OTHERS

Air Cooled Heat Exchanger

An air-cooled heat exchanger, or called air cooler, is an industrial heat exchanger that uses Ambient air as cooling medium, where the fan forces air cross the Finned pipes to cool the high-temperature processing medium within the pipes. The air cooler is mainly composed of three basic parts: tube bundle, fan and structure, and auxiliary parts like louver and platform handrails.

It uses natural air as cooling medium saving precious water, reducing the discharge of industrial wastewater and protecting the natural environment

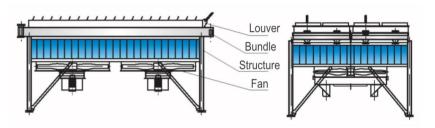


Typically, an air-cooled heat exchanger for process use consists of a finned-tube bundle with rectangular box headers on both ends of the tubes. Cooling air is provided by one or more fans. Usually, the air blows upwards through a horizontal tube bundle. The fans can be either forced or induced draft, depending on whether the air is pushed or pulled through the tube bundle. The space between the fan(s) and the tube bundle is enclosed by a plenum chamber which directs the air. The whole assembly is usually mounted on legs or a piperack.

System Features

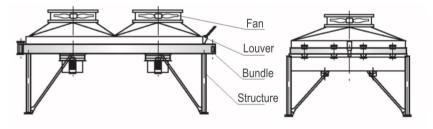
Forced-draft Horizontal Air Cooler

Forced-draft: The bundle is on the exhaust side of the fan to facilitate maintenance. The fan motor is always in cooler air to allow for treatment of high temperature processing medium and thus maintain a long service life.



Induced-draft Horizontal Air Cooler

Induced-draft: The bundle is on the intake side of the fan. The induced-draft horizontal air cooler features a stable performance of heat exchange as the air duct isolates finned pipes from sunshine, wind rain and snow. It also has even air volume, slight thermal circulation, low loss and low noise.



Sloped-top Air Cooler

The bundle is set into an A shape. It is compact, occupying a small area. The resistance within the pipe is less than that of a horizontal cooler. Its antifreezing performance is also excellent.

