

MODERN INDUSTRIAL
KITCHEN VENTILATION

Atrea®

Leader in ventilation and heat recovery



HISTORY

ATREA started as a private company in 1990 in the Czech Republic. Very shortly it began to focus on the production of ventilation units with waste heat recovery and later on, the kitchen industrial ventilation became another part of ATREA's complex product portfolio.

ATREA's high quality products also started to make their mark in the demanding markets of Western Europe. The economic and geographic proximity led ATREA to focus primarily on Germany where it has established itself really well as a result of a good partnership and top-quality products, with the Netherlands, Denmark, Switzerland, UK, Italy, Lithuania and other countries to follow.

Currently, ATREA is also expanding its business abroad with the ventilation and air-conditioning equipment for kitchens. It offers wall to wall ventilation ceilings, kitchen hoods with heat recovery and the control system. With having so much experience throughout the years, this part of ATREA's product range is slowly becoming a success among designers all over Europe.

For more information please visit www.atrea.eu



ATREA's product range

- Kitchen ventilation
 - Wall-to-wall ventilation ceilings and kitchen hoods
- Commercial ventilation
 - Air handling units from 500–15000 m³/h
- Residential ventilation
 - Air handling units from 170–580 m³/h
- Passive houses by ATREA
- SMART box ventilation system

WHY KITCHEN VENTILATION?



ATREA is able to supply a complete solution for kitchen ventilation – from the ventilation ceiling to the air handling unit with heat recovery . Having the whole service in one package gives us a huge competitive advantage, because it is both convenient and comfortable for the customer.

ATREA ventilation system is designed according to the VDI 2052. The construction of our ventilation system meets the most stringent criteria in terms of health requirements as well as design. The well-lit space of the entire kitchen, the draft-free supply of fresh air and perfect extraction, all that with the additional benefit of a modern control system, create a pleasant and clean environment for kitchen staff.

Business

- Attractive design
- Low purchase price
- Easy maintenance
- Pleasant environment for the cooks
- Light weight
- Brightens up the space
- Air-tight (closed extraction system)

Engineering

- Ventilates the entire area of the kitchen
- Hygienic air exchange
- High filtration efficiency
- Europe-wide TÜV certification
- Integrated supply of fresh air
- Integrated light for the whole area
- Perfect protection for the building construction

WALL-TO-WALL VENTILATION AND EXTRACTION CEILINGS

Brightens up the space

Light weight

We are able to create an ideal solution for all types and sizes of the kitchens.

Wall-to-wall ventilation and extraction ceilings are the flagship of ATREA's range. This modern and efficient system has been successfully marketed for over 15 years and verified through more than 200 large-scale projects in the Czech Republic and Slovakia and is slowly gaining reputation in other countries all over the world.

The fundamental difference is the design of the polycarbonate false ceiling and the shape of the extraction duct. The choice of type depends solely on the owner, architect or planner. From the technical point of view the TPV is a preferred choice in fragmented ground plans while SKVs are more aesthetic (e.g. for show kitchens or food counters).

It is also possible to design an exclusive tailored look according to our customer's needs.

As for functionality, there is no difference among the types of ventilation ceilings. They all supply fresh air, extract exhaust air, provide lighting for the entire kitchen area and protect the ceiling structure against the effects of heat and humidity.



BUSINESS ADVANTAGES

Attractive design

ATREA's ventilation ceilings take the look of the kitchen to a whole new level. Its appealing design creates an impression of elegant and high class facility together with a cozy working environment.

Low purchase price

The ventilation ceiling is always custom made according to our customer's needs. We know that high quality comes along with high prices, but we maintain a competitive price level.

Easy maintenance

It is extremely easy to clean the ceiling. No need to take the whole day off to remove the parts. Simply wash off the dirt using a wet dishrag.

Pleasant environment for the cooks

It has been proved several times, that a nice environment has a significant impact on employees. Thus, we have come up with a solution that creates a cozy and adequately illuminated workplace.

Light weight

Because of an ideal type of a construction design, there are not any high demands for the statics of the construction ceiling.

Brightens up the space

Thanks to the used materials of the ceiling, the lights spread out all over the workplace.

Air-tight

We use a closed extraction system, which ensures that the polluted air will not get to the building construction. Therefore, no mold can be formed.

