



TECHNICAL DESCRIPTION
“SULZER” CLOSED CIRCUIT COOLING TOWER
EWK-C

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 blades can be adjusted at standstill.

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

For EWK-C144 to EWK-C900, the fan is mounted on top of the cooling tower and is driven by a directly coupled, flange-mounted electric motor.

For EWK-C1260 the fan is driven by a directly coupled, flange mounted electric motor with 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 wide throat conical 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 cooling tower in the EWK-C series, and is included in the quoted price unless stated otherwise. EWK-C series cooling towers can also be supplied without water basin if their installation is foreseen upon an existing water sump eg. concrete basin supplied by customer.



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 cooling tower basin.

The complete unit is fully assembled in our factory and delivered in two parts (four for EWK-C1260).

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 galvanized after manufacture. Pressured tested, then assembled into tower shell. Wall thickness is 1.5 mm – standard. Thicker wall thickness is available at additional cost and delivery time may be longer than with the standard wall thickness.

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 cooling towers 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 SS or #316 SS



Fasteners

All fasteners are 304-grade stainless steel, except pop nuts, which are made of zinc-plated steel.

OPTIONAL ITEMS

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.

Foundation

To suit installation of Sulzer cooling towers: 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 cooling towers are practically CORROSION FREE. All plastic materials used in Sulzer cooling towers 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" item.