Forced Draft Products



Replacement Parts

for Cooling Towers, Closed Circuit Coolers and Evaporative Condensers

Factory Authorized Parts Quick Shipment









Recommended Annual Maintenance Checklist

To ensure your equipment's optimum performance and trouble-free operation, EVAPCO offers a Unit Inspection.

Regardless of the equipment manufacturer, an EVAPCO representative will perform a Unit Inspection as outlined in the column below.

This Inspection combined with regular service & maintenance will insure your equipment's peak efficiency and long service life.

Call your local EVAPCO Service Center to schedule your Unit Inspection today!

- Check pan strainer for cleanliness
- Check water basin for cleanliness
- Check bleed-off valve
- Check water make-up float valve and ball
- Check water distribution system and sprays
- Check fan belts for wear and tension
- Check fan screens for debris
- Check fans and lubricate bearings as per manufacturer's instructions
- Check drift eliminators for proper position
- Inspect protective finish, paint if necessary
- Check water quality. Contact a water treatment company for recommended water treatment program
- Contact your local EVAPCO Service Center for replacement parts





Replacement Parts Identification Forced Draft Products

FAN SCREENS

The fan screens are galvanized steel mesh.

2 FANS-CENTRIFUGAL

Centrifugal fan wheels are of the forward curved centrifugal type with hot-dip galvanized steel construction. All fans are statically and dynamically balanced for vibration free operation.

3 FANS - VANE AXIAL

The wide-blade slow speed cast aluminum alloy fans are arranged in a two-stage system (i.e. front and rear fan) that is installed in a closely fitted cowl with a venturi air inlet.

ELIMINATORS

The eliminators are constructed of inert polyvinyl chloride that has been



specially treated to resist UV degradation. Assembled in easily handled sections, the eliminators shall incorporate three changes in air direction to assure removal of entrained moisture from the

discharge airstream. The maximum drift rate shall not exceed 0.001% of the recirculated water rate.

WATER DISTRIBUTION SYSTEM

The spray header and branches shall be constructed of PVC (Polyvinyl Chloride) pipe for corrosion resistance. The internal tower water distribution system piping shall be removable for cleaning and have threaded end caps to allow debris to be removed. The water is distributed by precision molded ABS spray nozzles which are threaded into the spray header to provide easy removal for maintenance.

COIL 6

5

Condensing coil(s) shall be all prime surface steel, encased in a steel framework and hot-dip galvanized after fabrication as a complete assembly. The

tubes shall be arranged in a self-spacing, staggered pattern in the direction of airflow for maximum heat transfer efficiency and minimum pressure drop, without the use of additional spacers between the coil tubes. The coil(s) shall be designed with sloping tubes for free drainage of liquid refrigerant and air pressure tested under water in accordance with the "Pressure Equipment Directive" (PED) 97/23/EC



WATER RECIRCULATION PUMP

Closed circuit coolers and evaporative condensers are supplied with a vertically installed closed-coupled centrifugal pump with a mechanical seal installed to drain on shut down. The totally enclosed, fan cooled (TEFC) motor is provided with a protective canopy as standard.

8 MAKE-UP FLOAT VALVEASSEMBLY

This assembly contains a brass float valve with an adjustable plastic float. The supply of makeup water entering the unit is easily regulated by adjusting wing nuts on the threaded float rod.



9 ACCESS DOORS



10 PAN STRAINER

The type 304 stainless



ELECTRIC LEVEL CONTROL

An optional electric water level control and solenoid valve is available as optional in place of the mechanical make up valve.



BASIN HEATER PACKAGE

The electric basin heater packages are available to help prevent freeze-up of the basin water. The packages include electric heater elements with thermostat and low water cutoff

13a MOTORS ON LS UNITS

On 1.2 and 1.5 m wide models, the motor is mounted externally on the unit with an adjustable motor base for ease of service. A hinged protective cover shields the motor and sheave from the weather. On 2.4 and 3.0 m wide models, the motor is mounted above the fan housing, under cover, on an adjustable motor base for ease of service.

13b MOTORS ON LR UNITS

The motor is mounted under the protective fan system enclosure on an adjustable motor base for ease of use.

13c MOTORS ON PM UNITS

The motor is mounted on an adjustable motor base for ease of service.

FAN SHAFTS

Shafts are constructed of ground and polished steel. The exposed surface is coated with a rust preventative. Shafts on the centrifugal models have forged bearing journals.

FAN SHAFT BEARINGS

Bearings on centrifugal and vane axial models are selfaligning, heavy duty grease-packed ball bearings with eccentric locking collars. Some centrifugal models also use an intermediate sleeve bearing.

16 FAN DRIVE

The fan drive is a v-belt type with taper lock sheaves designed for 150% of the motor nameplate kilowatts. Belt adjustment is easily accomplished from the exterior of the unit

17 FILL

The cooling tower fill shall be PVC (Polyvinyl Chloride) of cross-fluted design for optimum heat transfer and efficiency. The cross-fluted sheets shall be bonded together for strength and durability. The fill shall have special drainage tips to allow high water loading and low pressure drop.

The PVC fill shall be self-extinguishing for fire resistance with a flame spread rating of 5 per ASTM E84-81a. It shall also be resistant to rot, decay or biological attack.



FAN MOTORS

Totally enclosed, ball bearing type electric motors are suitable for outdoor service

FAN SHAFT & BEARINGS





CENTRIEUGAL

VANE AXIAL