WALL-TO-WALL VENTILATION AND EXTRACTION CEILINGS

TECHNICAL ADVANTAGES

Ventilates the entire area of the kitchen

Ventilation ceiling are a great solution for kitchens where several convection ovens are placed. There is no need for kitchen hoods, the ceiling extracts all the polluted air and supplies the kitchen with fresh and clean air.

Hygienic air exchange

When cooking, many harmful substances are created. In order to prevent their presence, the exhaust air must be extracted perfectly, as well as supplying fresh outdoor air, which cannot be achieved by opening windows to ventilate.

High filtration efficiency

It is possible to add the UVC filtration according to the customer's requirements. This filtration ensures the disintegration of fat particles and eliminates the odors from cooking.

Europe-wide TÜV certification

Our product is TÜV certified. This certification monitors the quality of the used material and the design quality. It outlines that the ceiling is made under certain conditions, by certain tools. It also has to fulfill a certain prescribed quality.

Integrated supply of fresh air

the supply is integrated in the ceiling, with the help of a fabric diffuser, which is made exclusively for each project.



TYPES OF KITCHEN VENTILATION CEILING

HOTEL IMPERIAL KARLOVY VARY

STANDARDS OF KITCHEN VENTILATION DESIGN

EN16282

This is the first European standard which was designed for calculation and design of kitchen ventilation. It is based on the VDI 2052 as most European producers design kitchen ventilation systems according to this regulation. It has repeatedly proven itself over the past few years as the perfect standard for designing kitchen ventilation. Although the new EN16282 standard is based on VDI 2052, some points may vary (e.g. the recommended overlaps of hoods over the cooking block).

VDI 2052

Germany's VDI 2052 is currently the most widely used standard for the design of kitchen ventilation space. It was adopted not only by the Czech Republic, but also by a lot of other countries throughout Europe. For calculations made according to the VDI 2052 it is necessary to know several factors that affect the final calculation.

The most important factors include:

- Kitchen space
- Kitchen space strain
- Kitchen equipment layout (output and placement)

Based on these parameters, it is possible to design both the most suitable and also the most functional system.



KITCHEN HOOD
VARIANT

Easy maintenance

Low purchase price

Attractive design



SKV

A perfect design of the kitchen ventilation ceiling achieved due to arched polycarbonate panels.

TPV

A standard version of a fully illuminated ventilation ceiling.



TPV EXCLUSIVE

An exclusive design created mainly for the ventilation of show kitchens. The LED technology and translucent elements give show kitchens a unique look.

TPV-N

We are also able to supply the stainless steel type.



When designing the ventilation system, it was necessary to take into account the novelty of the dining room interior. Also, it was crucial to prevent the exhaust air from spreading into the area occupied by the clients of this luxury hotel. Thus, an effective extraction system was designed.



SCONTO BRATISLAVA

KITCHEN VENTILATION CEILING / TPV



This restaurant was designed in an open space in SCONTO Bratislava shopping mall. The main requirement was the elimination of smells spreading from the kitchen to the shopping mall. However, the design of the kitchen had to remain the same. Therefore, TPV extraction ceiling was the ideal solution.





The new CSOB headquarters is the biggest office block in Prague and at the same time biggest building in the Czech Republic and central Europe constructed to ecological standards. TPV ventilation and air-conditioning ceilings are installed in the kitchen and canteens with a total area of 330 m². The canteens use polycarbonate in two layers to ensure the perfect diffusion of light and uniform lighting in the space below the ventilation ceiling.



OPTIONAL ACCESSORIES

UV-C technology

- UV-C lamps eliminate the odors from cooking and disintegrate fat particles
- The entire system is kept spotlessly clean
- No aging of the system
- Odourless exhaust air
- Minimal risk of fire
- Meets the most stringent criteria and requirements for a clean environment

LED lights

- Possible for all types of kitchen ventilation ceilings (as a standard for TPV Exclusive)
- Optimal luminosity
- Low operating cost
- Low purchase cost

Self-extinguishing system

- It will automatically detect fire and start extinguishing it
 - Protects the ventilation system and kitchen appliances
 - Compact solution
 - Attractive design
 - Meets the fire safety conditions
1. ATREA wall-to-wall ventilation ceiling
 2. stored pressure fire extinguisher
 3. self-extinguishing system
 4. automatic nozzles

SELECTION SOFTWARE

ATREA is the only producer with highly sophisticated software available also for designing the kitchen ventilation systems together with the commercial and residential ventilation.

ATREA offers its proprietary design software that is a highly useful and practical tool to select not only the kitchen ventilation system, but also for DUPLEX series units and provide great marketing support!

