

MADDEN Engineered Products LLC.

Proposal Specification No. () Boiler Water Treatment Chemical Feed System Madden Model Number CFPPP1XXXJJJ

Part 1 -- General

1.1 The Summary

- A. The CONTRACTOR shall provide all labor, materials, equipment, tools, and incidentals required to furnish, install, test, and place into operation this Madden boiler chemical feed system to deliver the boiler(s)' water with the proper water treatment chemicals (system design assumes: phosphate, oxygen scavenger, and amine).

(Note: Madden Engineering's standard boiler water treatment feed systems are designed to dose into lower pressure (≤ 250 PSIG) lines, (i.e.) the Deaerator tank and the boiler's make up water feed line.)

1.2 Product

- A. Diaphragm Metering Pumps (3)
- Madden part no. JN102A, simplex diaphragm metering pump, rated for 0.2 - 2 gallons per hour at a maximum pressure of 250 psi. The pumps' output will be manually adjustable while the pumps are running. The motor will be 1/3 HP, TEFC, 1/60/115-230. The pumps will be finished with acrylic blue paint. Pump solution head construction: 316 SS head and valve bodies, Teflon faced diaphragm, Teflon valve seats, 316 SS valve balls, double ball valves for both inlet and outlet valves. The outlet piping connection will be 1/4" NPT.
- B. Tanks (3): 100 gallon LDPE, 29.5" diameter X 66" overall height. Translucent walls for view of liquid level. 12" screw on lid comes standard, with cone bottom and drain for pump suction line. Includes 1/4" bulkhead fitting for PRV return line. Come with blue powder coated steel stands. Rated to 140 degrees.
- C. High Speed Mixers (3): Madden Mixer part no. AA102A, 1725 rpm direct drive, constructed with a 36" long, 5/8" diameter stainless steel shaft and a 4" stainless steel propeller. The motor will be 1/3 HP, 1/60/115-230, TEFC. Rigid mount provided.
- D. Steel Mounting Skid: 54" wide X 108" long. Constructed with carbon steel 11 gauge top, 3" structural C section frame. With fabricated vertical steel channel with pad for mounting mixer motor. Finished with grey acrylic paint.
- E. Pump suction tubing for each pump: 1/4" 316SS pipe and compression fittings. Includes SS valve for tank drain, and one SS Y strainer per tank. One 100 mL calibration column will be installed per pump.
- F. Pump relief piping, stainless steel relief valve set at (please specify) ___ psi, (one per pump) with 316 SS tube and fittings for return of liquid to supply tank.
- G. Control Panel: 24" X 20" X 8" grey powder coat carbon steel enclosure, with piano hinged and 3 point latching handle. NEMA 4. Includes on/off buttons with pilot lights for each motor (3 pumps & 3 mixers) and a lockable master on/off switch.

Common Optional Additions, (specify if needed):

- Back pressure valve, 316 SS body with Teflon diaphragm, for use with pump dosing into low pressure D/A Tank.
- High Level Alarm, installed in Control Panel, wired to sound via motor overload.
- Low level tank switch: 316 SS switch installed on tanks, indicator light denoting tank low level installed on control panel.

Comments: Madden Engineered Products chemical feed systems come with the piping for the pump suction lines and relief lines installed. Any and all other piping installation to be done by the installing contractor. For further questions you can call Madden 800-369-6233 or email: info@maddenep.com.

Specifications for:

By:

Date: