



Enriching Lives



# KIRLOSKAR PUMPS & VALVES FOR PROCESS INDUSTRY



KIRLOSKAR BROTHERS LIMITED



Special Alloy Foundry



Material Testing Laboratory



CNC Machine Shop



Process Pump Testing Laboratory



ERP Centre

*KBL, the largest manufacturer and exporter of pumps in India, is the acknowledged leader in providing fluid handling solutions. A pioneer with decades of experience in the field, is offering a wide spectrum of pumps for varied applications in process industries. The Kirloskar process pumps are suitable for handling corrosive, toxic, and inflammable liquids operating under varying range of temperatures. The process pumps range includes end suction pumps conforming to international standards of DIN 24256, ISO 5199.*

*KBL, an ISO 9001 and ISO 14001 company, has established largest pump manufacturing infrastructure and well laid process controls and integrated systems. The state of the art Computer aided pump testing laboratories and Foundries to produce special alloy steel castings for pump components to international standards vital for process pumps are getting further enhanced. The metallurgical controls and material analysis utilizing destructive and non-destructive material test facilities are a few to mention.*

*One of main strengths of KBL lies in its specially trained engineers capable of offering tailor made solutions to fluid transfer problems typically encountered in process industries. Today KBL process pumps are in operation in a variety of industries such as chemical, pharmaceutical, fertilizers, sugar, oil and gas etc in hostile environment.*

*Presenting innovative solutions to its clients with its definite approach backed by sustained research efforts, KBL is always a front runner in achieving technological break through, testified by some of its trend setting pumps such as magnetic drive and canned motor pumps.*

*An integrated ERP package ensures that orders are executed with precise production planning mechanism for on time delivery of products and services. The customer care is ensured through our specialized marketing outfit located in regional offices in all the major cities and a large dealership network spread across India and in overseas markets. Today KBL has a unique list of customers all over the globe to its credit.*

*Committed to fluid handling solutions for over a century. Kirloskar - the name you can trust for centuries to come.*

#### KPD - Standard



#### Range :

Delivery size	: Up to 200 mm
Discharge	: Up to 750 m <sup>3</sup> /hr
Head	: Up to 150 meters
Temperature	: (-) 50°C to 350°C
Design Code	: DIN 24256 ISO 2858 API 610 ( 7 <sup>th</sup> Ed.with deviation)

#### Material of Construction :

Monel, R55, CF8M, CF8, CF3M, Alloy 20, Hastalloy C, CD4M Cu, CA 6NM, CA 15 etc also in Bronze, Phosphorous Bronze, Cast iron

#### Features :

- Horizontal, single stage, side suction, top centre line delivery
- Back pull out design
- Oil lubricated Bearings
- Gland Packing as well as with Mechanical Seal
- Flushing/ Quenching/ Alarm system as per API plan

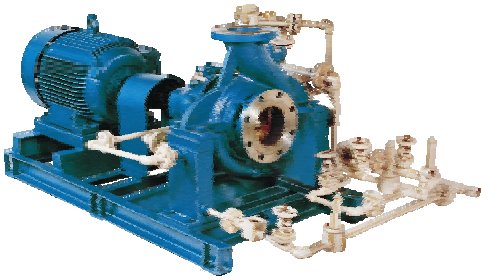
#### Applications :

Suitable for handling highly corrosive liquids, alkaline solutions, thermic fluids, hydrocarbons etc in industries such as

- Sugar and Paper
- Chemical and Petrochemical
- Air conditioning
- Effluent treatment
- Fertilizer and Refinery
- Steel and Mining



**KPD- CLM**  
(Centerline Mounted Pump)



**Features:**

- Suitable for liquid temperature above 180°C
- Center line delivery
- Mounted on Cast Iron/Fabricated pad
- Stuffing Box cooling
- Bearing cooling
- Material of Construction as per requirement
- Mechanical seal/Gland packing
- With/without flushing, quenching, cooling as per API plans

**KPD-MG**



**Features:**

- Suitable for toxic chemicals, especially hazardous acids and precious liquids in nuclear power plants
- Discharge up to 350 m<sup>3</sup>/ hr
- Head up to 62 m
- Horizontal, end suction, top delivery, single stage pump
- Magnetic coupling between pump and motor
- No gland
- Variety of material of construction

