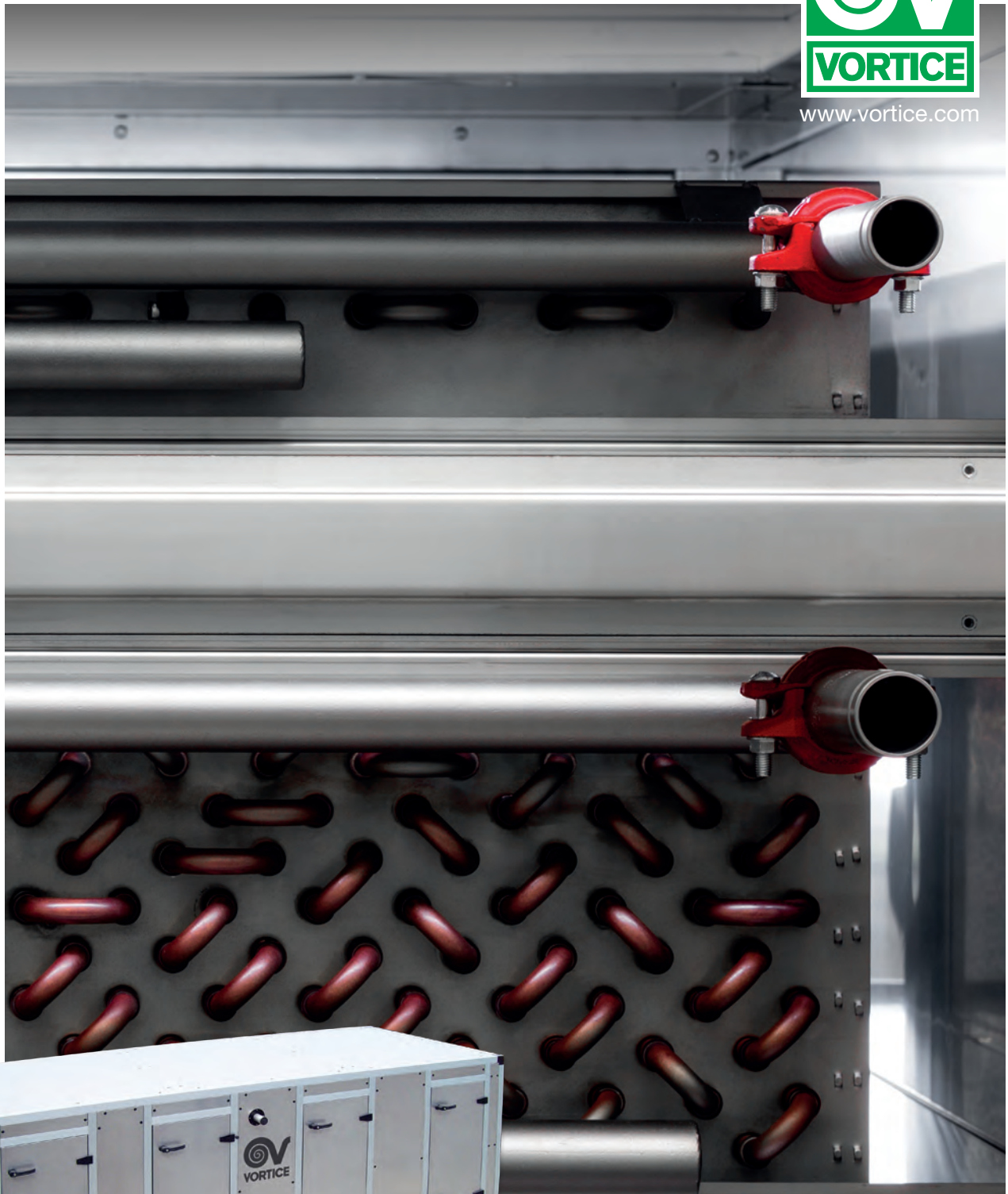




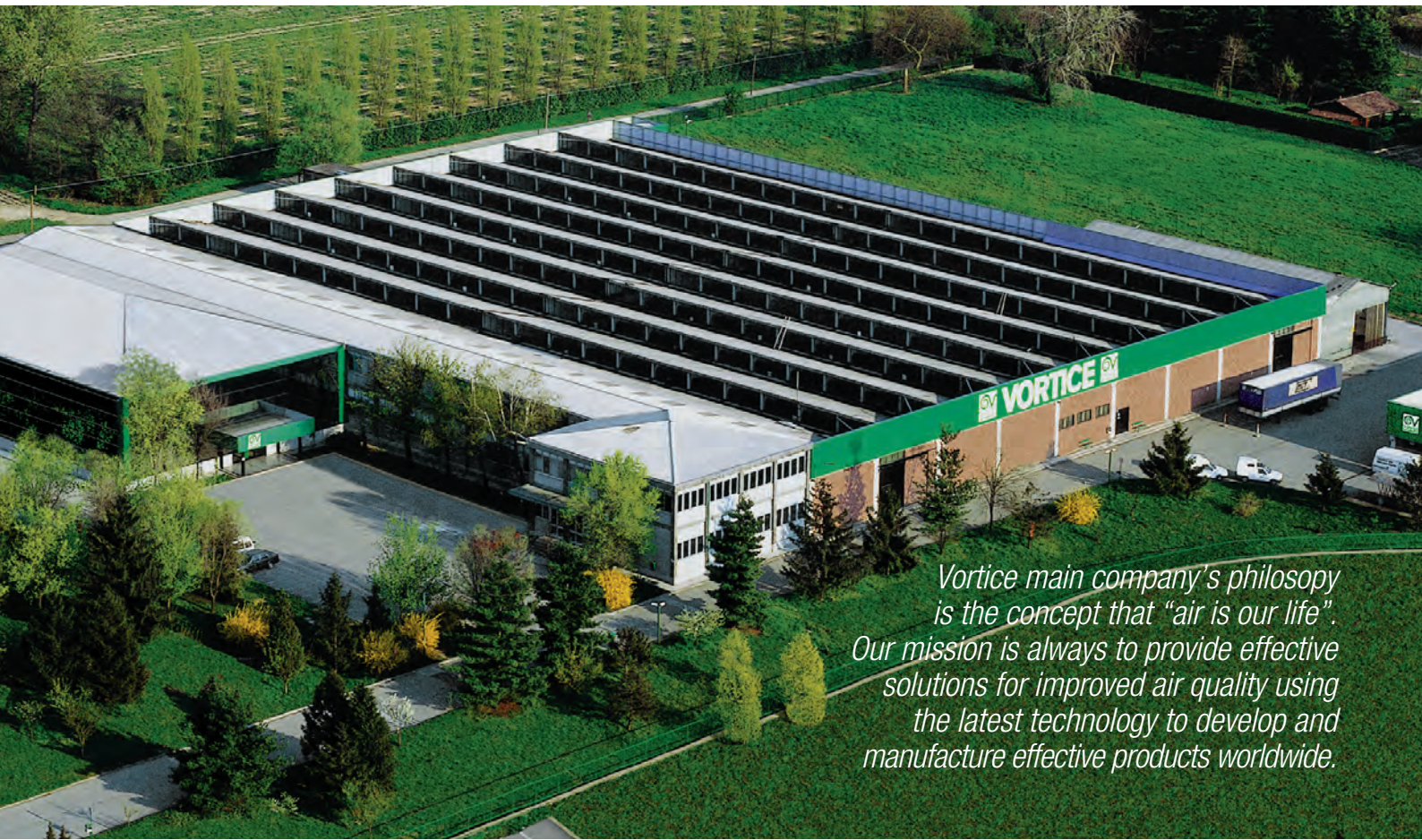
[www.vortice.com](http://www.vortice.com)



**AIR TREATMENT**

AIR HANDLING UNITS FOR FOOD INDUSTRY

**NEW**



*Vortice main company's philosophy is the concept that "air is our life". Our mission is always to provide effective solutions for improved air quality using the latest technology to develop and manufacture effective products worldwide.*

*Our current Vortice Headquarters have been located in Tribiano (Milan) since 1972.*

Vortice has achieved European market leadership by dedicating their efforts to the production of products for ventilation, climate control, heating, extraction, purification and the treatment of air, for domestic, commercial and industrial applications. Since 1954 Vortice has been synonymous with quality and excellence and continues to make significant improvements by investing in continuous research to improve the efficiency and quality of its products.

