

SECTION 113120
WET WELL VENTILATION SYSTEM (S-113)

1. Description

This specification shall govern all materials and work necessary for wet well ventilation system required to complete the project.

2. Materials

1. Duct: PVC Pipe ASTM D3034, DR 35 or 41, solvent joint
2. Fasteners: 316 Stainless steel
3. Exhaust Fan: 550 CFM at .25 inches of water

The exhaust fan shall be sidewall mounting, centrifugal belt driven type. The fan shall be designed for use in a corrosive environment of hydrogen sulfide and be constructed of fiberglass, stainless steel and other such materials required for the application. The fan wheel and inlet cone shall be of the centrifugal blower type. The fan wheel shall be of non-overloading, backward inclined type, statically and dynamically balanced. Blades, fin, inlet cones and back plates shall be securely fastened together for rigid assembly. Fan wheels and shaft seals shall be rated non-sparking in accordance with standards of the Air Movement and Control Association.

Motors and drives shall be isolated from the exhaust airstream. Electric motors, wiring, controls, and monitors shall meet NEC requirements for Class 1, Division 1, Group D hazardous areas. Motors shall be of heavy duty type with permanently lubricated, sealed ball bearings. Air for cooling the motor shall be taken into the motor compartment by means of an air tube from a location free of discharge contaminants. The entire drive assembly and wheel, as a unit, shall be removable thru the support structure without dismantling the fan housing. The wheel shaft shall be mounted in heavy duty, permanently lubricated, sealed ball bearing pillow blocks. Drives shall be sized for 165% of driven horsepower. Pulleys shall be keyed securely to the fan and motor shafts. Motor pulleys shall be of the adjustable type to allow for final balancing.

3. Submittals:

The contractor shall submit 5 sets of detailed drawings and specifications and parts lists for the engineer's review and approval.

4. Measurement and Payment:

Unless specifically included in the proposal, work and materials for the ventilation system shall not be measured for pay but shall be subsidiary to other pay items.