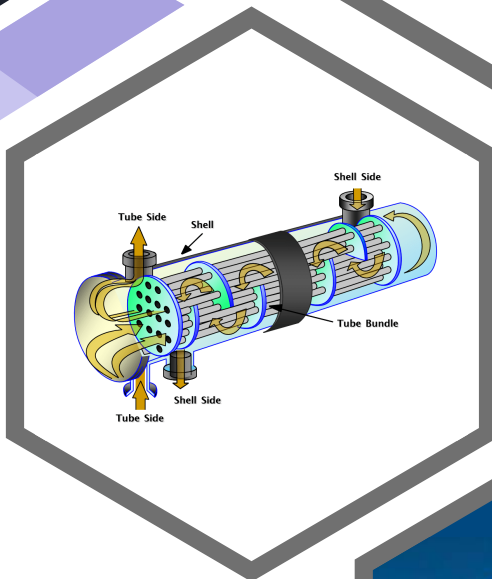




Perfect Engineering India

(Total Water, Air, Gas and Oil Solutions)



About Us :

Established in the year 2014 at chakan, Pune, Maharashtra.

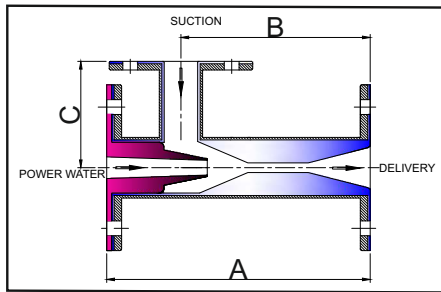
We perfect Engineering India are a sole proprietorship based firm, engaged as the for most. We are committed to provide safe industrial solutions to many factories. We are doing Design, Engineering, Manufacture & Supply of Water & Chemical Treatment Plants Equipments. • DM Plant • Softening Plant • RO Plant • ETP Plant • Cooling Tower • Sewage Treatment Plant • Chemical Dosing System. Our products are high in demand due to their premium, quantity & affordable prices. Further more we ensure, to timely deliver, these products to our clients through this. We have gained a huge clients base in the markets.



Our Valuable Products :

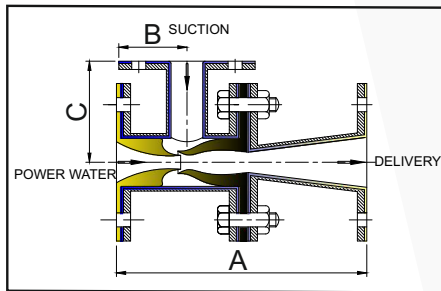
- 1» Inspection Window / Site Glass.
- 2» Plastic Filter Nozzles / PP Strainers.
- 3» Acid / Caustic / Brine Dosing Ejector.
- 4» Cast Basalt / Ceramic Pipes & Equipment.
- 5» CSRL/CSPP/PTFE Lined Pipes & Equipments.
- 6» Pressure Vessel & Tanks (MS/MSRL/ MSRC / FRP /PP/HDPE).
- 7» Heat Exchanger / Shell & Tube Type / U Tube Bundle /Fin Tube Type Radiator / AHU Cooling Coil.
- 8» Centrifugal Air Blower / Rotary Air Blower / Industrial Air Fans / ID Fan / Dust Collector / Bag Filter etc.
- 9» Ion Exchange Resin / Filter Media.
- 10» Vacuum Ejectors for Liquid / Air / Steam.
- 11» HCL Acid Fume Absorber / CO2 Absorber.
- 12» Vessel Internal Header / Lateral / Strainers
- 13» Tubular / Magnetic / Float & Board Level Gauges.
- 14» Conical Strainer / Resin Trap / Media Trap / Basket Type Strainer / Y Type Strainer / T Type Strainer etc.
- 15» Industrial Valves / Diaphragm / Butterfly / Non Return Valve (Flap, Ball, Swing, Wafer Type) / Gate / Globe / Ball Valves etc.

