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BT600AC

STAINLESS STEEL AUTOMATIC BRINE MAKING PLANT COMPLETE WITH AUTOMATIC SALINITY CONTROL, OVERFLOW PREVENTION, AUTOMATIC PUMP OUT TO STORAGE, PUMP PROTECTION

Brine Making Plant shall meet the following minimum specifications:

1. The brine making process will be automatically controlled by an Electronic Controller (EC). The EC will control the salinity content of the finished brine to within ± 0.2% and pump the finished brine to a customer supplied storage tank. The operator will be able to pre-select the desired salinity level of the finished brine. In auto mode the EC will shut down the machine in the event that the brine is either too rich or too lean. The brine maker will also include full manual override controls which enable brine production in a fully manual mode.

   Comply: _____yes _____no

2. The dissolution tank, brine containment tank and spillway shall be welded 304 stainless steel, one-piece construction. The stainless steel baffle wall between the dissolution side of the tank and the brine containment side of the tank shall be welded on both sides of the baffle.

   Comply: _____yes _____no

3. The entire Brine Making Plant shall be constructed into a single frame to allow for easy loading, un-loading, and positioning using standard fork lift trucks.

   Comply: _____yes _____no

4. The dissolution tank, brine containment tank and spillway shall be constructed of 304 grade stainless steel. Plastic or fiberglass construction is not permitted.

   Comply: _____yes _____no

5. The Brine Making Plant shall be delivered as a complete system with all plumbing, pump, valves, hoses, etc. included in the package. The Customer will be responsible for connecting the discharge pump to its own storage facilities if required.

Comply: _____yes _____no

6. Overall dimensions shall not exceed:
   Width: 145 inches — Comply: _____yes _____no
   Depth: 60 inches — Comply: _____yes _____no
   Height: 72 inches — Comply: _____yes _____no

7. System being supplied shall be designed and constructed so as to assure the dissolution tank can be filled using a standard 2 yd^3 loader bucket.

   Comply: _____yes _____no

8. System shall be an upward water flow type system. Water will move through the salt from the bottom to the top. The brine will exit the dissolution tank through a fixed, stainless steel spillway into the brine containment tank.

   Comply: _____yes _____no

9. Dissolution Tank Opening:
   Width: 136 inches minimum — State Width: _____
   Depth: 52 inches — State Depth: _____
   Capacity: 5.2 yd^3 — State Capacity: _____

10. Brine Containment Tank:
    Capacity: approximately 2470 litres (650 USG)

    State Capacity: _____

11. Pump/Motor shall be:
    Close coupled only: Comply: ____yes ____no
    Bench Rated for 120 USGPM flow rate Comply: ____yes ____no
    2 HP – 115/220 VAC Single Phase Comply: ____yes ____no
    Housing shall be glass reinforced polypropylene Comply: ____yes ____no
    Pump shaft shall be stainless steel Comply: ____yes ____no
    All other pump parts shall be corrosion resistant Comply: ____yes ____no

12. All valves and fittings that are exposed to salt or brine shall be corrosion resistant Banjo flange style polypropylene or approved equal.

    Comply: _____yes _____no

13. All fresh water supply lines and dilution water supply lines that are affixed to the Brine Making Plant shall be Sch. 80 PVC pipe. Flexible hose is not permitted.

    Comply: _____yes _____no

14. Flexible hose affixed to the Brine Making Plant used for recirculation purposes shall be wire reinforced and rated for 150 PSI minimum and have a service temperature rating of -40°C to 120°C.

    Comply: _____yes _____no

15. Main water supply line shall be controlled using an electric solenoid valve that is activated/de-activated by the electrical panel.

    Comply: _____yes _____no

16. Dilution water shall be controlled by an electronic proportioning valve which is monitored and controlled by the EC in the electrical panel.

    Comply: _____yes _____no

17. The Brine Making Plant shall include water/brine high-level sensors on both the dissolution tank and the brine containment tank. The dissolution tank level sensor will close the main water supply valve automatically in order to prevent overfilling. The brine containment tank sensor will control the pump out to storage function, the high level water shut-off function and the low level pump protection function. The sensors shall be c/w slosh guards as required.

    Comply: _____yes _____no

18. Electrical Panel:
    Nema 4X — Comply: ____yes ____no
    10’ electrical cord c/w “twist lock” plug — Comply: ____yes ____no

Motor contactor c/w overload relay	Comply: ____yes ____no
Emergency Stop button	Comply: ____yes ____no
Sensor relays	Comply: ____yes ____no
Electronic Salinity Control – User Adjustable	Comply: ____yes ____no
Manual Override Control Switch	Comply: ____yes ____no
Pump Start/Stop Switch	Comply: ____yes ____no
Auto/Manual Switch	Comply: ____yes ____no
Remote High Level sensor (for storage tank)	Comply: ____yes ____no

19. Spillway:
    The spillway shall have a flow capacity of not less than 22,800 litres (6000 USG) per hour.

    Comply: _____yes _____no

20. Clean-Out:
    The dissolution tank shall include at least one 6” ANSI stainless steel clean-out flange c/w 6” PVC Butterfly valve located at the rear. No elbows or other flow diversions are permitted on the clean-out pipe. The clean-out pipe shall be located approximately ¼” to ½” from the floor of the dissolution tank.

    Comply: _____yes _____no

21. The brine containment tank shall include a 6” clean-out as item 20 above.

    Comply: _____yes _____no