leakage, results ion wasted and increased plant down-time. Apart from High Cost of energy losses, gland leakages can also cause serious environmental, ecological and health hazards to plant workers. The Bellow sealed Valve comply to conditions at high temperatures and are capable of withstanding over 10,000 cycles without failure.



Ordinary Valve



Bellow Seal Valve

ADVANTAGES

Rising stem
Long life of imported bellows
Twin sealing system
Hard faced satellite
Testing ast per API 598
Bellow life cycle more that 10,000 cycles
Special design suitable for water, air, steam thermic fluid and hazardous materials.

PRODUCT FEATURES

Non Rising Hand Wheel
- Ideal in restricted spaces

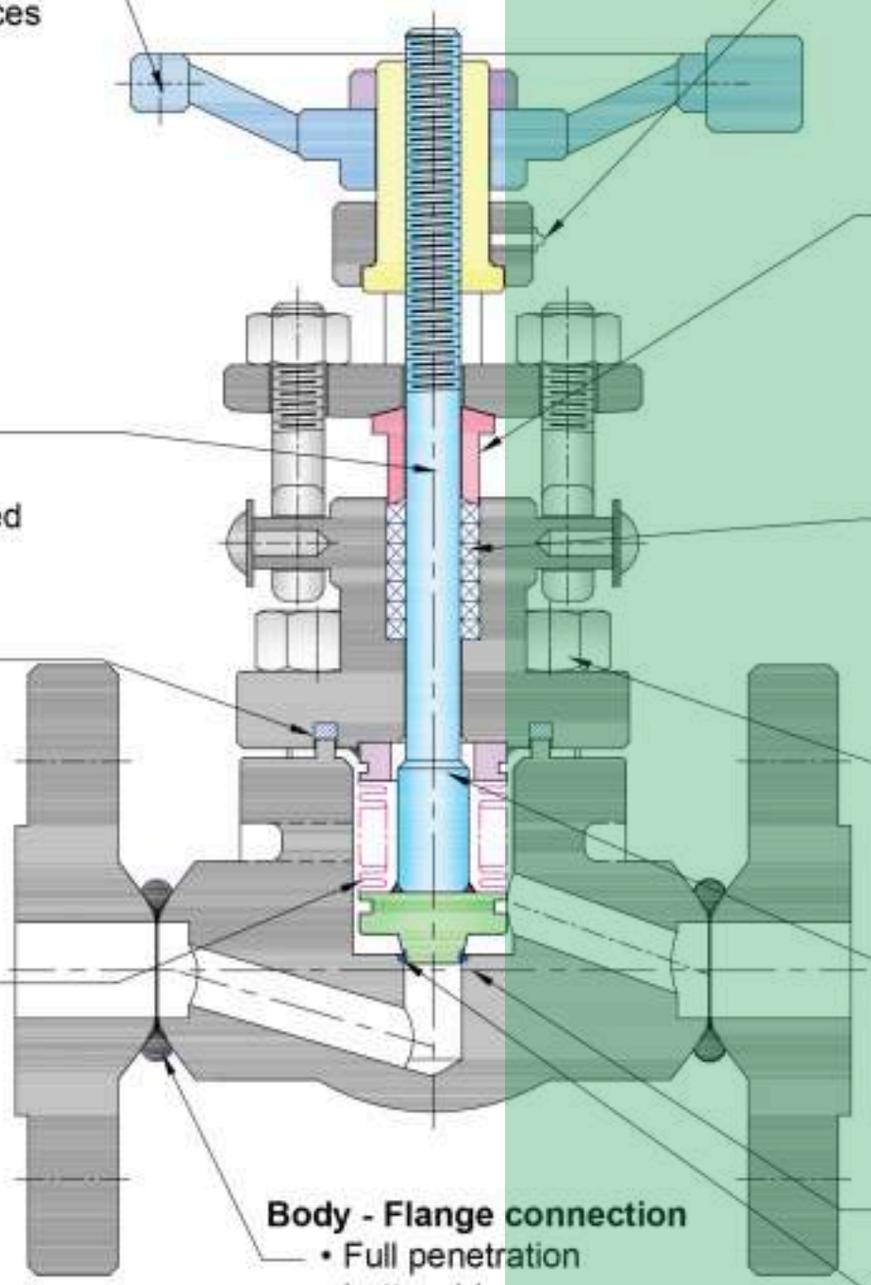
Provision For Lubrication on Yoke Sleeve
- Ensures smooth operation

Ease of operation for Secondary Packing
- Easy for replacing packing
- Improves proper sealing

Non Rotating stem
- High reliability
- Twist of bellow is avoided
- Longer packing life