M. S. Ebonite Lined (Ratio - 1:1) Venture Ejector Assembly



Sr. No.	Ejector Model No.	Nozzle Bore in MM	Throat Bore in MM	Connection in NB				A	B	C
				Power Water	Suction	Delivery	M ³ /Hr			
1	PE 1126	4	10	20	20	20	1.7	103	61	63
2	PE 1136	5	12	20	25	25	2.45	163	94	87
3	PE 1146	6	16	20	33	33	4.36	208	118	89
4	PE 1156	8	20	25	40	40	6.81	262	172	89
5	PE 1166	10	23	33	40	50	9.81	293	190	102
6	PE 1176	12	33	40	50	50	17.45	319	208	111
7	PE 1186	16	40	50	80	80	27.27	366	244	127
8	PE 1196	20	48	65	80	100	39.27	394	266	127
9	PE 1107	25	64	80	100	100	69.82	450	303	127
10	PE 1127	40	95	125	150	200	157.1	773	559	152

M. S. Ebonite Lined (Ratio - 1:5) Venture Ejector Assembly



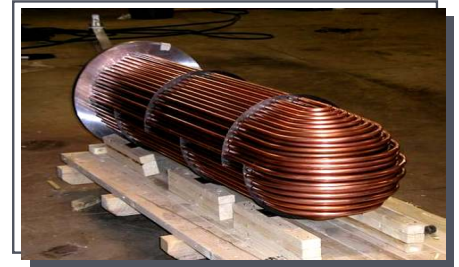
Sr. No.	Ejector Model No.	Nozzle Bore in MM	Throat Bore in MM	Connection in NB				A	B	C
				Power Water	Suction	Delivery	M ³ /Hr			
1	PE 1504	6	9.52	40	25	40	2.18	213	60	86
2	PE 1504	10	11.43	40	25	40	5.72	213	60	86
3	PE 1505	12	17.46	50	25	50	9.54	279	54	95
4	PE 1556	16	20	65	32	65	16.36	347	56	102
5	PE 1508	19	25.4	80	40	80	24.54	411	68	111
6	PE 15001	25	30.16	100	50	100	43.63	500	78	133
7	PE 15521	32	39.11	125	65	125	60	621	83	146
8	PE 15051	40	44.45	150	80	150	90	760	94	159

Body Material Mild Steel With Ebonite Rubber Lined, Nozzle & Throat PP, (Optional HDPE, PP/FRP Lined, Stainless Steel Also Available)

Heat Exchangers / AHU Coils / Transformer Radiator

Shell & Tube Heat Exchanger :

Our shell & tube heat exchangers are used in many comfort & industry applications for heating & cooling fluids. They consist of a shell with traditional plain tubes or enhanced surface tubes for high thermal performance. The fluids can be liquids or gases, one of which flows inside the tubes while the other flows outside the tubes within the shell. There are single-phase or two-phase heat exchangers, & the latter is used to either boil or condense fluids.



Fin Tube Type Radiators :

The obvious advantage of Air cooled fluid cooler is that it does not require any water after its first charge. This is completely a closed circuit system. The hot fluid (water) from the source is made to pass through finned surface heat transfer coils & using the heat is rejected to ambient air passing through coils using axial fans.

Cooling media is only free air.	Raw water pump is not required.
No problem of scale formation.	Substantial energy saving during mild weather conditions.
Water treatment plants & chemicals not required.	No fear of air contamination or pollution.
Does not require any tube well boring.	Total Maintenance free system.
100 % water saving-Does not require water after its first charge.	No Engine downtime for maintenance.
No dreation of DG set due to scale formation.	Cooling Tower and Shell & Tube Heat Exchangers are not required.

Transformer Radiator :

A transformer is a static machine used for transforming power from one circuit to another without changing frequency. Radiators are used in a transformer to cool the transformer oil through natural air or forced air flowing in these radiator fins. As the transformer oil temperature goes down due to cooling it goes to the transformer tank from bottom ,cool the windings and gets heated, and then returns to the radiator for next cooling .

Vessel Internals

We are manufacturing pressure vessels internal, PVC, PP, MSRL/RC, Stainless steel etc.