## VORTICE IN THE WORLD

FRANCE



Founded in 1974, Vortice France is located at Crétail about 10 Km from Paris.

ENGLAND



Founded in 1977, Vortice Limited is located at Burton on Trent in the East Midlands.

CHINA



Founded in 2012, Vortice Ventilation System is located about 200 Km from Shanghai.

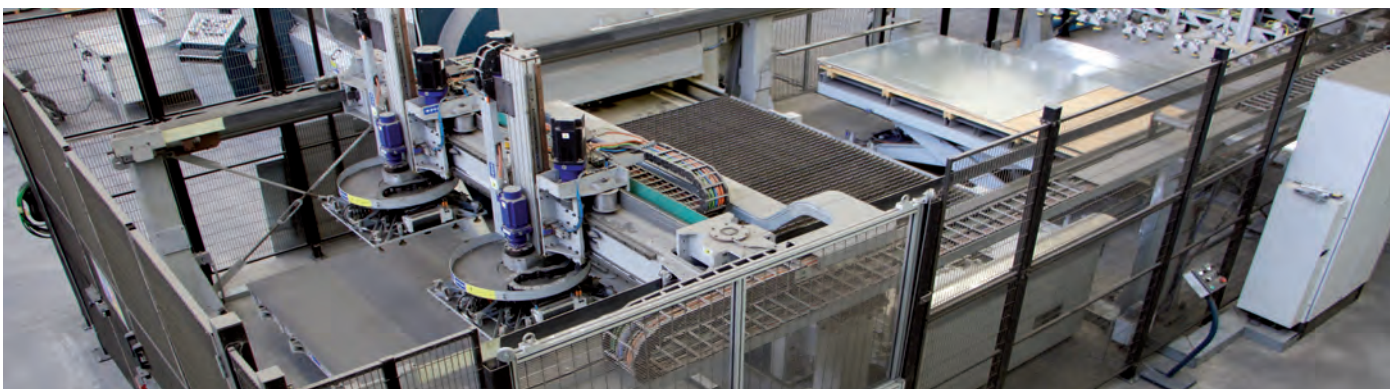
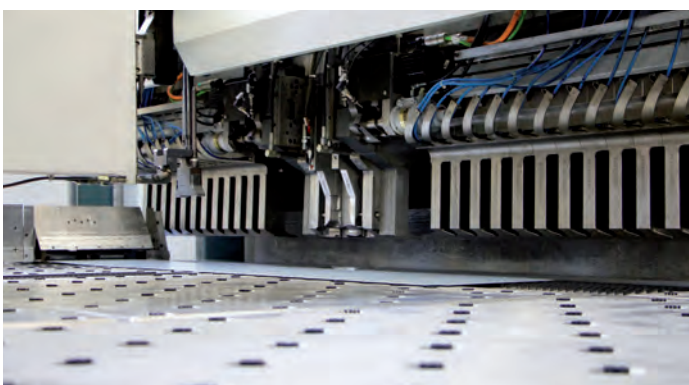
SOUTH AMERICA



Founded in 2012, Vortice Latam is located in San José, Costa Rica.



*In the industrial area of Isola della Scala, in the province of Verona. Surface: 12.000 m<sup>2</sup> Production unit: 6.000 m<sup>2</sup>*







# Mission & People

*“In respect of the environment  
and people, we work to contribute  
to the welfare and progress  
of society through the creation  
of highly specialized solutions  
for industrial climate, able to  
anticipate and meet the needs  
of our customers”*