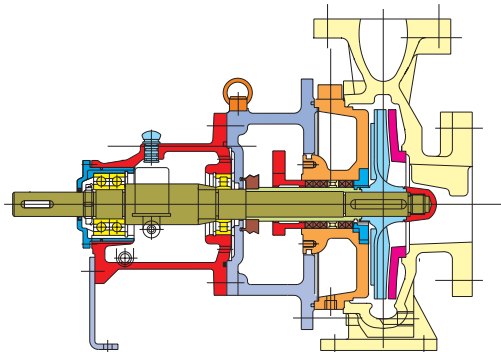
**KPD-J**  
(Jacketed Pump)



**Features:**

- Suitable for handling fatty acids and viscous liquids
- Cast steel/ASTM A322 4140 construction
- MS/SS 316 heating jacket
- Tested up to 12 kg/ sq. cm
- Mechanical seal/Gland packing

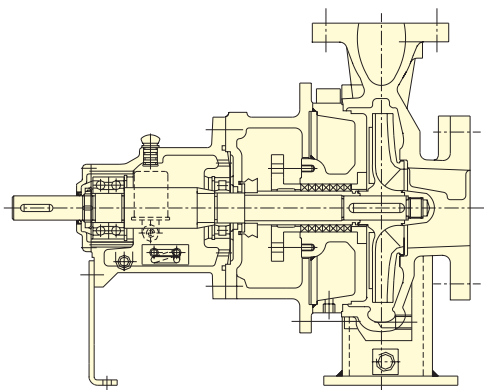
#### KPD-QF (Semi open Impeller Pump)



##### Features:

- Suitable for liquids with solid particles
- Semi open impellers
- Centre line mounting (optional)
- Telescopic shaft arrangement
- Stuffing box cooling
- Steam jacketing (optional)

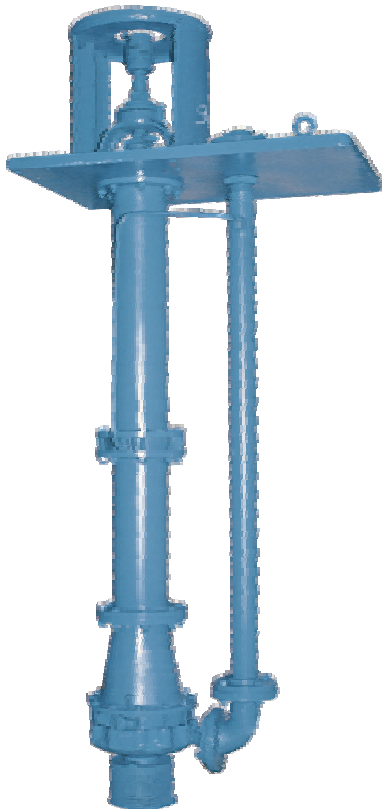
#### KPD-T (Thermic Fluid Pump)



##### Features:

- Suitable for handling liquids up to 350°C
- Centre line mounted
- Stuffing box cooling
- Bearing and pad cooling
- Mechanical seal/Gland packing

#### KPDS - Standard

**Range :**

Delivery size	: Up to 200 mm
Discharge	: Up to 650 m <sup>3</sup> /hr
Head	: Up to 150 meters
Temperature	: (-) 10°C to 150°C
Column Length	: Up to 8 meters

**Material of Construction :**

CF8M, CF8, CF3M, Alloy 20, CD4M Cu, also in Cast Iron and Cast Steel

**Features :**

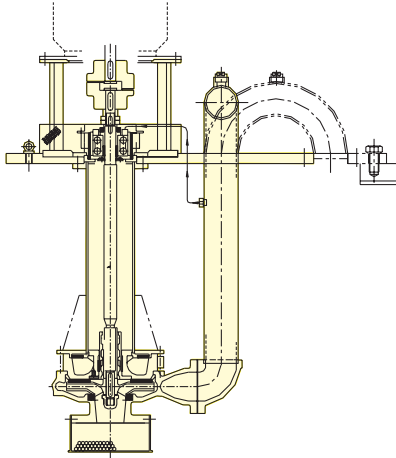
- Vertical submerged, single stage, single suction, vertical shaft with optional non reverse ratchet arrangement.

