

# Hotel Solution



Complete package solution  
for an invigorating  
indoor climate in hotels

**Swegon**

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Als het om lucht gaat.

**AUERHAAN**  
KLIMAATTECHNIEK

# Cooling, heating and ventilation in a single, quiet system

The most important economic key figure within the hotel sector is the occupancy level. This is directly linked to the well-being of the hotel guest, as a satisfied guest comes back.

## Special demands

The indoor climate in a hotel room must meet special needs. Since the room environment should be peaceful, quiet and offer the highest degree of comfort possible, a uniform temperature and a healthy indoor climate are vital, regardless of the outdoor temperature and season. The ventilation system must also be as quiet and as maintenance-free as possible. Moreover, occupants demand individual variations at room level.

## Hotel Solution

Cooling and heating production with OMICRON and the GOLD air handling system, the PARAGON comfort module, as well as the intelligence for the demand-control and connection of CONDUCTOR and Super WISE, all combine to make up the Swegon Hotel Solution package solution. They represent the optimum solution for a good indoor climate in hotel rooms.

The cooling, heating and airflow in each room are demand-controlled either manually, using a key card or via a supervisory system. Each room can be controlled separately for the maximum possible comfort.

OMICRON and the GOLD air handling unit ensure a constant temperature for the supply air, which is dehumidified and the supply and extract air ducts are constant pressure controlled. The airflow is continually optimised via Super WISE in order to save energy and therefore the environment. The water temperature for comfort modules is optimised and distributed demand controlled. Tap water production can be integrated.

OMICRON, GOLD and Super WISE can also supervise and control the entire Hotel Solution via the integrated web interface, via Swegon NESTOR or via an external supervisory system. Remote connection is possible with the help of Swegon Remote Access.



**OMICRON**, multifunction unit for simultaneous and independent cooling and heating production for the entire property, with integrated control equipment. The production of tap water is possible.



The system includes three to five intelligent control units:

- **CONDUCTOR** controls all room functions.
- **All Year Comfort** optimises the temperature of chilled and hot water by controlling pipework and radiators.
- **Super WISE** optimises pressure regulation in all zones in the building. Super WISE communicates with CONDUCTOR and GOLD, as well as with external supervisory systems.
- **NESTOR** can be used as a common interface for the whole climate installation, with its own web server, central alarm and parameter management.
- **REMOTE ACCESS** can be used for remote connection for supervision and optimisation.

## Swegon Bonus

### Quiet and draught-free

- No fan or motor in the room
- Optimum mixing without draughts
- Adjustment damper and demand-control

### Low energy consumption

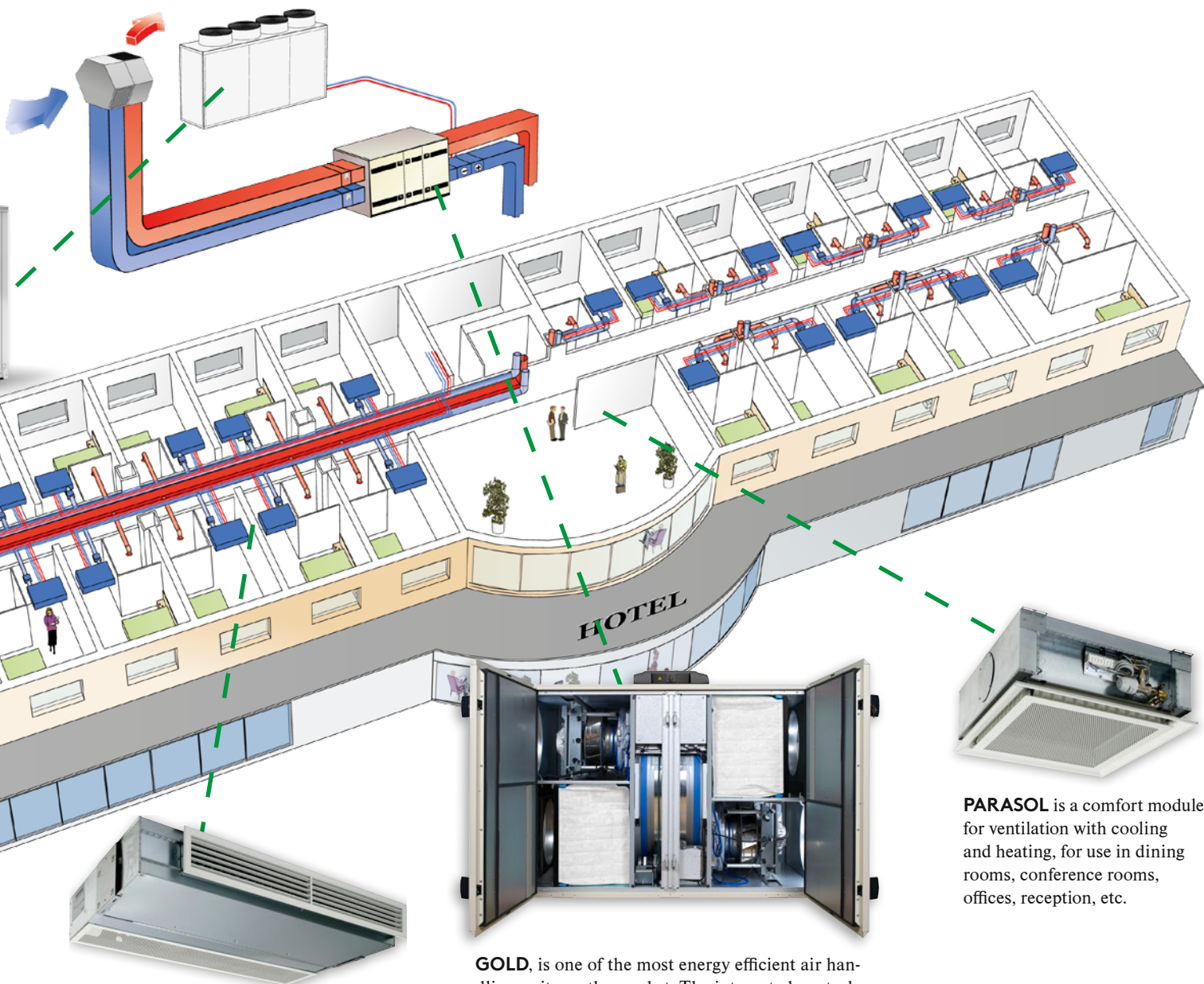
- Demand-control of airflow and cooling/heating via manual unit, key card or supervisory system (BMS)
- Approx. 80% heat recovery and cooling energy recovery
- Dehumidification of the primary air
- Deactivation of rooms to save electrical, cooling and heating energy (+/- 2 degrees for no occupancy)
- High EER/COP for cooling and heating production