Very detailed calculations on all specifications are standard.

The software checks whether all components were selected and whether the selected system is working. This way you can avoid any possible mistakes.

It includes:

- Selecting a ventilation ceiling, kitchen hood, air-handling unit including the accessories
- Showing parameters of the selected appliance and its components
- Selecting the control system with accessories in a functional set
- Electrical wiring diagrams
- Displaying and printing the components installed, an h-x- diagram and HVAC diagrams
- Price specifications of individual components
- Print output to a printer or PDF
- Exporting drawings and diagrams do DXF in 2D or 3D
- Sending the design and export by e-mail
- Additionally, the design software includes a full catalogue of ATREA's products in PDF format



Very positive feedback from designers from all over Europe is used for further improvement with the goal to create fast and easy design.

HOOD OPTIMA / VARIANT / MODIS 2 / GRANDE / KUBUS



OPTIMA

A compact kitchen hood OPTIMA with heat recovery, filtration of the supply air, a heater and lighting. Suitable for new or renovated buildings. No extra room for air-handling systems is needed. All functions are integrated inside the unit, with only the fans installed in the supply and exhaust ducts to meet requirements.

Advantages

- Compact size
- Integrated supply of fresh air
- Elegant design
- Integrated LED light (remotely controlled)
- Built-in heat exchanger with the efficiency up to 68%
- Built-in heaters
- Integrated digital control system RD5



VARIANT

Kitchen hoods VARIANT ensure efficient extraction with exhaust air filtration and simultaneously the supply of fresh air for kitchens of all sizes. They are custom made and include an automatic operation control system.

Advantages

- Integrated supply of fresh air
- Integrated fluorescent light with IP65
- Low weight
- Elegant design
- Optional directing of fresh air supply
- Compact size

HOOD ADVANTAGES

- Elegant design
- Low weight
- Compact size
- Integrated light

● *Elegant design*

● *Low weight*



HOOD OPTIMA / VARIANT / MODIS 2 / GRANDE / KUBUS

● *Integrated light*

● *Compact size*



KUBUS

A simple hood suitable for appliances such as dishwashers and convection ovens for kitchens of all types and sizes. The operation of such appliances does not result in the particles of fat being contained in exhaust air so it is not necessary to install grease filters.



MODIS 2

MODIS 2 is part of ATREA's product line – assembled kitchen hoods with a unique construction solution based on a modular system. This line offers an option to choose how the product will be delivered. There are three choices to be made:

- Delivery of a disassembled hood without the spigot
- Delivery of a disassembled hood with the spigots ready to be assembled on-site
- Delivery of an assembled hood

It can also be mounted with side rails to create a different structural composition.

Advantages

- 5 years of warranty
- Attractive design
- Integrated light



GRANDE

The welded stainless steel kitchen hood GRANDE was developed to meet the most stringent technical parameters according to the VDI 2052 and also the customer's design demands. Thanks to these parameters it can be used for ventilating cooking tops working under enormous strain and also acts as a design element.

Advantages

- Stainless steel design
- Cost-saving light (a "fully welded" look)
- Wireless control of the light
- Minimum of mounting joints (a "fully welded" look)
- Huge accumulation space
- High efficiency of separators

AUTOMATIC CONTROL SYSTEM

Automatic control system for kitchen ventilation is an optional accessory for kitchen hoods and the ventilation ceilings. The digital control system ensures economical operation of ventilation depending on the actual heat production of kitchen appliances and prevents uneconomic fan operation time during cooking or at a reduced heat load.

ATREA has its OWN control system.



Control system RD5

- Meets all requirements for the most advanced system
- Ensuring a perfect hygienic conditions in the kitchen
- External signal for convection oven for maximal output
- Control of the ventilation performance (0–10 V)
- Possibility to switch to fully automatic ventilation performance according to the actual strain in the kitchen
- Controlling based on the temperature and humidity
- Option of dividing space into zones a defining their operation
- Remote access
- Holiday mode (possible to use for state holidays)
- Start and finish delay option

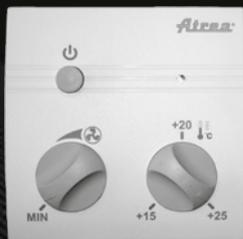


CP Touch control panel



- Suitable for offices
- Touchscreen and full-colour display
- Similar design to the ATREA web interface for easy control and orientation
- Built-in temperature sensor for free-ambient temperature control
- Password protected service access for enhanced safety
- 50 m distance reach
- Automatic screensaver