- Air Seal Pot
- SS316/PVC Peg
- Rubber Grommet
- Inlet Distributor / Belmouth
- Middle Collector Header / Lateral Distributor System
- Bottom Collector Header / Lateral Distributor System
- PP Strainer



PTFE/PFA LINED PIPES & FITTINGS

The PTFE lined pipes or the PFA lined piping and the PTFE fitting are recognized as the ideal solutions for conveying or processing highly corrosive fluids under severe conditions. The PTFE lining or the PFA liner is chemically inert and resists the majority of corrosive fluids up to 230°C.

Manufacturing expert in the 7 lining technologies

PFA injection

Rubber Lining

Ceramic Lining

PP / HDPE Lining

Cast Basalt Lining

Extrusion of PTFE fine powders

PTFE is a moulding



Plastic Filter Nozzles / PP Strainers

- JUV strainer
- Basket strainer
- K1 /KR1 strainer
- Ring type strainer
- Double decker strainer
- Strainer lateral
- D20 strainer
- C1 /CR1 strainer
- Single decker strainer
- Basket strainer / Sand filter nozzle



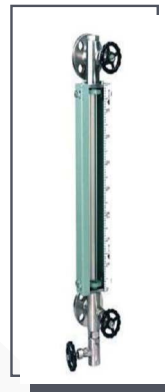
Industrial Strainers

- Conical Strainer
- T Type Strainer
- Basket Type Strainer
- Sinter Wire Resin Trap
- Resin Trap
- Y Type Strainer
- Media Trap



Tubular/Magnetic/Float & Board Level Gauges

Level Gauges are sensing and measuring instruments that are used to detect the level of a fluid or gas in a tank or similar storage container. These devices are widely used in industrial process applications and are employed to measure the fluid levels in drums, tanks, pressure vessels, or other similar applications. Moc: PP/MS/CS/SS



Industrial Valves

- Diaphragm Valve
- Gate Valve
- Ball Valve
- Non Return Valve
- PTFE Laminated Rubber Diaphragms
- Butterfly Valve
- Globe Valve
- Rotary Airlock Valve



FRP Lined Pipes & Equipment

Fibreglass or glass-reinforced plastic is used to manufacture composites, which are widely used in the market today to replace steel, aluminium and other lower strength plastics. Composite materials find their uses in various industries, such as aerospace, automobiles, transportation, energy, infrastructure, construction, electrical insulation, telecommunication, medical equipment, and sports due to its low cost, ready availability, excellent strength, and durability.



HCL Acid Fume Absorber / CO2 Absorber KOH Breather

We are passionately involved in offering a quality approved collection of "Perfect Engineering India" PP FRP, MSRL/RC, MSFRP HCL Acid Fume Absorber System in the market. These products are used in different places owing to their reliable performance, durable nature and long working life attributes. Our offered products are made by highly qualified professionals using advanced technology and the best quality of raw material that is procured from the most trustworthy suppliers of the market. These products are highly cherished among the patrons for its specific features and cost effectiveness.

Features: • Low maintenance • Long working life • Reliable performance

Co2 absorbers contain strong bases (sodium hydroxide and potassium hydroxide) that can extract labile protons from anesthetic molecules, resulting in the production of CO. (There are new CO2 absorbers that do not contain KOH or NaOH, such as Absorb.



Rubber Lining Pipes & Equipment

The process of rubber lining is divided in to the following steps. Preparation of the base surface. Preparation of rubber sheets. Application of the rubber sheets on the metal surface.

Surface Preparation :

This is very important process for rubber lining. The surface of the METAL MUST BE FREE FROM OIL, PAINT, SCALES, RUST ETC. THIS IS GENERALLY REMOVED WITH THE HELP sand blasting/ shot blasting. After the surface is cleaned, adhesive or bonding agent is applied to surface. Two or three coats are applied, as adhesion is an important process for rubber lining.



Preparation of rubber sheets :

The rubber compound is manufactured as per the requirements after looking in to the chemical and other conditions of the process. Rubber sheets are made on calendar machine in different plies. Lining up to 6 mm thickness can be applied in single layer. If the thickness is more, it is applied in 2 or more layers. For Pipes & fittings Extruded rubber tubes are inserted in the Pipes.

Application of rubber sheets :

Un vulcanized rubber sheets, which are prepared on the machine are applied on to the adhesive coated, half dried surface under slight pressure of hand or with a metallic roll as well as with the help of various lining tools. We have to ensure that no air gets trapped between the metal surface and rubber sheet. Joints are made levels and joint with help of knurling tools.

Vulcanization :

By and large vulcanization is carried out in an auto clave. This is the process by which rubber changes from plastic state to elastic state. The temperature and pressure depend upon the rubber compound and thickness of lining. Large size equipments, which are rubber lined at site, are vulcanized By Open Steam As Well As By Hot Water Curing, The Temperature Is Maintained To Get The Rubber Cured And For This Method Special Compound of Rubber Is To Be Manufactured For This Process.

Protection of rubber lining equipments :

The vessel should be stored away from sunlight or it should BE covered by tarpaulin or some, other device. This will avoid direct sunlight, which may affect the surface due to the presence of ozone. The vessel should be filled up with water when not in use for longer period.

Testing and Inspection :

All the rubber-lined items must be tested before & after vulcanization. This is to ensure that they are free from faults, Which might cause failure of the equipment. Visual inspection in good light is carried out to check mechanical damages blisters & poor joints. There after spark test with a high voltage is carried out to check mechanical damages, pin holes, blisters & poor joints. Hardness test is must for rubber lining. Knocking test is also carried out by an experienced hand with the help of Wooden hammer to check whether there is any poor bonding.

PP/HDPE LINED STEEL PIPES & FITTINGS

Pipe materials for pipe spools shall conform to one of the material specifications described below in accordance with the customer's piping specifications :

- Mild Steel Pipes as per IS 1239 Medium/ Heavy duty up to 150 NB & above 150 NB as per IS 3589, 5.00 MM Thick KS D3507 SPP or D3562 SPPS, ERW pipe



- Carbon steel pipe, ASTM 53 Gr.B or ASTM A106 Gr.B ERW and seamless pipe, size from 1 to 16.

Other required pipe materials such as API pipe, stainless steel or alloy steel pipes would be available to meet service conditions and should be referred to us. liner surface cracks, deformation, outside paint coating, etc.

Flange Specifications : Flanges confirming to ANSI / BS10 / DIN or any other international standard will be supplied in Mild steel, Carbon steel, Stainless Steel. Standard flanges are Slip-on type and Lap-joint type flanges and will be provided if requested at the time of making an offer.

PP Liner Specifications : The polymer resin shall meet the STM Standard Specifications and our standard PP liners are unpigmented and natural white color. The colored liners are available if specially requested.

Fitting Availability : Standard fittings include 90°C Elbow, 45°C Elbow, Reducing 90°C Elbow, Equal Tees, Reducing Tees, Instrument Tees, Concentric Reducers, Eccentric Reducers, Laterals and Cross for 1" (25mm NB) through 8"(200 mm NB) diameter. Non - standard fittings such as double and triple branch tees, other special shapes are available per the customer's requirements.

Testing and Inspection :

- All lined pipe and fittings are subjected to 10-15 KV (SPARK TESTING) non-destructive electrostatic test which is carried out to detect any defects in the liner such as pin holes, porosity, cracks, etc.
- According to the customer's request, hydrostatic testing will be carried out at room temperature using clean water.
- All lined pipe and fittings are subjected to the visual inspection to detect any defects such as liner surface cracks, deformation, outside paint coating, etc.

Storage and Handling Requirements :

- PP lined fittings shall be stored in a shaded area on wooden supports.
- Wooden or plastic end protectors are used to protect the PP lined sealing faces of flanged fittings. End protectors should stay in place until immediately prior to installation.
- Flange sealing surfaces shall be protected carefully and free from defects to eliminate any leakages when the lined pipe and fittings are assembled at site
- Avoid dropping or impacting lined pipe and fittings with heavy objects or storing near high traffic areas.