**Applications :**

Suitable for handling highly corrosive liquids, alkaline solutions, oils, solvents etc. in Industries such as

- Chemical
- Petrochemical and Refinery
- Fertilizer
- Effluent treatment
- Steel

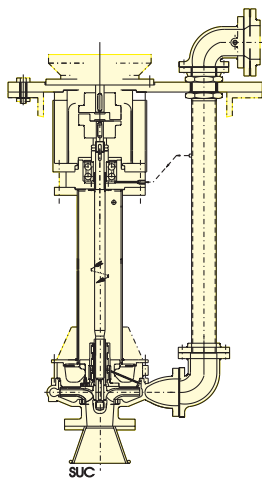
### KPDS-LGT



#### Features:

- Suitable for turbine lubrication and highly viscous liquids
- Single stage vertical mounting
- Cast steel construction

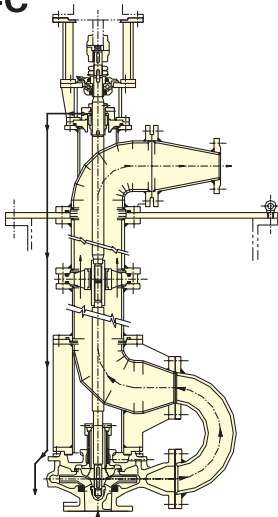
### KPDS-L



#### Features:

- Suitable for turbine lubrication and highly viscous liquids
- Single stage vertical mounting
- Cast steel construction

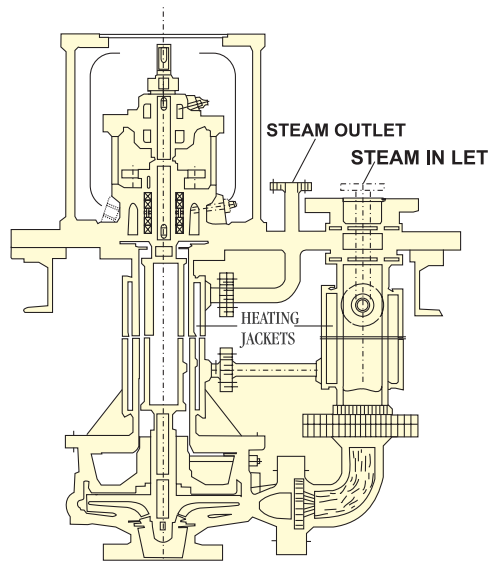
### KPDS-C



#### Features:

- Suitable for handling petrochemicals
- Discharge through column pipe
- Mechanical seal

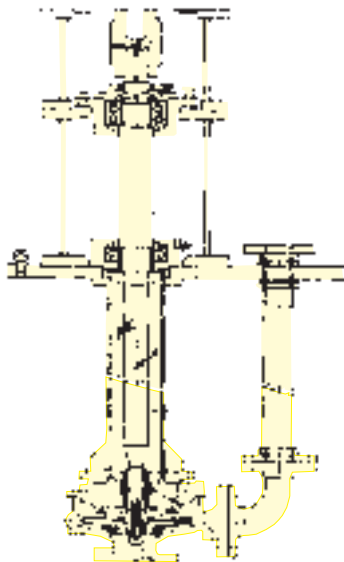
#### KPDS-J



##### Features:

- Suitable for handling molten sulphur
- Column pipes and rising pipes steam jacketed
- Graphite intermediate bushes
- Cast iron/Cast steel construction
- Maximum temperature 150°C

#### KPDS-SA

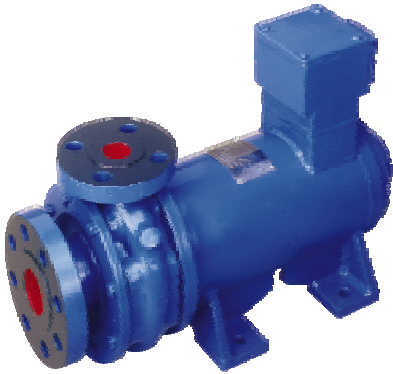


##### Features:

- Suitable for handling acids
- Material of construction as required
- Cantilever without intermediate bearings



#### CANNED MOTOR PUMP



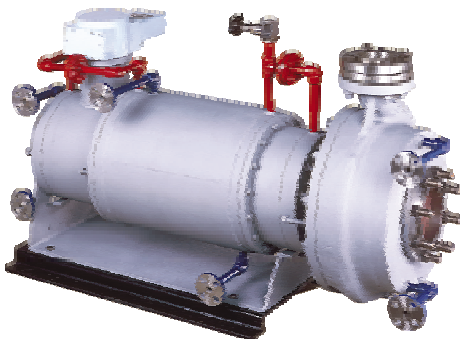
##### Range:

Delivery size : Up to 250 mm  
Discharge : Up to 1000 m<sup>3</sup>/hr  
Head : Up to 135 meters

##### Features :

- Japanese technical know how
- Horizontal, single stage, axial suction, top centre line delivery
- Hermetically sealed motor
- Bearing cooling through pumped liquid
- Enclosed/semi open impeller
- No seal no leakage
- Compact design
- Stainless steel construction
- Adequate safety devices

#### CANNED MOTOR PUMP - KCS

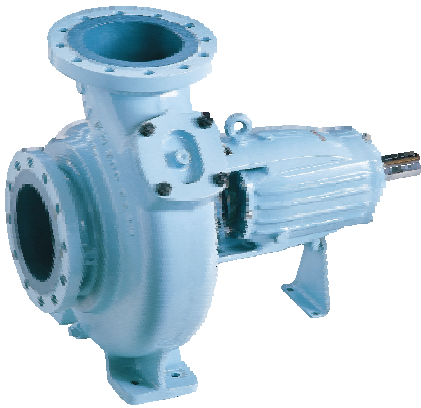


##### Applications :

Suitable for handling corrosive, toxic and hazardous and expensive liquids at high temperature and pressure in various industries such as

- Chemical and Petrochemical
- Pharmaceutical
- Fertilizer and Refinery
- Nuclear power plant

#### Non Clog Pump - SHM



#### Range :

Delivery size	: Up to 200 mm
Discharge	: Up to 800 m <sup>3</sup> /hr
Head	: Up to 90 meters
Permissible solids	: 105 mm
Consistency	: 5%

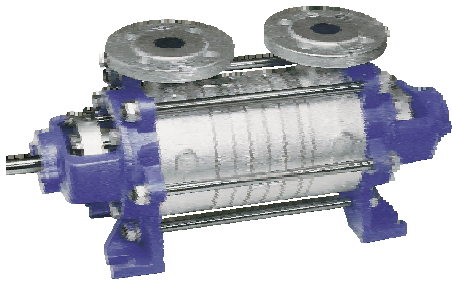
#### Special Features :

- Horizontal non clog type, single stage, side suction, top centre line delivery
- Back pull out design
- Enclosed, Semi open, single vane enclosed, three vane impeller semi open and free flow impellers
- Gland Packing with grease sealing
- Stuffing box cooling optional
- Flushing/ Quenching/ Alarm system as per API plan

#### Applications :

- Suitable for handling liquids with solids in suspension
- Sludge and pulpy liquids, sewage and waste water, viscous liquids, slurries, liquids carrying fibrous material, water carrying gravel etc. in industries such as sugar and paper.

#### Regenerative Pumps - CF



##### Range:

Delivery size	: Up to 50 mm
Discharge	: Up to 20 m <sup>3</sup> /hr
Head	: Up to 315 meters
Temperature	: Up to 120°C

##### Special Features :

- With technical know how from SERO Germany
- Horizontal multistage, sidechannel, Self Priming
- Single or double mechanical seal with API flushing/Quenching plans
- Lifetime grease filled
- Available in all stainless steel and stainless steel fitted construction

##### Applications:

- For handling liquids and gas mixture
- Low Discharge and high head applications
- Booster service
- Air conditioning and Refrigeration
- Boiler feed
- LPG and other Hydrocarbons
- Marine
- Domestic

#### CAST STEEL GATE VALVES (Conforming to API 600)

**Range :**

Class 150 : 2" (50mm) to 24" (600mm)

Class 300 : 2" (50mm) to 12" (300mm)

Class 600 : 3" (80mm) to 14" (350mm)

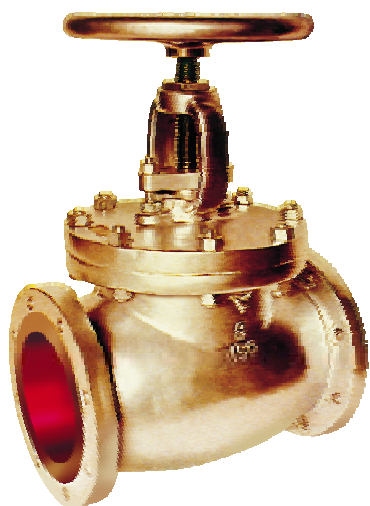
**Features :**

- Double flanged / Butt weld end, flexigate wedge, outside screw rising stem, yoke type bonnet, two piece gland construction and clockwise closing
- Renewable screwed body seat ring up to size 6", welded body seat ring for sizes 8" and above
- Back seating bush arrangement to enable re-packing under pressure
- Flanges with raised faces and serrated face finish

