

BESPOKE AIR HANDLING UNITS

HYGIENIC CONSTRUCTION IN ACCORDANCE WITH VDI 6022-1 AND DIN 1946-4





Built On The Clean-Concept

Designed specifically for pharmaceutical manufacturing facilities, laboratories and medical clean-rooms, Flexe-H by Airef is built in accordance with hygiene requirements of VDI 6022-1 and DIN 1946-4. These air handling units are loaded with easy-cleanability capabilities.

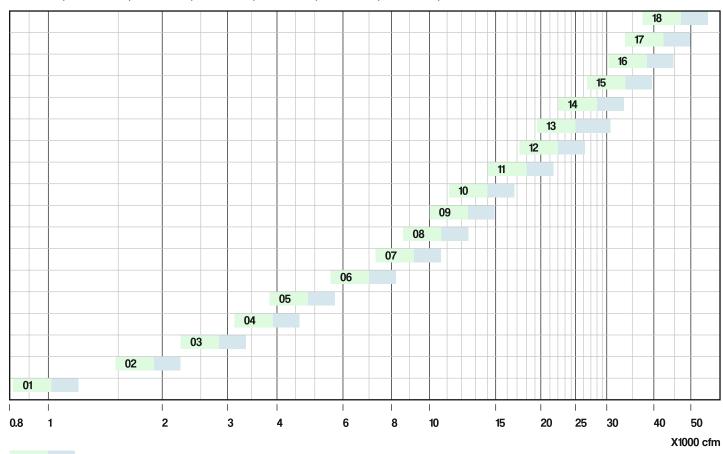
The use of hygienic materials resistant to disinfectants, and rounded inner edges ensure hygienic conditions for a longer time

- > Smooth inner surfaces and rounded edges. Corrosion class C4 (ISO 12944)
- > Sloped Stainless Steel drain pans
- > Use of UVC light and ISO 846 plastic parts to prevent microbial growth
- > Inspection window and light kit in all sections.
- > Withdrawable type main components

RANGE 800 CFM - 55000 CFM (18 SIZES)

AIRFLOW DIAGRAM

FLEXE 01, FLEXE 02, FLEXE 03, FLEXE 04, FLEXE 05, FLEXE 06, FLEXE 07, FLEXE 08, FLEXE 09, FLEXE 10, FLEXE 11, FLEXE 12, FLEXE 13, FLEXE 14, FLEXE 15, FLEXE 16, FLEXE 17, FLEXE 18



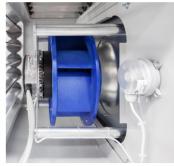
Bespoke functional modules

Flexe-H series modular air handling units are manufactured in customized, highly flexible configurations. These units are tailored to meet the varying temperature, humidity and air quality requirements of modern buildings.

A variety of functional modules can be logically clubbed to form an AHU, which is optimized to achieve the required indoor conditions. The units are available in an array of sizes, with or without the use of energy recovery devices.









STANDARD CASING (T45 / TX45)

Double skinned, sandwich type casing panels are injected with Polyurethane foam (PUF) of density 40 kg/m³, and fastened in cold-bridge free (Polyamide thermal break) extruded Aluminium mainframe. D-profile EPDM gaskets are provided as standard.

- > Standard casing thickness is 45 mm. Optional thickness 70 mm
- > Special frame-less casing available
- > Optional insulations are rockwool & mineral wool
- > All AHUs are mounted on 100 mm high, galvanised steel channels in grid form, with lifting holes.

FILTERS (G4-H14)

Multi-stage combinations of extended surface filters along with terminal / plenum mounted HEPA filters (H14 grade) are used to achieve the desired clean-room class. **AAF**¹ brand filters in panel and flanged construction are used as standard.

- Ultrasonically stitched bag filters are used for M5-F7 applications.
- > Special gaseous phase filters are available for gaseous contaminants.

FANS & MOTORS (PLUG TYPE)

Direct driven plug fans of globally recognized brands are used with TEFC AC or EC motors of efficiency IEO3 or above. **Danfoss**² brand AC drives are provided as standard with TEFC AC motors.

> Foot mounted fan modules are provided with spring-isolators as standard.

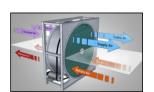
HEAT TRANSFER COILS (WATER / DX)

Standard forced-circulation coils are provided with Copper tubes and Aluminium fins, designed using computer programs. Coil casings are available in painted galvanized and stainless steel.

- > SS304 tubes and casings are available for steam applications
- > Finned heating strips can be supplied for dehumidification / heating applications.
- > As an option, all coils are available with hydrophilic, hydrophobic or corrosion resistant coatings.



OPTIONAL COMPONENTS / ACCESSORIES



Heat Recovery

- > Rotary (Wheel)
- > Recuperator



UV-C Lamps

- > 254 nm
- > Min 9000 Hrs



Mixing plenums

- > Single
- > Double



VCD actuators

- > On/Off
- > Modulating



Sound Attenuators

- > Open cell foam
- > Hygienic MOC



Magnehelic Gauges

- > AHU mounted
- > Digital / Analog



Drop Eliminators

- > 4-pass
- > PVC / Stainless steel



Intelligent Controls

- > Microprocessor based
- > Temp / RH / Pressure



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