HI- TECH RUBBER LINING

RUBBER LINING

Rubber lining is a rubber sheet or membranes used for protection from corrosion in aggressive chemical environments. There are several rubber Lining applications some of which include resistance to acid, chemicals and alkalis, abrasion resistance, infect protection for materials made of metals like Cast iron, Mild steel, Stainless Steel,Brass,Cement Floor etc.

Types of Rubber for Linings

Both the types of rubber- Natural Rubber and Synthetic Rubber- are used for making different varieties of rubber linings. The type of rubber depends upon the purpose and application of rubber lining.



Natural Rubber Linings

- Characteristics: low hardness, high resilience, flexibility &Abrasion resistant.
- Used In: Slurry tank lining, pipe lining, pump lining ,pickling tanks (storage tanks resistance to hydrochloric acid and sulphuric solutions.)

Ebonite Linings

- Characteristics: Chemical resistant at high temperatures, good flexibility, high impact resistance.
- Used In: Storage tanks, reactors, plants which use ion exchange membrane process, pipes at high operating temperatures etc.





Synthetic Rubber Linings

Various types of synthetic rubber like chloprene rubber, butyl rubber, and hypalon rubber are used for making these types of rubber lining.



Chloprene Rubber Lining-

Chloprene Rubber Lining have good weathering and ozone cracking resistance, better oil, acid and abrasion resistance. These are used indifferent applications like Desalination plants, sea water piping, lining for water box, site joints of CWP, vessels etc.

Butyl Rubber Lining-

Lining excellent chemical resistance Butyl Rubber at high durable temperatures, due to the inherent low vapor permeability. Used in Butyl rubber linings are, therefore, good for use in vessels, pipes for acid plants, FGD, hypo chloride storage and transport. **EPDM Rubber Lining-**

Characteristics of EPDM Rubber lining is Resistance to punctures, UV radiation, weathering and microbial attack, highly flexibility, low co-efficient of thermal expansion and contraction, EPDM lining can be applied in a wide range of temperatures and terrains. Used in Pond lining such as decorative ponds, golf course ponds, irrigation ponds as well as other water features like lakes & streams, canals and channels, reservoirs etc. They are also suitable for lining in landfill caps, waste water treatment facilities, and fish hatcheries.

Hypalon Rubber Lining-

Characteristic of Superb chemical resistance to oxidizing acids at high concentrations. Used in Vessels, pipes for high acid concentration, and hypo chlorite service.

SL No.	Name of Rubberlining	Hardness 100 shore"A"	Max. Temp. Withstand
1	Natural Soft	70° T0 75°	90°
2	Natural Hard	85° TO 95°	90°
3	Ebonite lining	100° Shore "A"	80°
4	Open Ebonite	95° TO 98°	80°
5	Neoprene	80° TO 85°	120°
6	Nitrile	40° TO 95°	120°
7	Butyle	80°	130° - 140°
8	E.P.D.M.	75°	160° - 170°
9	Hypalon	80°	140°
10	Silicon Moulding	40° TO 80°	175°
11	Viton	80°	300°

Chlorobutyl Rubber Lining-

Chlorobutyl rubber linings made of chlorobutyl have properties similar to butyl rubber lining but are more easier to apply. They have heat resistance upto $200\hat{A}^{\circ}F$. These linings are unaffected by cold weather or rapid temperature changes.