Downstream Safety Gland Packing With Graphite
- Additional reliability against bellow failure

Body-bonnet Joints
- Tougue and groove arrangement
- No gasket slip possible, long service life



Body Bonnet Joint With Hex Bolts
- Ensure joint tightness

Multiply Bellows
- High service life

Back Seat Arrangement on Stem
- Additional tertiary safety
- Anti-blow out under line pressure

Body - Flange connection
- Full penetration butt weld

Integral Body Seat
- Avoid leak through seat ring

Hardfacing or Steliting
- increased service life

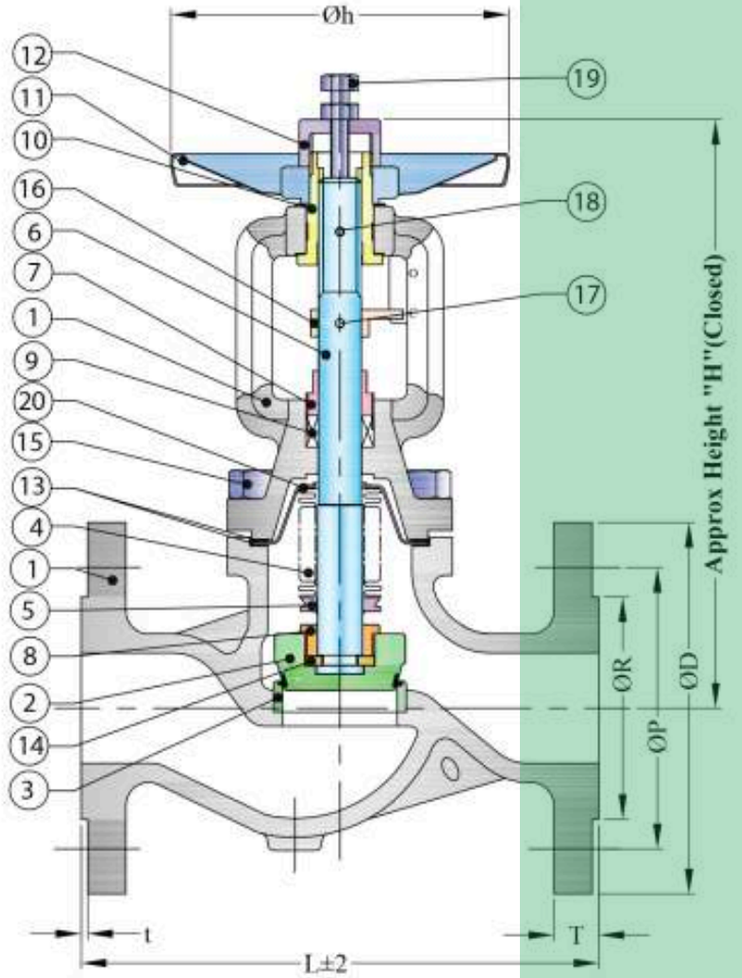
DN 15 - DN 200	
PN16(EN 1092-2)	
	CAST IRON(GG 25)
T min.	-10°C
T max.	+300°C