Cast Basalt Lined Pipes & Equipment

What is Cast Basalt

Cast Basalt is a mineral of exceptionally high abrasion resistance, unlimited resistance to moisture, high compressive strength and resistance to virtually all acids and alkalis and is completely corrosion free. Cast basalt is produced by melting selected natural basalt broken into sizes of 20-50 mm in shaft furnaces at temperatures around 1,300°C, followed by casting at which the melted basalt forms uniform phenolitic crystals hence producing its typical physical properties, in particular its exceptional hardness and wear-resistance.

Cast basalt reaches a value of hardness of 8 (min) on the Moh's hardness scale. For comparison: The highest value 10 is only attained by diamonds. By virtue of these properties, the silicate cast basalt provides outstanding protection against abrasion and scrubbing. However, it is marked by a certain sensitivity to impacts. Under normal service conditions, cast basalt withstands temperatures up to approx. + 350°C or -40°C. However, cast basalt should not be subjected to temperature shocks.

Sizes: Cast basalt products are manufactured as tiles, from pieces and segments. Straight pipes are spun-cast, available for nominal bores of 32 to 600 mm with the wall thickness ranging from 20 to 30 mm and a standard length of 500 mm. Smaller nominal bores of straight pipes, pipe segment for radii of 40 to 3,000 mm of various angles, as well as special form piece linings are predominantly sand-cast. The standard wall-thickness is 20 mm. Depending on the respective quantity, steel moulds can also be used, the wall thickness in those cases usually being 30 to 40 mm.



Ceramic Lined Pipes & Equipment

Hard & Compact Smooth & Inner Withstands High-Abrasion & Corrosion In any of the process industries especially Sled and Cement corrosion and abrasion lead to significant downtime of the plant. Further, the useful life of the equipment itself may get impaired because of the high abrasive nature of the materials being used. Thus, 'wear mechanism' results in shutdown, replacement, etc., which is costly, resulting in loss to the tune of millions of rupees.

High resistant to sliding abrasion.

High resistance to all types of chemicals.

Can With standard temperature up to 200 C.

Smooth Surface and resistant to abrasion & corrosion.

Non weltnhility & smooth surface results ill easy how of materials.



Centrifugal Air Blower/Root Air Blower

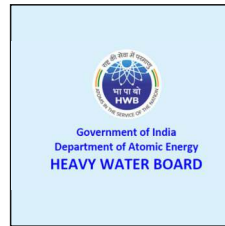
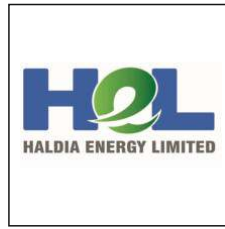
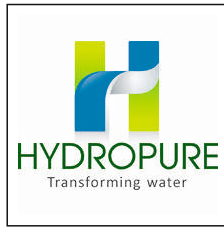
Centrifugal Blower :

Centrifugal Blowers, are used for numerous industrial applications including: aeration, air bars/formers, air bearings, air conveying, air injection, air knives, air scrubbers, air tables, combustion air, cooling, environmental test chambers, exhaust emission testing, flow benches, fluidized beds, gas boosting, gas exhausting, inflation air, vacuum collection, vacuum hold-down and vacuum pick-up.



Root Lobe Air Blower :

To serve the requisite requirements of our precious customers, we are engaged in providing a qualitative range of Lobe Roots Blower. Other details alloy steel hardened and ground timing gears anti-friction bearings Rotary oil sealing rigid one piece CI casing and side plates easy rotor timing setting alloy steel toughened shafts ground to close tolerances.



Export From :

Indonesia, Brazil, Saudi Arabia, Kuwait, Oman, Philippines,
Bangladesh, Shri Lanka, USA, European Union etc.



Perfect Engineering India

(Total Water, Air, Gas and Oil Solutions)

(An ISO-9001-2015 & MSME
Certified Company)

+91 9975801764

info@perfectengineeringindia.in

www.pfectengineeringindia.in

Gat No. 191/2, Bandalwasti, Kuruli, Chakan, Tal. Khed,
Dist. Pune - 410501 (India)