



DATE January 22, 2004

PERFORMANCE AND MECHANICAL SPECIFICATIONS

EVAPCO® AT COOLING TOWERS

REVISED
1/22/04

PROJECT:	<u>EXXON/MOBIL</u>		
CUSTOMER:	<u>EXXON/MOBIL GLOBAL SERVICES</u>		
ENGINEER:	_____		
UNIT:	<u>(1-1/2) AT 228-0324 COOLING TOWERS</u>		
CUSTOMER P.O. NO.	<u>C-59060</u>	EVAPCO SERIAL NO.	<u>M035536-37</u>
CAPACITY:	<u>EACH CELL 2,100</u>	GPM	<u>96 °F IN 86 °F OUT 80 °F E.W.B.</u>
FAN MOTOR:	<u>EACH CELL (1) 25 INVERTER DUTY</u>	HP	<u>ELEC. SPEC. 460/60/3</u>
INLET PRESSURE:	<u>0.9</u>	PSIG	<u>DRIVES SIZED FOR 0" ESP.</u>

- UNIT TYPE Factory assembled, induced draft, counterflow cooling tower.
- CONSTRUCTION All cold water basin components including vertical supports and air inlet louver frames are constructed of Type 316 Stainless Steel. Type 304 stainless steel casing, channels and angle supports. Fan cowl is constructed of stainless steel. Unit is built in accordance with the latest edition of the Factory Mutual Research Corporation Approval Guide and includes stainless steel water distribution headers, 1" x 1" stainless steel mesh covering the air inlet louvers and stainless steel partitions.
- MAKE-UP FLOAT VALVE ASSEMBLY* Brass float valve with adjustable plastic float.
- PAN STRAINER* All stainless steel construction with large area removable perforated screens.
- ACCESS Hinge mounted door in the upper casing for fan drive and water distribution system access. Removable louver panels on all four sides of the unit for pan and sump access.
- FANS Fans are axial propeller type constructed of aluminum alloy and statically balanced. The fan is installed in a closely fitted cowl with venturi air inlet. Fan screens are stainless steel and have stainless steel frames bolted to the fan cowl.
- FAN SHAFT Solid shaft of ground and polished steel. Exposed surface coated with rust preventative.
- FAN SHAFT BEARINGS Heavy-duty, self-aligning ball type bearings with extended lubrication lines to grease fittings located on access door frame. Bearings are designed for a minimum L-10 life of 75,000 hours.
- FAN MOTOR Totally enclosed, inverter duty, ball bearing type electric motor(s) suitable for moist air service. Motor(s) are 1.15 service factor design.
- FAN DRIVE The fan drive is a multi-groove, solid back, reinforced neoprene V-belt type with taper lock sheaves designed for 150% of the motor nameplate horsepower. Fan and motor sheaves are constructed of aluminum alloy.

FILL	Polyvinyl Chloride (PVC) of cross-fluted design. PVC sheets are bonded together for strength and durability. Fill is self-extinguishing for fire resistance, has a flame spread of 5 under A.S.T.M. designation E-84-81a, and is resistant to rot, decay and biological attack.
WATER DISTRIBUTION SYSTEMS	Precision molded ABS spray nozzles with large 3/8" x 1" orifice to eliminate clogging. Nozzles are threaded into spray header(s) constructed of Type 304 Stainless Steel.
ELIMINATORS	The eliminators are constructed entirely of Polyvinyl Chloride (PVC) in easily handled sections. Design incorporates three changes in air direction and limits the water carryover to a maximum of 0.001% of the circulating water rate.
AIR INLET LOUVERS	The air inlet louvers are constructed from UV inhibited polyvinyl chloride (PVC) and incorporate a frameless interlocking design that allows for easy removal of louver for access to the entire basin area for maintenance. The louvers shall have a minimum of two changes in air direction and be a non-planar design to prevent splash-out, block direct sunlight and debris from entering the basin. (Patent Pending)

" OMITTED ON UNITS FOR REMOTE SUMP OPERATION

14 FT WIDE BELT DRIVE

AT14ST-ST

EACH UNIT PROVIDED WITH:

- Designed and built per Factory Mutual Approval Guidelines
- Designed for Independent Cell Operation to include:
 - Watertight Partition (28' wide unit only)
- Schedule 40 PVC Sump Sweeper Piping consisting of one (1) inlet and one (1) outlet pipe per pan section.
- Bottom Suction Connections

EACH CELL PROVIDED WITH:

- (1) 14" BFW/Grooved Bypass Connection
- (2) 16kW Pan Heaters, 460/60/3, with (1) combination thermostat/low water cutoff and contactor(s) with transformer and disconnect in a NEMA 4 enclosure (wiring by others)
- (1) 12" BFW/Grooved Equalizer Connection
- External Service Platform with Vertical Ladder with 6' extension
- (1) Vibration Cutout Switch, mounted (wiring and sensitivity adjustment by others)
- (1) Motor Davit and Base per fan motor

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PDC/cmw