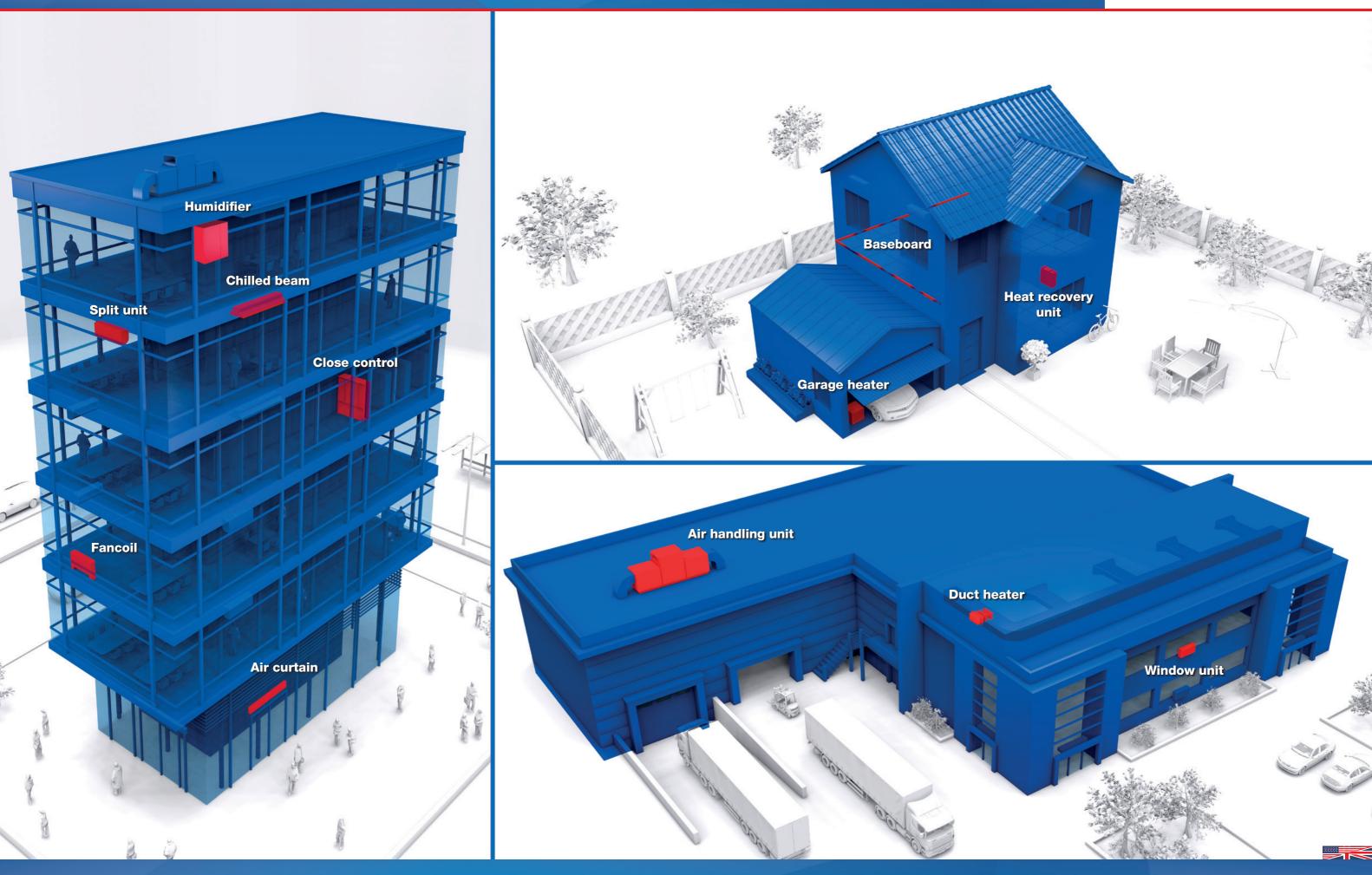


AIR CONDITIONING





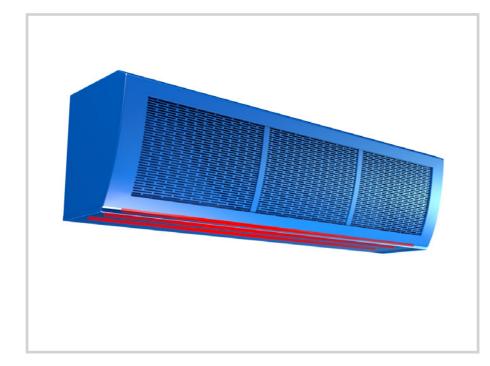






AIR CONDITIONING

AIR CURTAIN



Air curtains create an invisible door separating a conditioned room from the outside. This by means of air flow which is precisely adjusted in term of temperature and speed. This is the most efficent separation with the lowest possible energy consumption, regardless of whether it is the heat or the cold that you want to keep inside.

An air handling unit is a device used to condition and circulate air as part of a heating, ventilating, and air-conditioning (HVAC) system which distributes the conditioned air through the building and returns it to the AHU.



