PRODUCT BROCHURE

Low-profile air handling units
ATpicco

Modular configuration with highly efficient energy recovery
Investors, plant engineers, planners, and architects no longer ask “whether” but “how” they can enhance the degree of sustainability of their plants and building management systems. Each building is unique. Its location, size, construction quality, and increasingly the building management system determine its value and profit. The energy state of a building has gained appreciably in significance here: it is a fact that buildings consume around 40 percent of the world’s energy, and produce 21 percent of global greenhouse-gas emissions. The proportion of the energy costs in the “second rent” for users and residents is constantly increasing.

Where the heating, cooling, cleaning, purification, humidification and dehumidification of air are required, DencoHappel makes its contribution to progress. Customised climate control and air treatment, with the maximum-possible reduction in energy consumption over the entire life cycle of the facilities: this all pays out handsomely in euros and cents, in comfort, and in staff productivity. Our solutions reliably comply with all international standards in highly sensitive areas such as hospitals and cleanroom applications. They likewise set new standards for sustainability and flawless system integration in advanced sports arenas, production facilities, airport buildings, and swimming pools – as well as in offices, museums, and hotels.
TECHNICAL QUALITY

The one who processes air must master it

It is due to the precision work that has gone into the development of the hardware and software that our air treatment can neither be seen nor be heard, provides pleasant experience and helps in avoiding wastage of energy and money.

Can a building with large glazed areas be heated during spring and autumn on its north side and cooled on its south side, with only one system and without having to switch on the central heating? Does a system used, e.g., for heating cooling, humidification and dehumidification in pharmaceutical or electronic industry also protect against dirt and bacteria? Can investors and building owners calculate the life cycle costs of a central plant air handling unit, determine the effect of an energy-saving equipment on the operating cost for this purpose and thus select the optimal efficiency class right in the configuration stage of the plant?

DencoHappel has found answers to these and many other questions concerning air treatment and climate control – and has implemented them in solutions which reflect its experience gained in many and various successful applications. The core proposal consists of a broad spectrum of central and decentral air treatment plants, separators and filter plants up to complete clean-room systems. Their function, control and design can be fine tuned to their task, the condition and infrastructure of buildings, the operating cost calculations and the highest standards of energy efficiency and climate protection. State-of-the-art control technology developed in-house permits the individual control in individual rooms just as it permits the central handling in the context of building management system.

Control unit, which has interfaces to all usual systems of the building automation, provide for the trouble-free integration of the devices into the building management system. The fact that planners and users can implement their own desires at the design stage of the plant itself is the proof of the precision work involved in the air conditioning equipment.

DencoHappel stands for:

- Tailor-made air quality and a healthy, comfortable room climate with extremely noiseless operation
- Maximum energy efficiency and reduction in the CO₂ emission
- Precise central and decentral control and regulation
- High adaptability to most diverse functions and environments
- Easy system integration
- Durability and high degree of availability at low maintenance costs
ATpicco allows smallest footprint

With the ATpicco, you have a central air handling unit that really performs – but with a minimum of space requirements. And it keeps its promise of delivering just as much as the big boys do. Despite the benefits of its small footprint, it offers the complete functional diversity that you expect from a much larger air handling system. You can heat, cool, and ventilate – as well as filter, humidify, and dehumidify the air. And you can recover produced heat on a cost-effective basis.

ATpicco offers a complete range of combinations

You enjoy wide scope in the selection and combination of components and modules for the ATpicco. In accordance with the existing individual requirements of a particular project, you can combine the necessary modules in the desired performance classes.

ATpicco offers you top flexibility

With its optimally graduated modules, the intelligent concept of ATpicco offers you maximum flexibility in planning and installation. With any of a wide choice of heating, cooling or ventilation, intake, or mixing sections: the entire range of combinations is wide open to you. A great deal indeed speaks for selecting systems: for example, their practically designed, frameless panel structures with smooth interior surfaces, optimal acoustic values, and effective thermal insulation. And just as impressive are the ease and simplicity of comprehensive, effective, and hygienic maintenance – as well as the low power consumption.

All the experience from many generations of equipment – and the competence of the market leader – are built in to ATpicco.
ATpicco

Selected Modules in Detail

Fans with efficient EC drives complete the air-handling concept of ATpicco units with a flexible design.

The units handle air flow up to 4000 m³/h at optimum energy efficiency or air flow up to 2400 m³/h if combined units with cross-counterflow heat exchanger are used. This translates into filtering, heating, cooling. And they can also naturally be outfitted with efficient energy-recuperation systems.

Cooler and heater with full-face heat exchanger. Thanks to full utilization of ribbed surface efficiency factor and capacity are increased as well as pressure drop reduced at the same time.

