## HOW WE REDUCE THE RISK OF LEGIONNAIRES' DISEASE

VIRGA X3<sup>TM</sup> & VIRGA III® by NIMBUS® Advanced Process Cooling use hybrid adiabatic cooling technology. This technology eliminates the standing water reservoir found in traditional evaporative cooling towers, which is one of the primary breeding grounds for Legionella pneumophila — the bacteria which leads to no fewer than 50,000 cases of Legionnaires' disease annually in the United States.







Here are additional key engineering and technology features that enable VIRGA X3 & VIRGA III to virtually eliminate the risk of bacterial growth and Legionnaires' disease through hybrid adibatic cooling:

- A system flush feature provides added prevention during spray season. Once every 300 minutes, the spray system engages for 15 seconds (can be adjusted) to flush the spray manifolds and nozzles to ensure there is never any stagnant water in the system. This feature also serves to keep the spray nozzles clean and in optimal operating condition.
- VIRGA hybrid adiabatic cooling systems utilize a fine spray of fresh city water only on the hottest days of the year to maintain the desired leaving fluid temperature. This water is only activated when ambient temperatures dictate and evaporates into the air as it enters the cooling system. No recirculated water is used.
- The ideal temperature for Legionella growth is 77 108°F (25 42°C). That temperature range is generally higher than the temperature of the city water entering a VIRGA system when the water spray is activated, thus further reducing the risk of an outbreak of Legionnaires' disease with hybrid adiabatic cooling.
- Typically, Legionnaires disease is spread when water containing the bacteria is atomized in respirable droplets (1-5 um in diameter) and then inhaled by a human. The droplets produced by the adiabatic spray on VIRGA systems are many times larger in diameter than what is considered respirable.

To learn more, contact NIMBUS at 844.NIMBUS.3 or www.nimbus.cool today!

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