### Built-in control equipment with communication

- Jointly developed control equipment for optimum functionality
- Supervision via web interface makes external supervision systems cheaper or superfluous.
- Possibility to log and optimisation of operations

### Easy maintenance

- No filters in the room
- No moving parts in the room
- Simple to clean
- Dry system without drainage
- Automatic maintenance functions in GOLD and OMICRON



**PARAGON**, is a comfort module for demand-controlled ventilation with cooling and heating for use in the hotel's guest rooms.

**GOLD**, is one of the most energy efficient air handling units on the market. The integrated control equipment has every function imaginable for air handling and is ready for communication with most existing supervisory systems.

**PARASOL** is a comfort module for ventilation with cooling and heating, for use in dining rooms, conference rooms, offices, reception, etc.

## This is how it works

A central multifunction unit, **OMICRON**, supplies the entire property with cold water and hot water. One **GOLD** air handling unit per building structure or storey provides the system with supply air and extract air. The supply air maintains a constant temperature. The unit is equipped with an air cooler for cooling and dehumidification, as well as an air heater for reheating the supply air.

The air flow in the supply air and extract air ducts is pressure controlled: the air flow and pressure are constantly optimised at the lowest possible level by the Super **WISE** control unit. The All Year Comfort control unit optimises the temperature and floor on the secondary cooling and heating liquid circuits.

**PARAGON** is located in the ceiling in the entrance to each guest room. **PARAGON** is equipped with a condensation monitor and operates as a dry system. The window contact function stops heating and cooling if the window is open.

Demand-controlled room regulation takes place via the **CONDUCTOR** room control unit. Airflow control takes place in three stages (vacancy flow, occupancy flow, boost flow) via damper control in the supply air duct. The extract air register in the bathroom is damper-controlled to comply with the three supply air stages.

Room temperature and airflow can be controlled via:

- Room thermostat
- Key card
- Reception
- Supervisory system (BMS)
- Manual unit in the room

In addition, Swegon offers system products **WISE**, **PARASOL** comfort modules and suitable air diffusers, as well as grilles, dampers and sound attenuators that can also be used in other parts of the hotel.

# Hotels with indoor climate from Swegon



ACCOR/Mercure, Düsseldorf



CitizenM Hotel, Glasgow



Scandic Victoria Tower, Stockholm



InterContinental Hotel, Porto



Windsor Palace Hotel & Conference Center, Jachranka

- First Hotel Avalon, Gothenburg, Sweden
- Nordic Light Hotel, Stockholm, Sweden
- Best Western Hotels; several hotels in Germany, Poland and Sweden
- Holiday Inn, Cologne, Germany
- Unia Hotel, Lublin, Poland
- Radisson Blu, several hotels in Norway and Sweden
- Future Inns Hotel, Bristol, United Kingdom
- Scandic Hotels, several hotels in Norway and Sweden
- ACCOR; over 20 hotels in France, Germany, Poland, Turkey, Benelux, Russia and Andorra
- Sheraton/Starwood, Addis Ababa, Ethiopia
- Marriot Hotels, in Canada, Belarus and Sweden
- ORA Holiday Inn, Istanbul, Turkey
- ..... and many more