NEW

## STEEL CLEAN

Air handling unit designed specifically for the food industry

### BRIEF DESCRIPTION

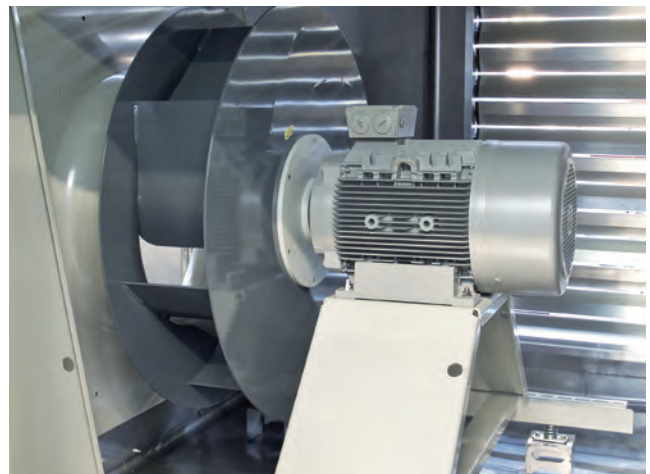
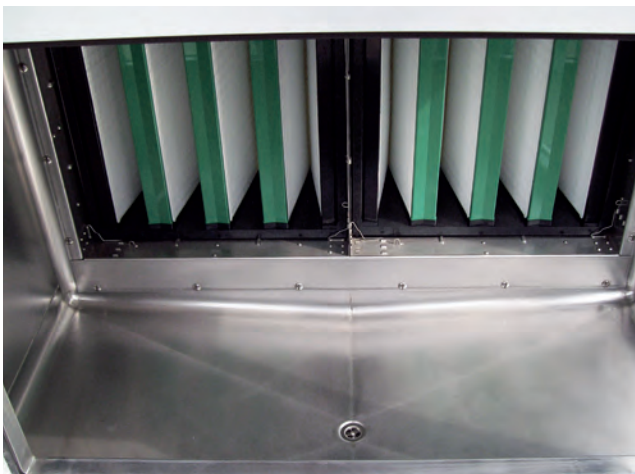
Air handling unit designed specifically for the food industry and for any application requiring the unit to be cleaned - namely washed - at the end of each day's production cycle. Out of all the food industry specific versions, this top of the range product best caters easy accessibility for cleaning; high thermal insulation.

Air flow rates up to 100,000 m<sup>3</sup>/h.

### Technical Features

#### STRUCTURE

- Internal structure comprising manually TIG welded airtight modules made from thick (1.5 mm) AISI 304 stainless steel.
- Internal frame and infill panels made from AISI 304 stainless steel designed and built so that there are no protuberances, sharp edges or corners that cannot be reached. Inside corners are rounded for easy cleaning and disinfection.
- Extremely effective thermal and sound insulation provided by an external cabinet produced with a frame of anodized aluminium profiles and 100 mm-thick sandwich panels comprising expanded polyurethane with a density of 40 kg/m<sup>3</sup> sandwiched between sheets of thick (1.5mm) AISI 304 stainless steel.
- Baseframe made from thick (4 mm) stainless steel with variable height to accommodate a trap of a suitable height for the pressures being handled, with the option of adding adjustable feet, also made from AISI 304 stainless steel.
- AISI 304 or AISI 316 drain pans on all the unit's sections to prevent the accumulation of stagnant condensate or sanitizing liquids.
- A number of condensate and sanitizing liquid drain pans fitted on all sections and under each internal component. The bottom of the internal chamber acts as a condensate tray and is produced with steep gradients and suitable drains designed to encourage condensate and sanitizing liquids to drain freely.
- Thermal break profile (internal chambers are completely isolated from the unit's outer cabinet).





#### COMPONENTS

- Dampers providing a perfectly airtight seal when closed.
- Option of adopting filtering systems with various efficiency ratings (flat, soft bag, rigid bag and absolute filters) on AISI 304 stainless steel mounting frames.
- Coils of any kind (glycol/water, direct-expansion, steam) and comprising any combination of materials (tubes made of stainless steel, copper; fins made of aluminium, copper, stainless steel, with epoxyphenolic coating...) with AISI 304 stainless steel frames.
- Epoxy powder coated plug fans.

#### MAINTENANCE

- All internal components can be accessed for maintenance and sanitizing purposes.
- Suitably sized inspection doors to afford easy access to all areas inside (for inspection and/or maintenance purposes) and to allow for fans, coils, filters etc. to be disconnected and removed.