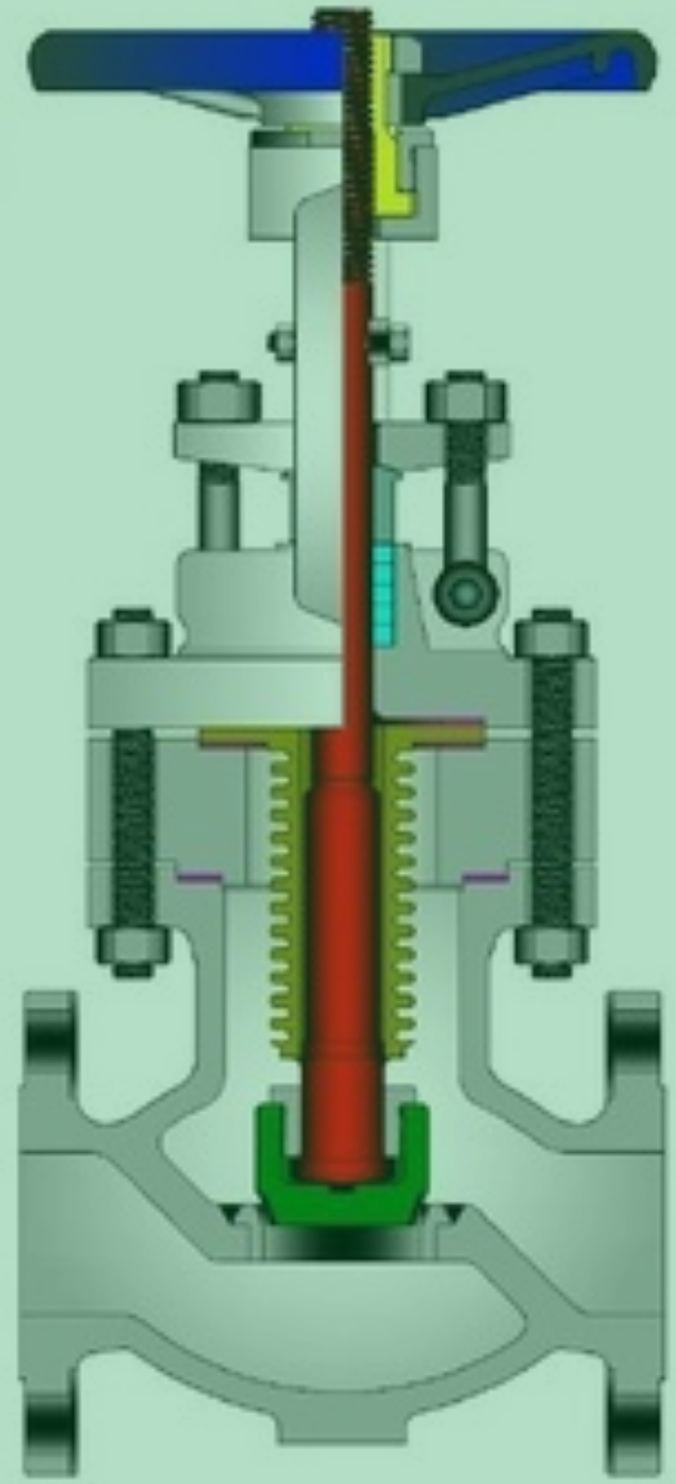
Available on request :
- Regulating disc, needle type disc.
- Optional Flanged end with large groove, large tongue 9 and RTJ end.
- Optional valves with CE markings.
- Optional valve with High Pressure Ratings.

Design may be changed without prior notice.

SL.NO	Component	Materials
		CBGL(CI)-F-GG 25
01	Body & Bonnet	GG 25 / 40.3
02	Plug	ASTM A 276 TP 410 + HF
03	Seat ring	ASTM A 276 TP 410 + HF
04	Bellow	AISI 316Ti / AISI 321
05	Bottom Bellow collar	ASTM A 276 TP 316 / 321
06	Stem	ASTM A 276 TP 410
07	Gland	ASTM A 276 TP 410
08	Stem nut	ASTM A 276 TP 410
09	Packings	Graphite
10	Yoke Sleeve	SG Iron / EN 1A
11	Hand Wheel	Carbon steel/SG Iron
12	Hand Wheel Nut	Carbon Steel
13	Gasket	Graphite+Stainless steel
14	Stem ring	ASTM A 276 TP 410
15	Fastners	Carbon Steel
16	Guide Plate / Indicator	Carbon Steel
17	Pin	Carbon Steel
18	Lubricator	Carbon Steel
19	Rise limiter	Carbon Steel
20	Cup	Stainless steel

* Available on request





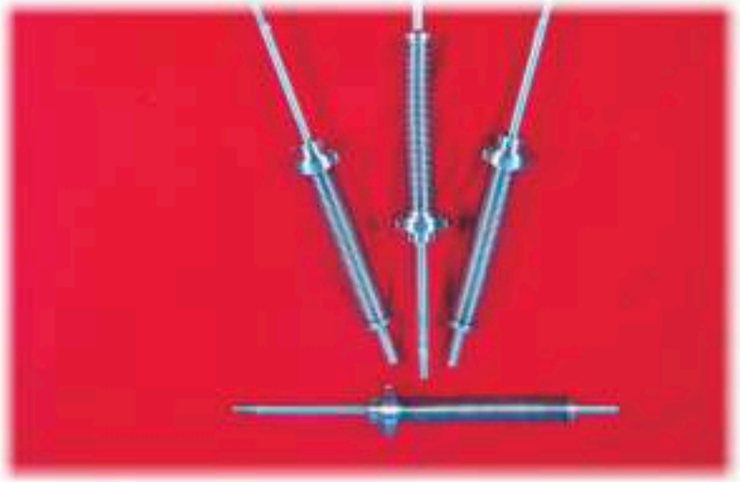
Dimensional Details:

DN	L	H closed	ØD	ØP	ØR	T	t	no of hole/Ø	Øh	Weight (approx.)
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[kgs]
15	130	220	95	65	46	14	2	4/Ø14	125	3.9
20	150	225	105	75	56	16	2	4/Ø14	125	4.7
25	160	235	115	85	65	16	3	4/Ø14	125	5.5
40	200	260	150	110	84	18	3	4/Ø19	150	10
50	230	265	165	125	99	20	3	4/Ø19	150	12.5
80	310	335	200	160	132	22	3	8/Ø19	200	25.5
100	350	390	220	180	156	24	3	8/Ø19	250	35
150	480	470	285	240	211	26	3	8/Ø23	350	70
200	600	610	340	295	266	30	3	12/Ø23	400	125

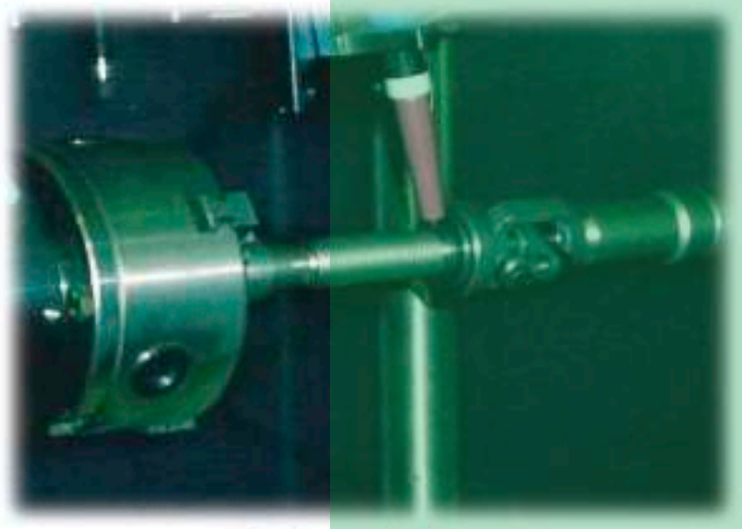
Testing Pressure in bar

HYDRO	SHELL	24
	SEAT	18
AIR	SEAT	07

Bellow Seal Cast Iron Globe Valve, with flanges acc. to EN 1092-2, face to face as per EN 558-1 and with ACME stem screw thread and grounded shaft.Multiply bellow with long service life made of stainless steel. Min. life cycle of Bellow as per MSS SP-117, metal back seat, safety stuffing box packing made of pure graphite, graphite+stainless steel Gasket, housed in a tongue and grooved flange. Body and Bonnet made of cast material GG 25, seat ring hardfaced , disc with conical and 360° rotating plug made of A 276 TP 410, duly hardfaced.



Bellows



Fusion of Bellows

Helium leak Testing

Hydroformed Bellows

VARIOUS TESTING STANDARDS

GIVING

“ZERO LEAKS”

“ZERO MAINTENANCE”

- Design Standards
  API 602 for forged gate valves
  BS EN ISO15761 for forged globe valves
  API 600 for Cast Gate Valves
  BS1873 for Cast Globe Valves
  ASME B 16.34 for Cast Globe and Gate Valve

- Bellow Inspection and Test : MSS SP -117
- Cycle Life upto and including class 800 Forged Valves : as per MSS-SP 117
  Min. 5,000 Cycles for Globe Valves
  Min. 2,000 Cycles for Gate Valves
  For class above 800, Minimum 2000 cycles for Globe Valve,
  Minimum 2000 cycles for Gate Valve

- Cycle Life for Forged Valves & all classes Cast Valves : as per MSS SP-117

Size(inch)	upto and including class 800		above class 800	
	Gate Valve	Globe Valve	Gate Valve	Globe Valve
≤2	2,000	5,000	2,000	2,000
2-1/2 ~ 4	2,000	5,000	1,000	2,000
>4	1,000	2,000	1,000	1,000

- Cycle Life Test is performed with the valve under the pressurised conditions.

- Non-Rotating stem prevents torsion of bellows.

- Two Secondary Stem Seals :
  Stem backseat and stem packing ensure perfect sealing when a bellow is damaged.

- Long Life Seating Surface :
  Hard faced with Stellite grade 6 for both seat and wedge/disc to prevent seizing and galling.

- End Flanged Dimension : ASME B16.5

- Butt Weld End Dimension : ASME B16.25

  Face to Face & End to End : ASME B16.10

- Helium Leak Test is performed for each bellow assembly using a Helium detector with sensitivity of 10-9 Std cc/sec.

- Bellow Material : SS321, SS316Ti, Inconel 625, Hastelloy C276, etc.

- Multi-Ply Bellows : Minimum 2 ply bellows

- Soft Seat Insert on Globe Disc :
  Soft seat also available for Gas or Vacuum Service.

At **PureSys India**, We work to provide the optimal cost saving, maintenance free and long term solution.

GET IN TOUCH