Air Handling Units are installed in commercial and industrial buildings mainly on the building roof. Our proposal for this application is significantly wide and include duct heaters and immersion heater for heat pumps, tubular heater range supplied with or without fins and with optional vulcanized ends specially designed for wet or very high humidity areas, aluminum heaters and open coil heaters (for a fast heat transfer), etched foils and heating cables (mainly for antifreeze function) and *belly band heaters* (to be installed in the scroll compressors).



offer a better solution (low thermal inertia).

Tubular finned heater

Stitched wire heater

Air curtains are installed in commercial and industrial buildings mainly at the entrance for people or at goods inward

doors. Tubular finned elements are the most popular but for quick response stitched wire, open coil or mica heaters can



Open Coil Mica Heater





Aluminium heater



Vulcanized tubular heater

Etched foil





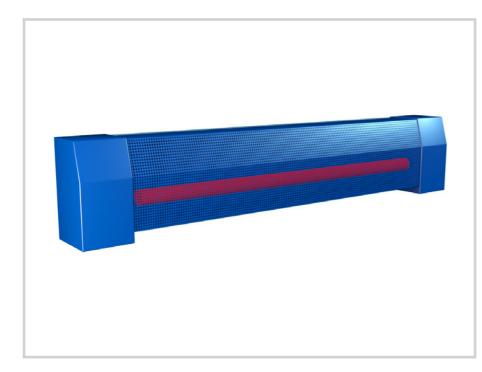


Duct heater



AIR HANDLING UNIT (AHU)

BASEBOARD UNIT



A baseboard unit is a compact radiator placed at floor level. It is a domestic appliance mainly used in the North America market.

A close control unit is an air handling unit that provides a very accurate and precise climate control.

The possibilities of employing these units extend from computer centres and machine rooms with intensive production of exhaust heat, to measuring laboratories and art museums for which not only a standard temperature but also a constant relative humidity are critical.



Close controls are very compact air handling unit installed in the server rooms in the commercial and industrial buildings in order to maintain very accurate air specifications. As in the air handling unit our heaters proposal includes tubular heaters supplied with or without vulcanized ends for wet or high humidity areas, aluminum heaters and stitched wire heaters offer a fast heat transfer and belly band heaters to be installed on the scroll compressors.



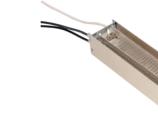
or tubular elements with or without fins.

Tubular heater (with or without fins)

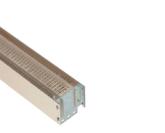
Aluminium heater

Base board unit are installed mainly in the domestic building but they can also be used commercial and industrial to

provide gentle and steady warmth that fills your room. For this application we would recommend aluminum, stitched wire



Stitched wire







Tubular heater (with or without fins)

Vulcanized tubular heater





Stitched wire

Aluminium heater



CLOSE CONTROL Precision Air Conditioning

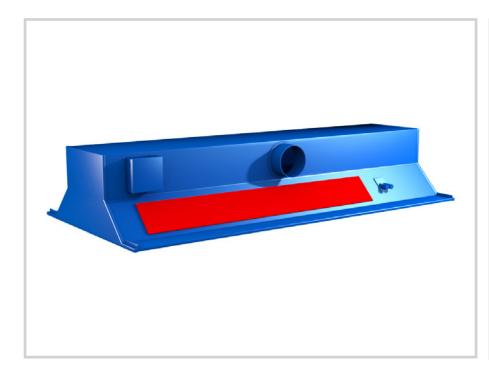


Belly band heater





CHILLED BEAM



A chilled beam is a type of convection HVAC system designed to heat or cool large buildings.

As the beam chills the air around it, the air becomes denser and falls to the floor.

It is replaced by warmer air moving up from below, causing a constant flow of convection and cooling the room.

Chilled beams are local heat distributors installed in the ceiling of the commercial building such as hotel, supermarkets, and malls. The most typical heater choice is an *etched foil*.

A duct heater unit is a ready-touse kit composed by electrical heaters wrapped into a metal frame.

These units are installed inside the AHU as part of ductwork. In addition to the heater we can incorporate controls such as high limit sensors or integrated panels supplied lose or as part of the heater assembly.

Duct heater are self standing systems that are installed into the air handling units or into the ductwork to provide supplemental heating. They are used in the industrial and commercial buildings. We can both design the whole duct unit or just simply assist you to select the best heater characteristics between our *tubular heaters, open coils or aluminum heaters.*



Etched foil





Tubular heater (with or without fins)

Open coil



DUCT HEATER





Aluminium heater

AIR CONDITIONING

FAN COIL



A fan coil unit is a device consisting of a heating or cooling unit and a fan.

It is part of an HVAC system which can be found in residential, commercial and industrial buildings.

Typically, it is not connected to ductwork and is used to control the temperature in the space where it is installed, or serves multiple spaces.

It is controlled either by a manual on/off switch or by a thermostat.

A garage heater unit is a device used to heat an enclosed area, generally employed to warm a small or medium space. It is usually held in contrast with central heating, which warms many connected spaces at once. Space heaters are usually portable or wall-mounted.

