



# Pas Reform Air handling unit

To produce and supply fully optimised air conditions throughout the hatchery



Pas Reform  
Hatchery Technologies



# Air handling unit

## Benefits

The air handling unit (AHU) is a central air conditioning station that conditions air supplied into the hatchery building by ventilation ductwork connected to the AHU. Air that has been conditioned by the AHU is delivered into hatchery rooms with thermo-hygrometric and IAQ (Indoor Air Quality) treatment. In a modular design with separated fan, filter, cooling, heating and heat recovery blocks, the air handling unit treats external, incoming air by filtering, cooling and/or heating, humidifying and/or dehumidifying. The unit includes a frequency controlled high pressure centrifugal fan, quick release filters and an electronic switch box with Siemens Synco 700 regulator, for the control of temperature, humidity and pressure in a range of heating and cooling options. High efficiency A+ energy labelling due to IE2 motors and a variable frequency drive ensure low operational costs. Units are easy to maintain, silent in operation and can be installed both side by side or on top of each other to minimise footprint.

## How it works

- Outside air enters the air handling unit via a flexible connection, which can be connected to a wall or air piping
- A dust filter removes larger particles from the incoming air, then an F7 filter further treats incoming air to remove the remaining fine particles
- Various cooling and/or heating modules prepare the air at the right temperature set-point. Cold or hot water circuits in each module allow for efficient transfer and the variable air speed ensures maximum transfer efficiency
- Where a heat recovery module is included, this is installed prior to the heating module to pre-heat the air
- Customer specific air ducting design ensures that the climatized air is prepared and directed as required to meet the specific needs of different areas in the hatchery

## Related products

- ▶ Air ducting
- ▶ Boiler system
- ▶ Process water chiller
- ▶ Heat recovery system
- ▶ Hatchery climate control
- ▶ Pressure sensor
- ▶ Chick holding area

## Technical Specifications

Type	30	55	83	110	143	188	244	280	340
Air capacity (m3/h)	> 3,000	> 5,500	> 8,300	> 11,000	> 14,300	> 18,800	> 24,400	> 28,800	> 34,000
Motor capacity (kW)	> 1.5	> 3.0	> 4.0	> 5.5	> 7.5	> 11.0	> 15.0	> 15.0	> 18.5
Unit Width (mm)	> 912	> 1017	> 1017	> 1322	> 1322	> 1627	> 1627	> 1932	> 1932
Unit Height (mm)	> 712	> 1.017	> 1017	> 1017	> 1322	> 1322	> 1627	> 1627	> 1932
Unit Length (mm)	> 1627	> 1729	> 1831	> 2034	> 2034	> 2339	> 2339	> 2644	> 2644
Unit weight (kg)	> 160	> 240	> 310	> 430	> 500	> 700	> 790	> 1030	> 1150
Filter quality	> F7								
Material	> Fully galvanized framework and sheet-steel frame								
Including	> Pressure sensor for automatic filter maintenance indication								
Heating module	Heating 1		Heating 2		Heating 3				
Avg. min. temperature	> 0 °C		> -17 °C		> -40 °C				
Humidity level	> 50 % RH		> 50 % RH		> 50 % RH				
Heating water (in-out)	> 80 - 60 °C								
Material heating coil	> Cu/Al slide out coil								
Cooling module	Cooling 1		Cooling 2		Cooling 3				
Avg. max temperature	> 30 °C		> 35 °C		> 40 °C				
Humidity level	> 50 % RH		> 50 % RH		> 50 % RH				
Cooling water (in-out)	> 12 - 18 °C								
Material cooling coil	> Cu/Al slide out coil								



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