



# Hoval

## TopVent® SH with adiabatic cooling

Cost-effective cooling for  
an ideal working climate

Cost-effective cooling | Ideal working climate | Straightforward

Up to 35%  
savings on operating  
costs compared to  
mechanical cooling

## Cost-effective cooling for an ideal working climate

The periods of extreme heat experienced during summer are getting longer and becoming more intense too. It is therefore worth making a small investment today and discovering the hall cooling system of tomorrow.

With precisely this requirement in mind, the TopVent® SH supply air unit is now also available with adiabatic cooling. It makes the indoor climate more comfortable on hot days and ensures a pleasant, productive working climate. The cooling system is simply integrated in the heating device. Furthermore, it is inexpensive to purchase and cost-effective to operate.

### Added value for you:

- Cost-effective cooling:  
Low operating costs with water as the refrigerant
- Ideal working climate:  
A more comfortable indoor climate boosts employees' productivity
- Straightforward:  
The cooling unit is already integrated and simply requires a water connection

### Hoval TopVent® SH with adiabatic cooling

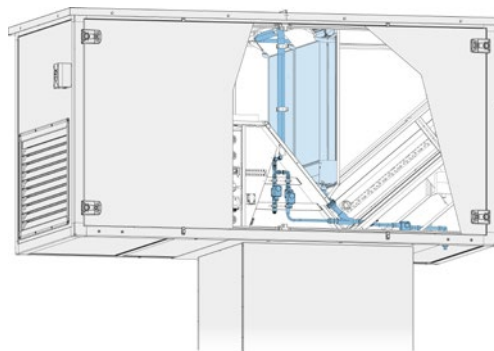
The TopVent® SH is a roof supply air unit that is used for ventilation and heating in modern production facilities and commercial halls. Maintenance work is performed from the roof, so that operations in the hall can continue undisturbed.

The adiabatic cooling function is available as an option and ensures an ideal working climate – with low costs and minimal effort with regard to planning and integration. If greater cooling capacity is required, Hoval indoor climate systems are also available with reversible heat pumps.

### What is adiabatic cooling?

Adiabatic cooling makes use of the properties of water. Evaporating water requires a large amount of energy – referred to as evaporation heat – which is taken from the supply air. The cooled air is then fed into the hall.

Water vapour is also fed into the hall along with the cool supply air, resulting in a slow but steady increase in humidity. The system cannot be operated continuously for this reason, but it can be used to prevent temperature peaks in the afternoon.



#### Adiabatic cooling with the TopVent® SH:

Water evaporation takes energy from the supply air and cools it down.

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.

### TopVent® SH-9 with adiabatic cooling

Decentralised supply air unit with maintenance access from the roof for heating with central heat generation and decentralised adiabatic cooling

| <b>Ventilation</b>  | <ul style="list-style-type: none"> <li>■ Recirculation operation</li> <li>■ Supply air operation</li> <li>■ Air distribution with Air-Injector</li> <li>■ Outlet nozzle (option)</li> <li>■ Air filtration</li> </ul> |          |           |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|
| <b>Heating</b>      | <ul style="list-style-type: none"> <li>■ With connection to hot water supply</li> </ul>                                                                                                                               |          |           |
| <b>Cooling</b>      | <ul style="list-style-type: none"> <li>■ Adiabatic cooling by means of water evaporation</li> <li>■ Free cooling</li> </ul>                                                                                           |          |           |
| Technical data      |                                                                                                                                                                                                                       | Cooling  | Heating   |
| Air flow rate       | m³/h                                                                                                                                                                                                                  | 7000     | 9000      |
| Cooling/heat output | kW                                                                                                                                                                                                                    | up to 24 | up to 121 |
| Floor area covered  | m²                                                                                                                                                                                                                    | 661      | 946       |
| Water consumption   | l/h                                                                                                                                                                                                                   | 250      | -         |