

## RH

Forced draft axial fan



Water flow rates from 70 to 660m<sup>3</sup>/h/cell

- *Infill: X-STREAM for heavy duty waters*

COMMERCIAL DOCUMENTATION

# Heavy duty open cooling tower: RH series

## Casing structure

All the panels are folded twice or 4 times at the 4 sides of the panels. This design secures extremely rigid sheets which, once assembled, provide an **unequalled sturdiness and tightness** to our towers.

## Inclined and plane large capacity basin

The basin incorporated to the tower has been designed for long thermal inertia to compensate the process thermal fluctuations. The basin is inclined and plane to secure a complete and clean drain. Large access doors are provided: 540 x 540mm. Finally, all the connections are located on the same panel (overflow, drain, make up water supply, electrical heater ...).

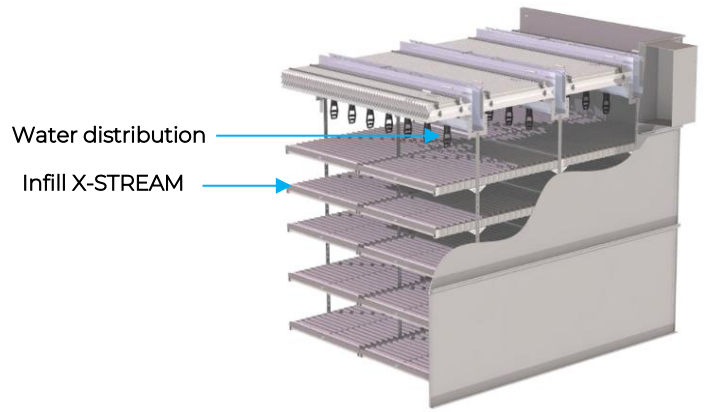
To avoid bacteriological growth, the assembly of the panels is made **without any welds and without screws on the parts in contact with water**.

## Water distribution

Water is distributed by steel open air channels. They are installed with PP nozzles especially designed to achieve an optimal distribution through the whole air section, and with large water nozzles to avoid clogging even in the case of high suspended solids content. These nozzles operate under low pressure, in order to low pumping head and to distribute large size drops, which prevents the drift from getting out of the cooling tower.

## Infill: X-STREAM

It is made of PP blades. They equally spread the water along the blades, into drops down to the lower blades' layers. The cooling occurs during the drops fall between the blades' layers; therefore, this exchange surface is highly resistant to clogging. It can be used for water with solids content up to 400 ppm. By thermal expansion, the **X-STREAM** is self-cleaning in the case of waters with high salts content.



## Anti-corrosion protection

2 options:

- ∞ Gr / m<sup>2</sup> 275 galvanized sheets coated outside with zined paint. All the sheets are folded onto the outside of the tower in order to ensure that the inside of the tower is completely protected by the zinc coating.
- ∞ Stainless steel sheets (304 L or 316 L): RXH series.

## Environment protection

Sound attenuation: the **RH** cooling towers are initially low sound. In addition, their design makes it possible to select the right fan orientation towards the most favourable direction. To improve even more the sound performances, the followings options can be selected:

- ∞ **Special sound attenuation**, adjustable according to the sound level to reach: fan speed reduction, low sound fans, baffles at inlet, whole tower casing attenuation, air outlet cone with sound attenuating material.

Plumeless system (JACIR system) options:

- ∞ Plume reduction system,
- ∞ Plume suppression system,
- ∞ 30% to 50% water savings.

## Sound and energy savings

The axial fans are particularly efficient, with a very low absorbed power. In addition, the belt coupling makes it easy to select the best ratio efficiency/power level. Those fans are in the dry air flow, at man chest, and out of the basin. Fan guards are provided together with inlet cone.

## Options

Automatic Deconcentration by Induction (DAi), frequency converter, support beams, level switch with electro valve, control panel, explosion proof motors, fan non-freezing device, site erection,