

Evaporative coolers

The **evaporative cooler** is the modern equipment which purpose consists in creation in the room of comfortable air - cooled, cleared and humidified. Air cooling is due to the evaporation of water, without the use of chemicals, including refrigerants. Unlike air conditioning, the evaporative cooler does not dry the air.

The operation of the **air cooler** is based on the process of water evaporation. In addition to lowering the indoor temperature, the device helps to:

- removal of hidden heat, smoke, odors, dust, insects;
- a significant increase in productivity;
- maintaining a constant temperature of stored products;
- constant renewal, cooling, purification of indoor air;
- observance of safety and hygiene rules.

Areas of application of the **evaporative cooler** are rather big. The equipment is used for [ventilation](#) and maintenance of the set parameters of air quality in rooms of various function and the size. The most common **air cooler** is found in shopping malls, offices, restaurants, in residential, industrial and warehouse premises, in greenhouses, exhibition and sports halls. In addition, the device is effective both indoors and outdoors. That is, the **evaporative cooler** can be installed in a summer cafe, on the veranda, outdoor stage.

Air cooler: features and benefits

The **evaporative cooler** consists of the fan, the water pump and the system of the filters enclosed in the plastic or metal case. The air is sucked in by the fan through the holes in the housing, then passes through a filter that is constantly wetted with water. The filters that are part of the **cooler** clean the air of harmful impurities and particles larger than 10 microns, as well as unpleasant odors. In some cases, it is possible to flavor the air with a selected scent, such as eucalyptus or lemon.

The **evaporative cooler** can operate in both air cooling mode and fan mode. In addition, among the advantages of the equipment are the following:

- the cost of maintenance of such an **air cooler** is usually less than traditional air conditioning systems;
- no freon;
- minimal air pollution;
- the mechanical design of the evaporative type **cooler** is simpler than that of air conditioners;
- there are no problems associated with thermal and chemical air pollution by coolants.

The **air cooler** also has its downsides. This is the noise from the fan and the inability to reduce the air temperature very low. In general, the device can be called a breakthrough, along with [unmanned logistics](#).

Evaporative coolers

Published on PATRIOT-NRG International portal for energy saving (<https://www.patriot-nrg.com>)

Source URL: <https://www.patriot-nrg.com/en/evaporative-coolers>