**Applications :**

- Naptha and Naptha derivatives in Oil refineries
- Water, Steam, Air, Gas or Liquid with Corrosive propertie

#### CAST STEEL GLOBE VALVES (Conforming to BS1873)

**Range :**

Class 150 : 2" (50mm) to 14" (350mm)

Class 300 : 2" (50mm) to 8" (200mm)

Class 600 : 3" (80mm) to 8" (200mm)

**Features :**

- Double flanged / Butt weld end, outside screw rising stem, yoke type bonnet
- Body is designed to have smooth flow through seat with minimum pressure drop
- Body / Bonnet joint male-female type to have leak-proof joint
- Two piece gland construction and clockwise closing
- Renewable screwed body seat ring up to size 6", welded body seat ring for sizes 8" and above
- Back seating bush arrangement to enable re-packing under pressure
- Flanges with raised faces and serrated face finish.

**Applications :**

- Naptha and Naptha derivatives in Oil refineries
- Water, Steam, Air, Gas or Liquid with Corrosive properties

### CAST STEEL CHECK VALVES (Conforming to BS 1868)



#### Range :

Class 150 : 2" (50mm) to 18" (450mm)

Class 600 : 3" (80mm) to 10" (250mm)

#### Features :

- Double flanged / Butt weld end, circular body cover.
- Body is designed to have smooth flow and minimum pressure drop.
- Body / Bonnet joint male-female type to have leak-proof joint
- Screwed body rings up to 6, welded body seat rings for sizes 8" and above
- Disc with integral seat design for long life and lower maintenance
- Hinge and Disc are separate giving complete flexibility to disc for leak tight performance

#### Applications :

- Naptha and Naptha derivatives in Oil refineries
- Water, Steam, Air, Gas or Liquid with Corrosive properties

### CAST IRON GATE VALVES



#### Range :

As per IS 14846 : 50 to 1200mm  
( Non rising spindle type)

As per BS 5163 : 50 to 600mm  
( Non rising spindle type)

Generally as per IS 14846 : 50 to 900mm  
( Rising spindle type)

#### Manufacturing and Testing Standard :

- Non rising spindle as per IS 14846 / BS 5163 and rising spindle generally confirming to IS 14846 standard.

#### Features :

- Rigid and sturdy design with minimum head loss across the valve
- Long service life and leakproof even after repeated open or close cycles.
- Excellent finish on spindle threads resulting in low friction and smoother operation of valves

#### Applications :

- Suitable for handling clear water having turbidity up to 5000 ppm and temperature up to 65°C. Other fluids with maximum pressure and temperature conditions generally within the scope of IS 14846 / BS 5163



#### CAST IRON REFLUX VALVES



**Range :**  
50 to 700 mm

**Manufacturing and Testing Standard :**

- As per IS 5312 Part I

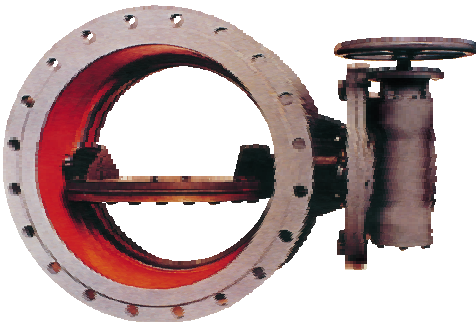
**Features :**

- Rigid and sturdy swing type design with minimum head loss across the valve
- Long service life and leakproof of high order

**Applications :**

- Suitable for handling clear water having turbidity of 3000 ppm and suitable for temperature up to 65°C (for Rubber/Bronze seating) and up to 95°C (for Bronze /Bronze St. Steel / St. Steel seating)

