Prevent hydrocarbon leaks into cooling water loops

Niagara Wet Surface Air Coolers (WSAC®) application study

The challenge

Leaks and failure in heat exchangers can allow hydrocarbons or other environmentally dangerous components into the open cooling tower stream. This can cause explosions and fires, and also discharge contaminants into the environment.

The solution

A “typical” solution is to replace the heat exchanger with a costly “double-wall” type (which still does not guarantee zero discharge). Instead, customers can install a closed-loop WSAC® cooler. A sensor in the secondary loop monitors for any leaks. Any material leaking from the process will stay within that closed loop and not be exposed to the atmosphere.

Advantages

- Essentially eliminates the environmental risk
- Reduces the water purchased and discharged at the facility
- Makeup to the WSAC can be from almost any source

What is a WSAC?

Alfa Laval Niagara Wet Surface Air Coolers (WSAC®) are efficient closed-loop, evaporative cooling systems designed for the power, process, wastewater, natural gas and petrochemical industries.

These fluid cooling and vapor condensing systems are optimized for industrial applications where rugged designs, and cost-effective, efficient closed-loop cooling and condensing duties are required.

NIAGARA
Wet Surface Air Coolers

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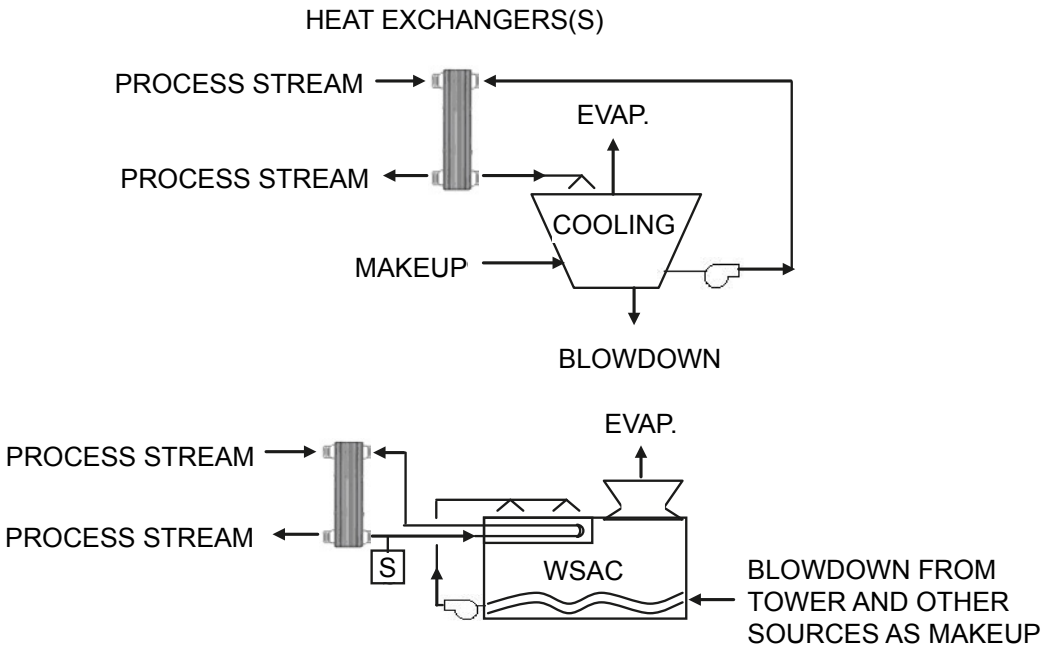
Application diagram



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