Garage heater are portable heat generators developed to satisfy your request of flexibility. Our heaters are manufactured to fulfill the need of fast heat transfer and reliability. We typically offer *open coil and tubular heaters*.



or aluminum heaters.

Tubular heater (with or without fins)

Fan coils are very common devices used to warm rooms for domestic, commercial and also industrial buildings.

Depending on the performances you would achieve we offer our tubular heaters, open coils and stitched wire heaters

Open coil



Aluminium heater





Tubular heater (with or without fins)

Open coil



Stitched wire heater



GARAGE HEATER Portable heater







HEAT RECOVERY UNIT (HRU)



An heat recovery unit is a domestic appliance mainly used in North Europe. This is a very effective and green way to recover heat from an hot waste air flow with high potential energy content.

Resistive steam humidifier is found in air handling units and allows to control the relative humidity of the air flow introduced towards the user. Steam generation is extremely precise and allows to operate with all types of water even with a non-constant flow over time.

Heat recovery unit are the most modern way to reduce the overall heat losses from domestic buildings. Heating systems incorporating tubular elements are often added to boost the building temperature in periods of extreme cold conditions.

Resistive steam humidifiers are installed in industrial and commercial buildings. Tubular heating elements, made with super alloys (Incoloy and titanium), are used to give durability in corrosive operating environments, such as demineralised/ deionised water and softened water.



Tubular heater



Vulcanized tubular heater

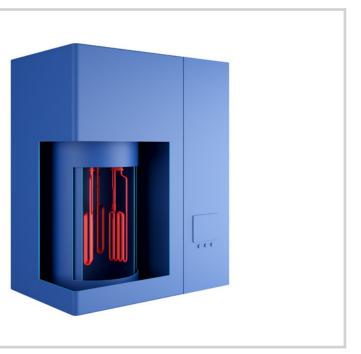


Tubular heater

Vulcanized tubular heater



HUMIDIFIER







WINDOW UNIT - SPLIT UNIT



Window and split unit are devices used to manage air temperature in the small and medium size rooms. We offer our *tubular heaters* as well as naked wire heater range available as *open coil and window heaters*. For scroll compressor we offer a standard range of *belly band heaters*.





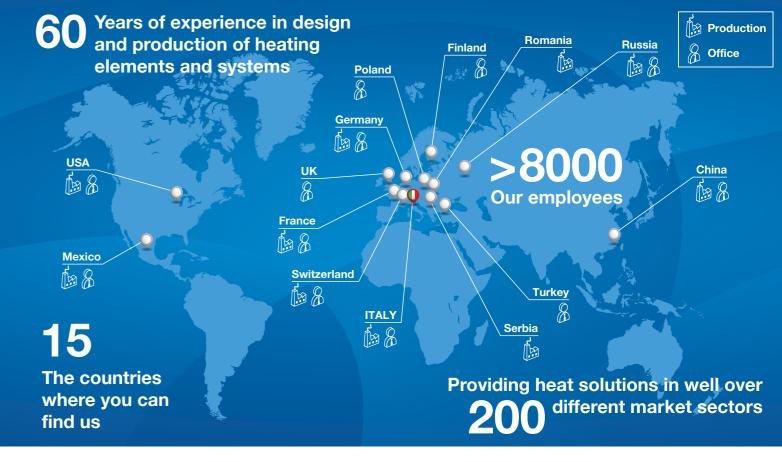
Tubular heater (with or without fins)

Open coil



Belly band heater





ZOPPAS INDUSTRIES Partner

- Experience Zoppas Industries increasing efficiency using lean enterprise across all facilities and departments.
- Access our state-of-the-art laboratory facilities with over 30 years' design experience.
- Benefit from Zoppas Industries manufacturing and design facilities which maintain Quality Management Systems according to ISO 9001, EN 9100 and IATF 16949, Environmental Management System according to ISO 14001 and Energy Management System according to ISO 50001.
- Access one of the widest Heating Element Technology product portfolios in the world including completely integrated thermal assemblies with sensors, connectors, enclosures, etc.
- Benefit from Zoppas Industries global presence through design and manufacturing facilities across Europe, North America, South America and Asia - Iowering your Total Cost of Ownership (TCO) including reduced logistics, design, communication and support costs.
- Access Zoppas Industries' in-house design, development and R&D capabilities, such as CAD 3D design, FEA, DOE, FMEA.
- Benefit from Zoppas Industries products third-party certification, such as UL and VDE: marking applied on customer's request.

COMPANY CERTIFICATIONS







9191.IRCR 9196.IRC8



Window heater



We at ZOPPAS INDUSTRIES put you in the front seat of internationalization - sourcing your local needs globally.



PRODUCT TRADEMARKS











Compliance with the mark of each specific product must be properly reviewed with our Sales Department.





015 - 0223





Heating Element Technologies

Via Podgora, 26 31029 Vittorio Veneto (TV) - Italy Phone: +39 0438 9101 marketing@zoppas.com www.zoppasindustries.com