**NEW**

## AIR CLEAN

Air handling unit designed for easy washing inside with vertical configuration

### BRIEF DESCRIPTION

Air handling unit designed for easy washing inside, with vertical configuration, modular with double thermal break profile and panel. Air flow rates up to 100,000 m<sup>3</sup>/h

## Technical Features

### STRUCTURE

- AISI 304 stainless steel air handling unit with vertical configuration, constructed of thermal break stainless steel profiles coupled with thermal break panels using stainless steel screws.
- Frame made out in press-formed thermal-break cut profiles 20/10 mm thick AISI 304 stainless steel.
- AISI 304 stainless steel screws with special insert housed in the stainless steel frame.
- 46 mm-thick sandwich panels comprising an injected polyurethane foam core with a 40 kg/m<sup>3</sup> density and 1 mm-thick AISI 304 sheet stainless steel skins.
- Panels feature rubber seals to ensure non condensation.
- AISI 304 stainless steel drain pan with at least a 15% gradient TIG welded onto the unit's baseframe for full drainage of condensate and sanitizing detergents. 48 mm diameter condensate drain.
- Internal frame and infill panels made from AISI 304 stainless steel designed and built so that there are no protuberances, sharp edges or corners that cannot be reached, potentially harbouring dirt. Inside corners are rounded for easy cleaning and disinfection.
- Baseframe made from thick (min. 2 mm) stainless steel with variable height to accommodate a trap of a suitable height for the pressures being handled, with the option of adding adjustable feet, also made from AISI 304 stainless steel.







## COMPONENTS

- Dampers providing a perfectly airtight seal when closed.
- Option of adopting filtering systems with various efficiency ratings (flat, soft bag, rigid bag and absolute filters) on AISI 304 stainless steel mounting frames.
- Coils of any kind (glycol/water, direct-expansion, steam) and comprising any combination of materials (tubes made from stainless steel, copper; fins made from aluminium, copper, stainless steel, with epoxy-phenolic coating...) with AISI 304 stainless steel frames.
- Direct-driven radial fans .

## MAINTENANCE

- Full access to internal components - such as coils, filters, fans and/or internal compartments - for inspection, cleaning and/or washing as all external panelling can be removed independently from the internal component.
- Suitably sized inspection doors to afford easy access to all areas inside (for inspection and/or maintenance purposes) and to allow for fans, coils, filters etc. to be disconnected and removed.





NEW

## PRO CLEAN

Air handling unit designed specifically for the food industry

### BRIEF DESCRIPTION

Air handling unit with fibreglass self-contained cabinet. Air flow rates up to 100,000 m<sup>3</sup>/h

### Technical Features

#### STRUCTURE

- Polyester resin impregnated and vacuum-pressed fibreglass sandwich panels, hardened without adding curing accelerators (room temperature cure). This means the panel and all structural strengthening are of the same nature.
- Sandwich panels comprising sheets of polyurethane sandwiched between 2.5 mm-thick GRP laminates. Total panel thickness 53 mm.
- Polyurethane foam (density of 34/35 kg/m<sup>3</sup>) blown with gases that are not harmful to the atmosphere (pentane system)
- Plastic laminates with a completely smooth surface are used for the sandwich panel skins and are formulated with a food-grade isophthalic gelcoat.
- Brushed stainless steel profiles around the perimeter.
- "Flush" doors with grey airtight seals (4 blades).
- AISI 304 stainless steel closures and hinges.
- Rounded inside corners to assure a high standard of hygiene.
- Housing designed to withstand use of even acidic or alkaline detergents.
- Inside floors slope towards drains to prevent water ponding.
- Inserts for fastening internal components made from aluminium alloy, which will not give rise to rust.
- Accessories made from compound materials or stainless steel.
- Bulkheads and partitions made from AISI 304 stainless steel.
- Unit floor serves as a full-length draining condensate tray to prevent water ponding.
- Hot-dip galvanized steel baseframe made up of 2 x IPE 160 side beams + UPN 80 cross beams for coils + IPE 160 or UPN 140 cross beams for fan(s).
- 2" stainless steel drains featuring internal flange and stainless steel external locknut





## COMPONENTS

- Dampers providing a perfectly airtight seal when closed.
- Option of adopting filtering systems with various efficiency ratings (flat, soft bag, rigid bag and absolute filters) on AISI 304 stainless steel mounting frames.
- Coils of any kind (glycol/water, direct-expansion, steam) and comprising any combination of materials (tubes made from stainless steel, copper; fins made from aluminium, copper, stainless steel, with electrophoretic coating...) with AISI 304 stainless steel frames. .
- Direct-driven radial fan.

## MAINTENANCE

- Inspection doors vary in number and size to suit individual requirements in terms of internal sanitizing and maintenance inspection.



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