#### BUTTERFLY VALVES



**Range :**  
80 to 2500mm

**Manufacturing and Testing Standard :**

- As per IS 5155 / IS : 13095 / AWWA - C - 504

**Features :**

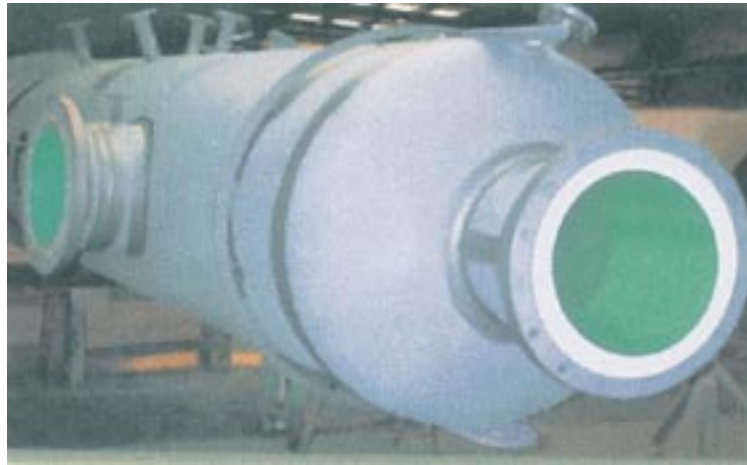
- Rigid and sturdy design with minimum loss of head across the valve
- Single / Duo-eccentric seat geometry resulting into less wear and tear of the seal and hence longer life
- Unique clamping Ring design for controlled and uniform seal compression and easy replacement of seal.
- Unique "O" ring and U seal combination in shaft seal for easy replacement at site
- Low maintenance cost

**Applications :**

- Suitable for variety of liquid and gaseous media in Chemical and Petrochemical plants for tight shut off and control
- Ideally suitable for isolating as well as throttling services
- Applicable for maximum pressure and temperature condition within the scope of BS 5155 / IS 13095 / AWWA C-504

## KBL IN PROCESS SECTOR

### CORROSION PROTECTION COATINGS



#### **POLYGLASS VEF**

Vinyl ester/acrylic co-polymer loaded with flake glass and reinforced with fibre

#### **POLYGLASS Standard**

Polymer acrylic co-polymer loaded with flake glass.

#### **PLAZMET ZE**

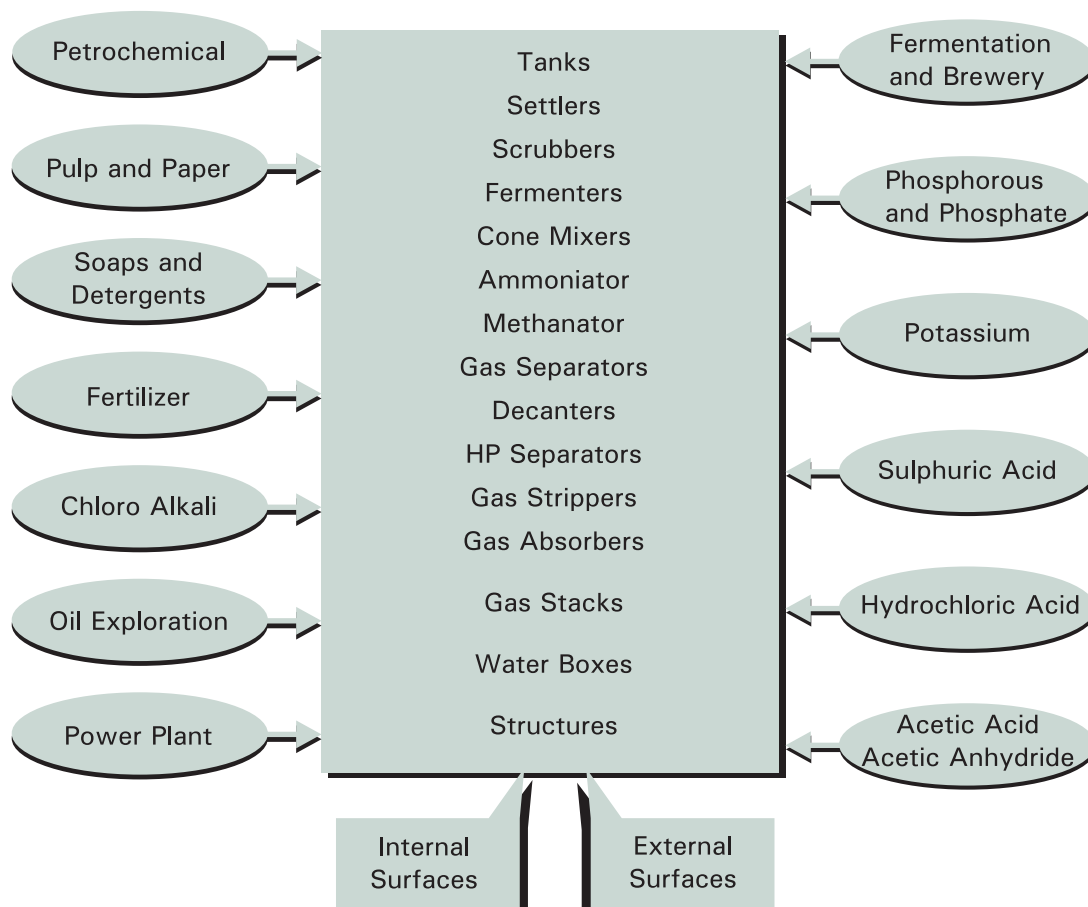
Polyamine cured high solids flake glass epoxy

