GOHL-KTK
Cooling for life

Cooling tower series WRI

Cooling tower with closed circuit

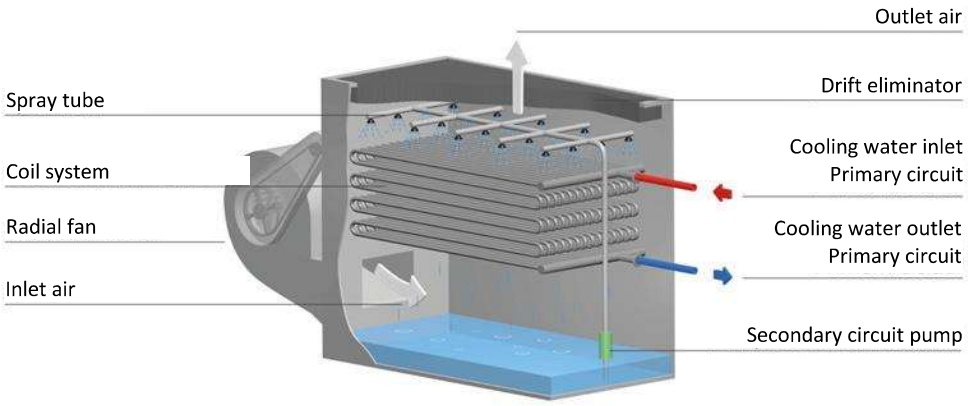
No contamination in the cooling water network

PRODUCT FLYER

GOHL-KTK
MADE IN GERMANY

- Safe system separation
- High efficiency
- Dry operating possible
- Compact, powerful, adaptable

FORCED DRAFT EVAPORATIVE COOLING TOWER WITH CENTRIFUGAL FANS FOR CLOSED CIRCUIT



Application

The closed cooling tower **WRI** is used there where a cooling water consumer should be operated with clean water without deposits and corrosion. Easy hydraulic connection through the closed circuit, no direct contact of the ambient air with the cooling water, dry operation at low external outside temperatures possible.

- Inside installation (building/machine room)
- 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. For an evaporative cooler with closed circuit the ambient air does not come into direct contact with the cooling water. the water flows for cooling a consumer through a closed tube coil system, which forms the primary circuit. This keeps the cooling water clean always and there are no deposits in the circulation. For re-cooling of the primary circuit the tube coil system is sprayed with the water pumped in the secondary circuit and cooled by the condensation.

Low noise radial fans

The fans are upstream from the device. They push the fresh air optimally into the device. The blades of the fan wheels are curved allow a low speed. Due to the considerable pressure reserves, additional silencers can be used.

Tube bundle heat exchanger

The tube coil system is made of full wall steel tubes and after manufacture the exterior is galvanised in a full bath.

Accessibility

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

Compact housing

The housing with integrated water collection tray consists of 2 mm Sendzimir galvanised steel plates coated in the whirl sintering method. The individual plate segments are screwed together with stainless steel bolts and double-sealed with a permanently plastic sealant. The high air flow rate creates wave movements, which are levelled using an integrated wave breaker. 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.

Water distribution

Water distribution with self-cleaning nozzles made of galvanised steel and nozzles made of PP, the nozzle support tubes are easily removed from the main tube through a screwed connection.

Long term corrosion protection

A thermoplastic plastic layer is melted onto the housing made of Sendzimir galvanised steel plate using vortex sintering in a powder fluidised bed. This coating process meets the requirements acc. to EN ISO 12944 of the highest Corrosion category C5-M for offshore and coastal areas. Tested and approved by the “Institut für Korrosionsschutz Dresden” (Institute for Corrosion Protection”

Performance improvement in dry operation

Optional: Through the attachment of a finned cooler package onto the evaporative cooler WRI, a dry cooling element is connected with the wet cooling and thus achieves an increased drying performance.

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