



TECHNICAL DESCRIPTION **“SULZER” EVAPORATIVE CONDENSER – EWK-E**

Motor support

Hot dipped galvanized steel structure with wire guard on top.

Stainless steel execution available on request.

Fan

Statically balanced axial fans. Pitch of the aerodynamically profiled blades can be adjusted at standstill.

Fibreglass Reinforced Polyester (FRP) blades and stainless steel hubs available for all tower models on request.

For EWK-E144 to EWK-E900, the fan is mounted on top of the evaporative condenser and is driven by a directly coupled, flange-mounted electric motor.

For EWK-E1260 to EWK-E1800, the fan is driven by a directly coupled, flange-mounted electric motor with or without a gearbox unit.

All motors can also be supplied in pole changing execution and for special voltage on request.

Water distribution system

Consists of PVC pipes fitted with spray nozzles in plastic. These spray nozzles distribute the water uniformly over the coil.

Cooling tower housing

Consists of a square or rectangular shaped casing made of ultra-violet *UV) stabilized FRP. Even aggressive water cannot affect this high quality material. The water basin is an integral part of every standard Sulzer evaporative condenser in the EWK-E series, and is included in the quoted price unless stated otherwise.

Air inlet louvres are made of plastic material are fitted in the casing to prevent splashing of water (by wind for example) outside of the evaporative condenser basin.



The complete unit is fully assembled in our factory and delivered in two parts (four for EWK-E1260 and EWK-E1800).

Strainer basket and float valve

A strainer basket and a make-up water float valve are installed in the basin. The strainer basket is used to prevent coarse impurities entering into the water spray system while the float valve is to regulate the fresh water supply. The strainer basket is made of stainless steel.

Access panel

Access to sump and strainer by removing one of the louvre panels.

Coil section

Manufactured from seamless steel tubing, hot dipped galvanised after manufacture. Pressured tested, then assembled into tower shell. Wall thickness is 2.0 mm.

With the coil design - maximum heat transfer is achieved while maintaining low airside pressure drop.

Drift eliminator

Made of UV stabilized PVC sheet, in honeycomb shape. It is used to prevent carry over of water droplets by air stream. The drift eliminator in Sulzer evaporative condenser reduces the water loss by drift to less than 0.002% of the total water flow through the Cooling Tower in strict accordance to the Australian standard AS3666/2002.

Different plastic materials can be used on request.

Internal supports

- Casing stiffeners** - thin profiles in stainless steel 304
- thick profiles in hot-dipped galvanized steel
- Coil supports** - thick profiles in hot dipped-galvanized steel

Fully stainless steel execution can be provided on request, #304 S.S. or #316 S.S.

Fasteners

All fasteners are 304-grade stainless steel.



Low-level switch (electric) - (OPTIONAL)

A liquid level control device enabling dual point activation/deactivation of pumps,

Ladder - (OPTIONAL)

Made of aluminium to Australian standard.

Hot dipped galvanized steel profile ladder equipped with safety cage is available on request at additional cost.

Foundation

To suit installation of Sulzer evaporative condenser. Information provided on request.

Colour

Colour is fixed during manufacturing process using special UV stabilized gel coat as a first layer. Standard colour: aquatic blue. Colour range is possible on request but deviation from normal calls for longer procedure and can affect the delivery time.

Corrosion

The evaporative condenser FRP casing is CORROSION FREE. All plastic materials used in Sulzer evaporative condensers are stabilized against UV radiation.

Spare parts

Experience suggests that almost no spare parts will be required for the first five (5) years of operation of the tower if operated in accordance to our operating instructions. However, if any parts are required, they are available from our factory in Melbourne.

Note: There will be additional charges for any "optional" or "on request" items.