#### **PLAZMET ZF**

Rust tolerant epoxy coating with rust converter, inhibitor and passivator.

#### **PLAZMET HTE**

Viscous solvent free two/three pack aromatic amine epoxy compounded with stainless steel and glass platelets and heavily loaded with Silicon Carbide.



## KBL IN PROCESS SECTOR

### A FEW MAJOR CUSTOMERS

Client	Liquid Handled	Temp °c	Capacity m³/hr	Model	Rating KW	Speed RPM	Material Of Const.
Ballarpur Industries	ALKALINE WATER	45	15	KPDS 32/20	5.5	2900	C.S.
Brook Bond India Paper Mills,	CAUSTICLYE	40	18	KPD 50/26	3.7	1450	C.S.
Baroda Rayon	ETHYLENE GLYCOL	120	50	KPD J 65/20	3.7	1450	CF8M
Bhilai Steel Plant	PITCHCREOSATE	140	28	KPD J 50/20	2.2	1450	CF8M
BHEL	HCL	50	75	KPD 80/20	15	2900	Hastelloy-B
Century Rayon Ltd.	SPIN BATH	60	204	KPD 125/32 M	37	1450	R55
Cheminova India Ltd.	MOLTEN SULPHUR	135	4	KPDSJ20/16 QF	3.7	2900	C.I.
Dr.Beck & Co.	HEAT TRANSFER OIL	280	40	KPD 50/20	11	2900	C.S.
Damau Distillery	ALCOHOL	40	6	KPD 32/13	0.75	1450	SS-316
Faria Chemicals Ltd.	FERMENTED WASH	35	60	KPD 50/13	5.5	2900	CF8M
Formica India	PHENOL	140	22	KPD 40/20	5.5	2900	CF8M
GNFC	AMMONIUM NITROPHOSPHET	130	25	KPD J 40/13	3.7	2900	CF8M
Gujarat Petrosynthesis	Butane	38	9	KPD 32/16	1.5	2900	C.S.
Gwalior Rayon	CAUSTIC SOLUTION	75	43.2	KPD 65/32	15	1450	CF8M
Gwalior Rayon	HCL 33%	30	3.6	KPD 40/20	0.75	1450	Alloy-20
Gujarat Petrosynthesis	POLYBUTANE	227	36	KPD 50/20	9.3	2900	C.S.
Ganesh Benzoplast	THERMIC FLUID	250	200	KPD 100/20H CLM	37	2900	C.S.
GSFC	LACTUM	165	10	KPD J 32/16	3.7	1450	CF8M
GNFC	TURBINE OIL	50	65	KPDS 65/26L	5.5	1450	C.S.
Godrej Soaps Limited	VEG. OIL	90	15	KPD 40/32	3.7	1450	CF8M
Hindustan Antibiotics Limited	ACIDIC Filterate	40	12	KPD 32/16	3.7	2900	CF8M Fitted
Hindustan Paper Mills, Cachor Project	BLACK LIQUOR	90	60	KPD 80/20	7.5	1450	CF8M
.Hindustan Lever Ltd.	FATTY ACID	230	99	KCS 80/32	18.5	2900	CF8M