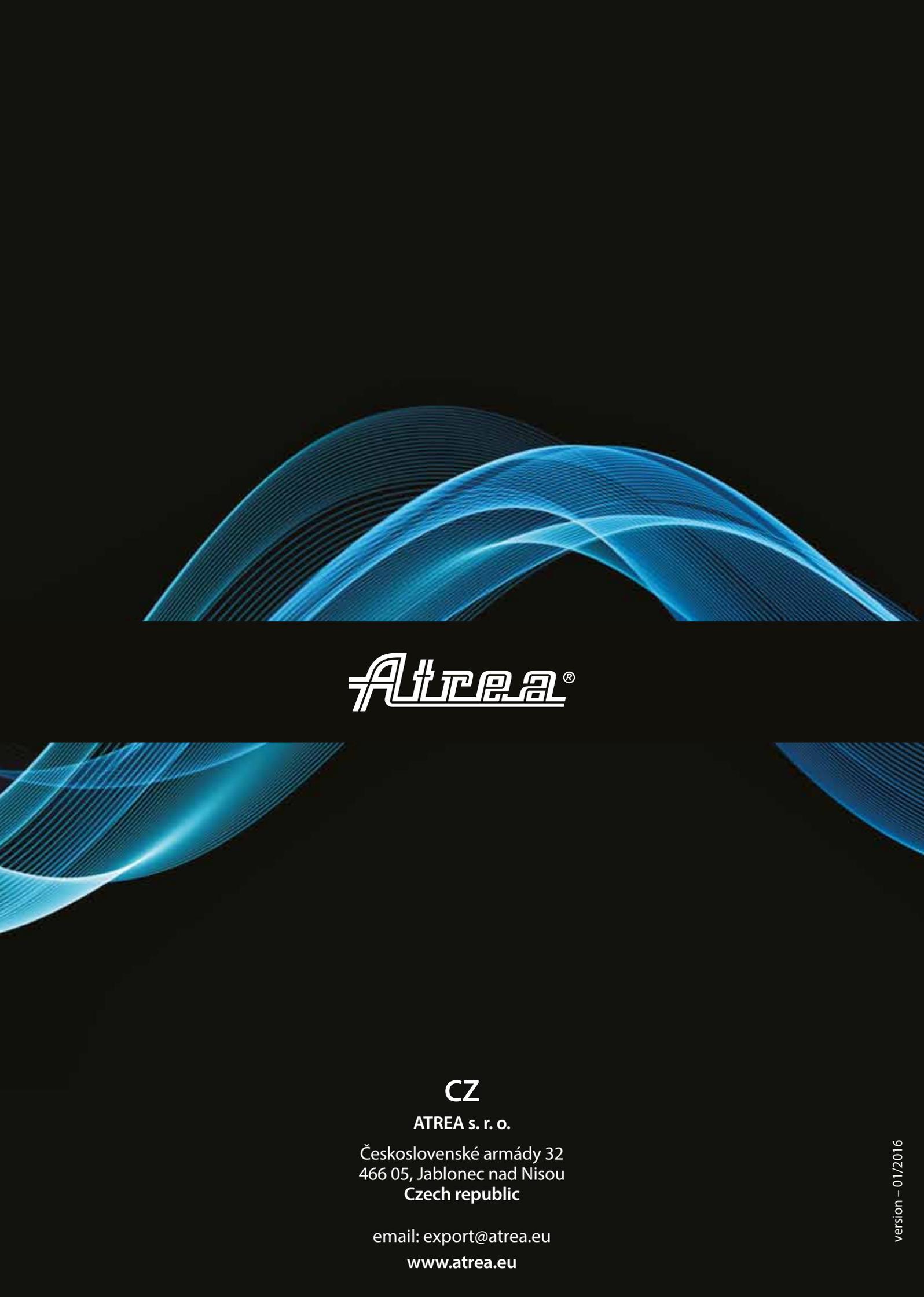
CP 10 RT control panel



- Suitable for kitchens
- Cheaper and simpler option
- Intuitive and easy power and temperature setting
- Simple on/off button
- Ingress protection IP43

Web server as standard
with the use of DUPLEX units.



The background features several overlapping, wavy lines in shades of blue and cyan, creating a sense of motion and depth. These lines are composed of many thin, parallel lines that create a mesh-like or fiber-optic effect.

Atrea[®]

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