

High Chlorides

Pump Construction - Grounding is Essential!

Product	<u>Salinity</u>	Modifications
Drinking water	1,000 – 4,000 ppm	standard construction
Upstream River water	3,000 – 4,000 ppm	standard construction
Swimming Pool water	4,000 – 5,000 ppm	upgraded shaft & bearings
Brackish water	12,000 – 14,000 ppm	304SS pump construction
Sea Salt Water* *deep or low oxygen content	32,500 – 35,000 ppm	304SS pump construction 316SS shaft & fittings
Sea Salt Water * * **high oxygen content, > 80 degree F temperature **closer to Tropic of Cancer or Tropic of Capricorn	> 35,000 ppm	316SS pump construction

Special Notes:

- Many brackish water areas are stratified and a lower salinity product can be acquired by proper pump placement.
- Frothing sea water is highly oxygenated and requires all 316SS
- As salinity increases, electrical conductivity increases, proper and extensive grounding will help prolong life. Additional sacrificial anodes can also prolong pump life in many applications.

Integrity Pump and Motor standard construction:

Ductile iron bowls, stainless steel impellers, 416SS shaft, stainless steel fittings.

316L and Duplex are the next levels of protection, but costs rise quickly.

Pump life based on construction of materials, as it relates to the salinity of the water, is not an exact science. The application must be reviewed; cost, conditions, location, and other elements may determine a different pump construction for the job.