

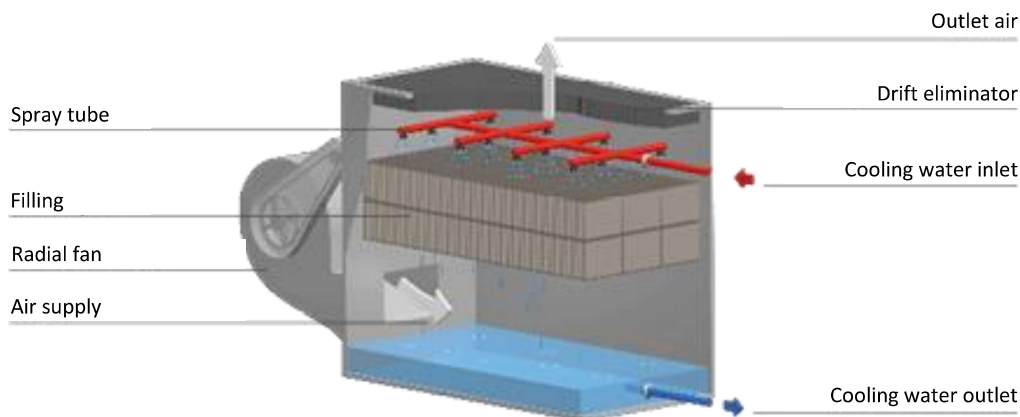
## Cooling Tower Series ERD

Cooling tower with open circuit  
The most efficient type of re-cooling



- Low cooling water temperatures
- Direct highly efficient heat transfer
- High efficiency
- Compact, strong und enormously adaptable

# FORCED DRAFT EVAPORATIVE COOLING TOWER WITH CENTRIFUGAL FANS FOR OPEN CIRCUIT



## Application

The **ERD** series are highly efficient re-cooling plants made of stainless steel for the open circuit. They are used where consumers/chillers require large volumes of water and / or a low cooling water temperature should be reached.

- Compact interior installation in buildings or machine rooms
- Exterior installation
- Building air conditioning
- Industrial process cooling

## Functional principle:

The cooling of the process heat is generated through the evaporation of the natural coolant - water. In the counter-current a heat and mass transfer takes place between the cooling water and the surrounding air. The cooling water collects in the cooling tower tank and is conveyed from there to the cooling system components. Pressurised air evaporative cooling towers with radial fans have a very small footprint with simultaneous high performance density.

## Water distribution

Water distribution with self-cleaning nozzles made of PP, in stainless steel design. The nozzle pipes can easily be removed from the main pipe using a plug-in connection.

## Accessibility

Inspection hatches enable adjustment of the integrated fittings, the control and service and the cleaning of the water collection tank.

## Filling body and droplet separator

The high-performance filling body and droplet separator are UV resistant and are made of PP.

## Cooling water connections

The cooling water connections are welded with the housing wall. These consist of a VA pipe section with bead and an aluminium loose flange similar to IN EN 1092-1 Type 02/37 This guarantees a hygienically optimised water inlet and outlet.

## Compact housing

The water collection tank made of 2 mm stainless steel sheet is integrated in the housing. The housing including the water collection tank forms a complete unit. Baffles arranged in the tank area ensure a uniform air distribution and at the same time reduce the wave movement of the water.

### Optional: welded housing

The sheet metal panels are welded with each other in a specially developed welding process. Through this media temperatures up to 90°C are possible.

**The bottom of the water collection tank has an incline of 2 %.** This prevents puddles to remain when emptying the tank and thus at shutdown forming germs hazardous to health. Advantages of the closed design:

## Low noise radial fans

The fans are upstream from the device. They press the fresh air optimally into the device and thus have no service life reducing factors of the exhaust to compensate for. The blades of the fan wheels are curved allow a low speed. Due to the considerable pressure reserves, additional silencers can be used for the cooling tower.