## KBL IN PROCESS SECTOR

### A FEW MAJOR CUSTOMERS

Client	Liquid Handled	Temp °c	Capacity m <sup>3</sup> /hr	Model	Rating KW	Speed RPM	Material Of Const.
Hindustan Fertilizer Croperation	HCL + HN03	30	50	KPD 50/16	11	2900	Hastelloy-B
Hindustan Paper Corpn.Ltd.	WHITE LIQUOR	90	12	KPD 32/26 QF	15	2900	CN7M
Indian Rayon Corporation,	CAUSTIC SODA	30	60	KPD 65/26	9.3	1450	C.I.
IPCL	HITHERM	120	9	KPDS 32/20	1.1	1450	C.S.
IOCL	H2SO4 98%	30	20	KPD 40/13	5.5	2900	Alloy-20
IPCL	H2SO4 78%	16	95	KPD 80/16	22	2900	CN7M
L&T Usha Martin Ltd.	TURBINE OIL 46	50	150	KPDS 80/26 L	75	2900	C.S.
Madras Refineries Ltd.	HYDROCARBON	70	4.5	KPD 32/20	3.7	2900	C.S.
Mysore Paper Mills Ltd.	MILK OF LIME	40	350	KPD 150/32 N	55	1450	2.5% Ni Cl
Nuclear Power corpn.	HEAVY WATER	65	6	KCS 20/20	3.7	2900	CF8M
National Dairy Development Board	LIQUID AMMONIA	-20	8	KCS 32/20	3.7	2900	CF8M
National Newsprint & Paper Mills	WHITE WASH	40	90	KPD 80/26	9.3	1450	CF8M fitted
National Fertilizers Limited	CARBONATE SOLUTION	100	8	KPDS 25/16	2.2	2900	CF8M
Oriental Paper	GREEN LIQUOR	80	80	KPD 65/16	11	2900	CF8M
Prawara SSK	SPENT WASH	30	57.6	KPD 40/13	3.7	2900	CF8M
Reliance Petroleum Ltd.	TURBINE OIL ISO-VG 32	40	82	KPDS 80/26 LGT	37	2900	C.S.
Rourkela Steel Plant	MOLTEN SULPHUR	135	7	KPDSJ25/16 Q	3.7	2900	CI
RCF	NaOH 40%	35	10	KPD 32/13	3.7	2900	CF8M fitted
Rayalseema Paper Mills,	BLACK LIQUOR	120	50	KPD 65/26	5.5	1450	CF8M
RCF	UREA 60%	150	20	KPD J 40/20	7.5	2900	CF8M
Salem Steel Project	HN03	30	8	KPD 25/16	2.2	2900	Alloy-20
Uranium Corpn. of India Ltd.	ACIDIC SOLUTION	50	80	KPD 65/26 N	37	2900	ALLOY 20
Visakhapattanam Steel Plant	COAL TAR	100	20	KPD J 40/20	7.5	2900	C.S.

# KBL IN PROCESS SECTOR

## A FEW MAJOR CUSTOMERS

- Alexandria Carbon Black Co. Egypt
- AL -Hamrani Co Ltd. Saudi Arabia
- Dyestuffs and Chemicals Co., ISMADYE, Kafr El Dawer Egypt
- Egyptian Electricity Authority El Arish Thermal Power Station, Egypt
- Guyana Sugar Corp
- Hercules International Est., DUBAI
- Indo- Jordan Company, Jordan
- Industrial Chemicals Establishment, Saudi Arabia
- Industrial Chemicals and Resins Co. Ltd ; Saudi Arabia
- Kagera Sugar of Uganda Ltd, Uganda
- Moafaq Al Gaddah Trading Co. Dubai
- National Chlorine Industries, Jordan
- Saudi Formaldehyde Chem. Chemicals Co. Ltd, Saudi Arabia
- State Energy Co Ltd., Krygzsthan
- The Sugar and Integrated Industries, Egypt





## KIRLOSKAR BROTHERS LIMITED

Registered & Corporate Office : Udyog Bhavan, Tilak Road, Pune 411002, India.

Tel. : +91-20-444 4444

Fax : +91-20-444 0156 / +91-20-444 4198 / +91-20-44 40 816 /  
+91-20-444 8671 / +91-20-444 9428

Email : [kblin@kbl.co.in](mailto:kblin@kbl.co.in)

[www.kirloskar.com](http://www.kirloskar.com)

[www.kbl.co.in](http://www.kbl.co.in)

---

As we are constantly endeavouring to improve the performance of our product/equipment, we reserve the right to make alterations from time to time, and as such our product/equipment may differ from that detailed in this publication. For latest information you may get in touch with our Registered & Corporate Office, Pune.

---