

# LIVESTOCK INDUSTRY

Ventilation and Filtration Solutions

**ANIMAL WELFARE** 







# AIR RENEWAL AND QUALITY IN FARMS AND LIVESTOCK FACILITIES

# **HJB** wall-mounted high-flow fan

- Ideal for air renewal in farms, livestock buildings and greenhouses.
- High airflow capacity helps reduce gas and humidity build-up.
- Made of galvanised steel, with a high-efficiency three-phase motor (IP55, Class F insulation). Supplied with safety guard.
- Equipped with an overpressure shutter: reliable counterweight-operated opening, ideal for harsh environments.
- ° Belt-driven system.
- Stainless steel impeller (AISI 430).
- ° Available sizes: HJB 90, 110, 120, 140.
- Maximum airflow: from 15,600 m³/h to 41,100 m³/h.

# **HJBM PLUS** wall-mounted axial fan

- Wall-mounted installation to optimise airflow
- Designed for air renewal in livestock facilities and greenhouses.
- Made of galvanised steel with C4 anti-corrosion finish and reinforced polyamide adjustable-angle blades.
- High-efficiency, low-energy consumption motor. Available in single-phase and three-phase versions, with IP-55 or IP-54 protection (IP-65 for terminal box) and class F insulation. Includes motor support grid and protective guard.
- ° Sizes: HJBM PLUS 25, 30, 35, 40, 45, 50, and 56.
- ° Maximum airflow rates: from 1,290 m³/h to 12,010 m³/h.

# VENTILATION IN WORK AREAS AND PRODUCTION PROCESSES

### HI axial adjustable

- Portable and easy to move according to specific needs.
- Ideal for surface drying, localized cooling, and improving ventilation at critical points.
- ° Adjustable air jet.
- ° With on/off switch and CETAC-type plug.
- Protective grille on both sides.
- Durable and corrosion-resistant for use in demanding environments.
- Single-phase asynchronous motors with 6 poles, IP-55 protection, and class F insulation.
- ° Sizes: HI 45, 50, and 56.
- ° Maximum airflows: from 4,720 m³/h up to 7,820 m³/h.

# MB medium-pressure centrifugal

- Designed for extraction or localised supply air in livestock and industrial processes.
- Suitable for machinery cooling and product temperature reduction.
- ° Handles continuous air temperatures of up to 130 °C.
- Casing made of rolled steel sheet, fully welded or lock-formed, and corrosion-protected for demanding environments.
- Three-phase asynchronous motors with IP-55 protection and class Finsulation.
- Forward-curved impeller made of galvanised steel sheet.
- Sizes: MB 12/5, 14/5, 16/6, 18/7, 20/6, 20/8, 22/9, 25/10, 28/11, 31/12, 35/14, 40/16, 48/18.
- ° Maximum airflows: from 250 m³/h up to 12,500 m³/h.







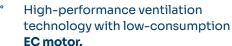
# AIR PURIFICATION AND PARTICLE CONTROL

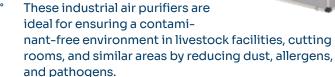
### **ENKELBOX PLUS EEC FILTER**

ventilation unit with filtration

- Combined ventilation and HEPA filtration system to ensure maximum air quality.
- Reduces airborne particles and contaminants in livestock production areas.
- Galvanised steel casing with aluminium framework and
  - **insulated** panels filled with 25 mm thick, class Al (non-combustible) rock wool at 90 kg/m³ density.
- ° Ideal for installations with strict hygiene requirements.
- Easy maintenance with quick-release system for filter replacement.
- Electronically controlled motor and safety switch with potentiometer for full-speed regulation.
- ° Sizes: 155, 190, 250, 310, 355, 450, 500, 560, and 630.
- ° Maximum airflows: from 450 m³/h up to 17,000 m³/h.

### **REINTDECK** purifiers





- REINTDECK EASY: Decentralised purifier designed for installation in false ceilings or suspended.
  - Reduces viral load and improves air quality through constant air renewal.
  - Equipped with H-14 HEPA absolute filters that remove 99.995% of particles.
- Sound-insulated structure with easy maintenance for quick filter replacement.
- REINTDECK: Centralised version with greater filtration capacity.
  - **Triple**-stage filtration with G4, F7 and H-14 HEPA filters for maximum efficiency.
  - Perfect for large facilities such as pavilions, warehouses, and production areas.

# APPLICATIONS IN SILOS AND FORAGE DRYERS

- Silos are key structures for preserving grain, forage, and other livestock inputs. Without proper air circulation, several issues may arise, such as:
  - humidity build-up, promoting mould and fungal growth.
  - Development of microorganisms that affect feed quality.
  - Generation of harmful gases such as CO<sub>2</sub> and NH<sub>2</sub>, which can be dangerous for both staff and animals.
- ° Ventilation solutions:
  - Centrifugal fans to maintain airflow inside the silos, preventing condensation and ensuring proper preservation of stored grain or forage
  - Axial fans installed at silo access points to improve air renewal and prevent the build-up of harmful gases.

- Artificial drying of forage is a fundamental process to preserve its quality and extend its storage time without losing nutritional value. During dehydration, it is crucial to have an efficient ventilation system to:
  - Ensure uniform drying of the forage and prevent unwanted fermentation.
  - Control temperature to avoid damaging the product's nutritional properties.
  - Reduce processing time, optimising production and energy efficiency.
- ° Ventilation solutions:
  - Axial fans with directed airflow to speed up drying processes.
  - Centrifugal fans for hot air extraction systems, cooling, or boosting the flame in dehydration plants, allowing rapid and controlled drying.





#### **VORTICE GROUP COMPANIES**

### VORTICE S.P.A

Strada Cerca, 2 Frazione di Zoate 20067 Tribiano (Milan) Italy Tel. (+39) 02 906991 Fax (+39) 02 90699625 vortice.com

### VORTICE LIMITED

Beeches House-Eastern Avenue Burton upon Trent DE13 OBB United Kingdom Tel. (+44) 1283 492949 Fax (+44) 1283 544121 vortice.ltd.uk

### VORTICE INDUSTRIAL S.R.L.

Via B. Brugnoli 3, 37063 Isola della Scala (Verona) Italy Tel. (+39) 045 6631042 Fax (+39) 045 6631039 vorticeindustrial.com

#### CASALS VENTILACIÓN AIR INDUSTRIAL S.L.

Ctra. Camprodon, s/n 17860 Sant Joan de les Abadesses (Girona) Spain Tel. (+34) 972720150 casals.com

### VORTICE LATAM S.A.

Bodega #6 Zona Franca Este Alajuela, Alajuela 20101 Costa Rica Tel. (+506) 2201 6934 vortice-latam.com

## VORTICE VENTILATION SYSTEM

(Changzhou) Co.LTD No. 388 West Huanghe Road Building 19, Changzhou Post Code: 213000 China Tel. (+86) 0519 88990150 Fax (+86) 0519 88990151 vortice-china.com

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