

CoolStream N provides low-cost evaporative / adiabatic cooling and ventilation principally for larger industrial premises with higher heat loads, such as power generation plants and other heat intensive industries.

The CoolStream N evaporative cooler helps keep larger internal spaces cool all year round. It doesn't need to cost the earth: using the cooling power of water, it's possible to achieve low energy cooling.

Since it uses natural ventilation, no energy is consumed to power fans. However if it is necessary to boost the air flow and cooling capacity from time to time, optional EC fans can be integrated into the system.

Its features and benefits are described overleaf.



KEY FEATURES

UNIT DESIGN

Width: From 800mm up to 9600 mm overall in 400mm steps.

Height: Four overall heights are available as modules: 666 mm, 1000mm, 1333mm and 2000mm.

FAN OPTIONS

Either natural cooling (no fans) or high-efficiency, low noise variable 0-100% speed EC fans.

CONTROLS

Touch screen controls, temperature and humidity options, BMS connections.

Check with Colt for further information.

HOW IT WORKS

Evaporative cooling is an efficient and effective alternative to conventional air conditioning. Evaporative cooling systems are up to 7 times more economical than such AC systems, and the initial costs are lower.

Evaporative cooling involves supplying 100% fresh air and thereby maintains air quality. CoolStream N can be operated as a simple natural ventilation system in cooler weather. Exhaust is normally provided at high level via natural ventilators, providing a pleasant temperature at the working area.

CoolStream N is particularly effective in large spaces where a purely natural ventilation system cannot ensure a comfortable internal working climate. It is well suited for retrofit into existing natural ventilation systems to boost the cooling effect. The natural ventilation system is supported by the cooler inlet air, so that with the same free inlet area a lower room temperature can be achieved.

Installation

CoolStream N is mounted into the façade of a building. A conventional weather

louvre system is fitted onto the outside of the unit. It is only 425mm in depth, allowing installation into most kinds of buildings. Its modular design and high degree of pre-assembly facilitate installation.

CoolStream N has a large maximum panel size (up to 20 m² per unit) and high aerodynamic efficiency, thus allowing a high air flow through one unit.

Fan supported

If additional airflow is required, CoolStream N units can be optionally equipped with high-energy efficiency EC fans which provide the air flow the room needs. They operate independently from the conditions outside and operating at full variable speed, providing just the right amount of airflow.

Robust, safe technology

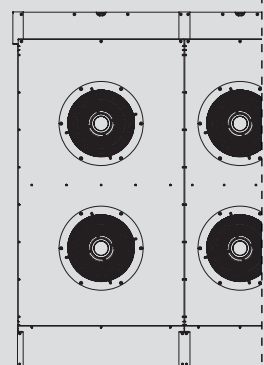
CoolStream N has simple but reliable technology, which provides low running and maintenance costs. Since it is free from refrigerants, it is environmentally friendly and safe. It has an integrated water quality control system and a hygiene certificate to VDI 6022.

SIDE VIEW

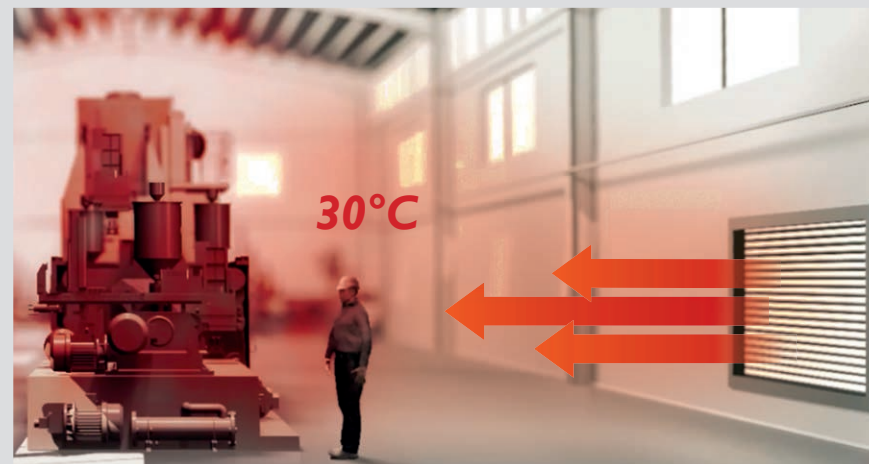
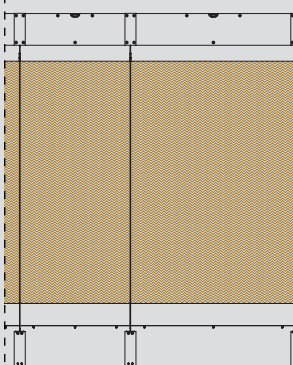


END VIEW

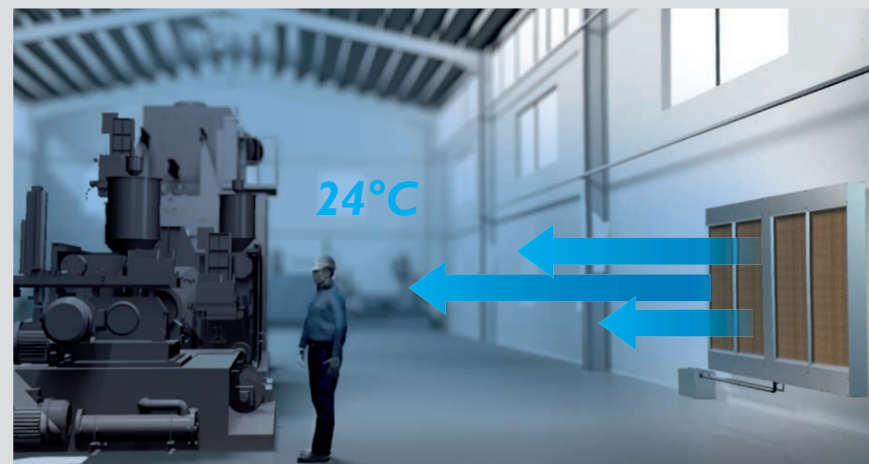
Option with fans



Option with natural cooling



Conventional ventilation principle - Warm or hot outside air enters the building



Cool Stream N combines the advantages natural ventilation with evaporative cooling. At 30°C and higher, the air can be cooled by 10°C or more.

HOW EVAPORATIVE COOLING WORKS

Warm outside air [1] flows through the desorption medium [2] that is kept moist [3]. The water evaporates and removes energy from the air, which results in a significant reduction in air temperature [4].

