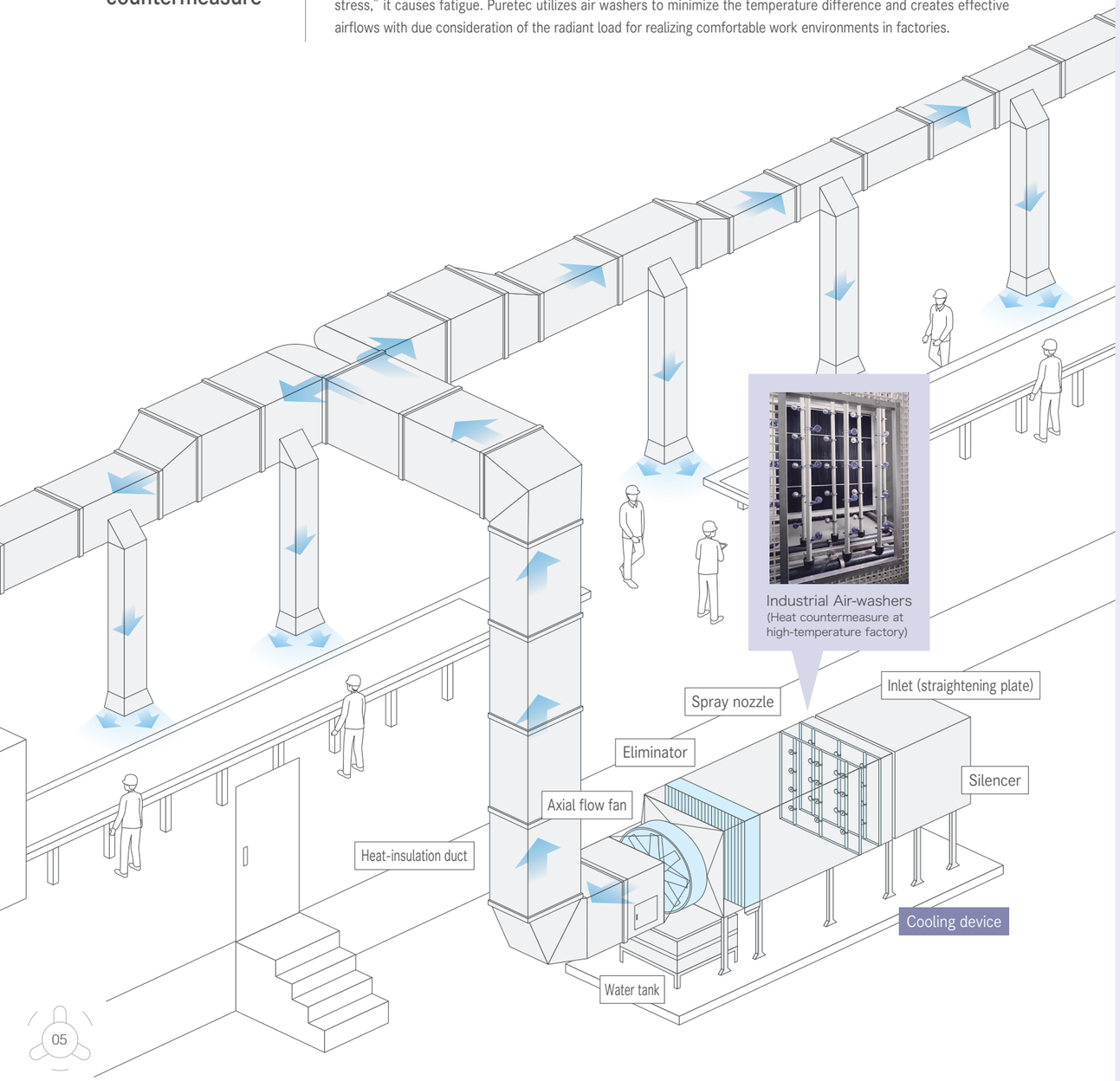
MILD COOLING

High temperature in working room countermeasure

Work environments in high-temperature factories, such as paper/corrugated box manufacturing plants, foundries and dyeing factories, are extremely harsh in summer and can reach 40° C to 50° C in temperature. Workers continuously working under a commercial spot cooler in such an environment can experience fatigue quickly. That is because the difference of temperature between the air discharged by the cooler and the air inside the factory can be as large as 20° C to 30° C, disallowing the human body from properly adjusting the body temperature. Called “environmental stress,” it causes fatigue. Puretec utilizes air washers to minimize the temperature difference and creates effective airflows with due consideration of the radiant load for realizing comfortable work environments in factories.



FEATURES

The air washer is a simple structure that sprays water into the blowing air and extracts water droplets with an eliminator at the rear stage.
The blowing air is deprived of vaporization heat by contact with the sprayed water, and the outlet air temperature is 7˚C to 8˚C lower than the inlet air temperature.
Because sprayed water can be reused, the amount of water remains almost the same with only a small amount of evaporation.

- Because the temperature difference stress is added to the temperature regulation function of the human body, and an air condition causing little fatigue is achieved.
- Since the air washer has an air-cleaning function, it can be used as a filter to remove outside air pollutants during normal operation.
- Only blowing fans and pumps for the washer require a power source, therefore power saving is much greater than general package air conditioners.

Psychrometric chart