The ATpicco is equipped with a filter that can be removed on the unit side. The filter is designed as a bag or panel filter.
Whether in the creative forge of an advertising agency, in the reception area of a brewery, at the roulette table of a casino, in the sound studio of a broadcasting station, in the special-function hall of a hotel, or in the rooms of a museum ...

... at all these sites, especially good indoor climate is an absolute must in every respect. With such applications, and for countless other situations, ATpicco has a proven record as an ideal partner. Because this compact central air handling unit is hard to beat in assuring comfortable, feel-good room climate and enhanced air quality.
At home in the very best homes
ATpicco can present a portfolio of truly enviable reference projects. In all of Europe, ATpicco has achieved a splendid record of success in a great number and variety of application areas.

Comfort control with its very own system
The convenient optionally selectable MATRIX control system, which features a minimum of cabling, effectively regulates and monitors the system, while making available all the potential of the entire equipment – a universal system for the many and varied combinations of ATpicco.

Selected references
The pictures, beginning from the bottom, show the reception area of Grolsch Brewery, in Enchede, the Netherlands; to the right Biel Casino in Switzerland; at the bottom a recording studio of Czeske Radio Station in the Czech Republic and the Green Room in the A-Rose Resort in Travemünde, Germany.
**TECHNICAL DATA AND FACTS**

**ATpicco**

**Summary of key benefits:**
- for air flows up to 4000 m³/h
- Space-saving, flat design (355 mm or 450 mm high)
- Wide range of installation possibilities (ceiling, floor, wall)
- Complete spectrum of functions
  ... and many more

**Especially compact design**

**ATpicco** can be installed over a suspended ceiling, behind a partition wall or wall cladding, or below a raised floor. Thanks to its compact design, relatively great leeway is possible in room layout: which is often important in bistros, boutiques, restaurants, and the like.

**Comprehensive system planning**

With *Lplus* design software by DencoHappel, you have access to an innovative, technologically mature instrument for comprehensive system planning - also in the design of central air handling systems. DencoHappel offers you one-stop production, delivery, and service.

You can get the design software free of charge from us, or you can download it from our Web site at www.dencohappel.com

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**Capacity diagram with three model sizes**

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Capacity range in m³/h
The new ATpicco air handling units

The units are small and flat but offer full-scale functions: ATpicco air handling units can also be used as combined units with a highly efficient heat recuperation, bypass, speed-regulated EC fans as well as full-face heat exchangers for heating or cooling.

**Especially flat form for with minimum space demand**
- High diversity to combine various components and modules
- Low life cycle costs thanks to the application of efficient components
- Optimum placement of units into a suspended ceiling through modular design
- Heating, cooling, ventilating as well as filtering, humidifying and dehumidifying with only one unit
- Efficient heat recuperation
- Effective heat insulation
- Optimum acoustic values
- Maintenance friendliness

Combined unit with highly efficient heat recovery unit including bypass, with speed-controlled EC fans and full-face heat exchangers to deliver required heating or cooling capacity.

Complete air-handling unit for installation in suspended ceiling, wall or floor
- individual
- efficient
- flat
- maintenance-friendly
Economical from the beginning
The technical developments of DencoHappel represent state-of-the-art swimming pool climate control. Our systems support diverse applications that optimally conform to current criteria of cost effectiveness, safety and sustainability. Our products and services go far beyond pure technology. They are integrated into a comprehensive and in every respect customised service package. This programme includes not only conventional services such as spare part delivery, maintenance, and repair. It unites the consulting and engineering of a technology leader with customised after-sales service and rapid response times. And this not only for installing new equipment. This service also applies for upgrading and optimising old equipment and provides you with perfect support in all project phases. The functionality of the system is secured over its entire service life.

International service und support in experienced hands
Wherever you need us, we will be there for you in the shortest time. All over Europe, our own customer service ensures that you are able to make optimal use of our units’ advantages at all times. Many technicians are ready on-call in Germany alone for rapid deployment. All services are designed for absolute safety and reliability. For example, an on-site function check is a part of our delivery service, conducted by an experienced DencoHappel technician together with the installer. This way we directly and personally pass on our functional know-how built up over many years. In this context we should also mention the training we offer in the technology of our climate control systems. Such training is a benefi cial instrument for ensuring the lasting functionality and availability of the systems.

A decision for quality
A high quality standard is the basis and principle for all our services. All our service specialists are highly experienced and devote themselves to their work with great diligence. Technically and personally convincing; this is what you can expect from us.
• Initial installation
• Maintenance and servicing
• Assembly services
• Spare parts
• Customer service
• Consulting
• Refurbishing
• Training
DencoHappel is a globally operating company with great expertise in air treatment, air conditioning and filtration technology.

Our nearest consulting and service teams will be glad to discuss ideas and develop creative and effective solutions with you.