

Adiabatic cooling ensures an ideal working climate in halls

The Hoval TopVent® SH Adiabatic cools large halls and facilities to pleasant temperatures in the hot summer months. Furthermore, adiabatic cooling is an extremely cost-efficient and environmentally friendly way of cooling halls.

As well as being a topic that has dominated the media in recent years, global warming is a fact that becomes particularly evident every year when summer comes around. Not only are the periods of extreme heat experienced during summer getting longer and longer, they are becoming more intense too. Having a pleasantly cool working environment is beneficial for all employees – particularly those who work in large production or storage halls. In addition to being unpleasant for employees, working at high or very high temperatures also causes their performance to suffer. With this in mind, it is worth making a small investment today and discovering the hall cooling system of tomorrow.

A cooling system that has proved its worth

The Hoval TopVent® SH is a roof supply air unit that is used for ventilation and heating in fresh air, mixed air or recirculation operation in modern production facilities and commercial halls. Depending on the damper position, it takes in fresh air and/or room air, heats it and injects it back into the room through the Air-Injector. Thanks to its high performance and efficient air distribution, the supply air unit covers a large area. Compared to other systems, fewer units are needed to achieve the required conditions with the TopVent® SH.

TopVent® SH now with adiabatic cooling

The TopVent® SH is now available with an optional adiabatic cooling function, guaranteeing an ideal working climate combined with cost-effective cooling. It makes the indoor climate more comfortable and thus boosts employees' productivity on hot days – the unit ensures pleasant temperatures at all times, even in large halls.

The effort involved in planning and integrating a unit of this nature is minimal. The cooling unit is already integrated in the equipment and simply requires a water connection. If greater cooling capacity is required, Hoval indoor climate systems are also available with reversible heat pumps. The TopVent® SH Adiabatic is inexpensive to purchase and the operating costs for the cooling equipment are low. With the TopVent® SH Adiabatic, environmentally friendly, resource-efficient cooling can be achieved because it uses water as a natural “refrigerant” rather than relying on environmentally harmful refrigerant products.

The Hoval TopVent® SH Adiabatic is installed on the roof, in exactly the same way as the TopVent® SH. This offers a significant advantage – any maintenance work that needs to be carried out on the unit can be performed via the roof, so that operations in the hall can continue undisturbed. The roof unit design means that it does not protrude far into the hall and does not take up a large amount of space inside.

What is adiabatic cooling?

Adiabatic cooling makes use of water: water requires energy in order to evaporate. This energy is taken from the supply air, cooling it down before it is fed into the halls. Adiabatic cooling is extremely cost-efficient and environmentally friendly as a cooling system. The cooling unit is integrated in the equipment and simply requires a water connection. The cooling function is controlled fully automatically by the integrated Hoval TopTronic® C control system.