

AIRWAY



COMPLETE CLIMATE CONTROL

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Jamesway Chick Master Incubator



For ideal incubating conditions in any climate, delivering 100% fresh air for increased bio-security

Ventilation is the fuel for your incubators. No matter the hatchery size or type of bird, accurate temperature, humidity and pressure control ensures the success of your hatch.



WHY CHOOSE US?

We offer various solutions with unique features designed to manage all your service needs within the hatchery from one control.

Each system is designed with quality and efficiency in mind, while being easy to install, operate and maintain.



CC3

CLIMATE CONTROL SYSTEM

A robust and reliable system that pays for itself

The CC3 is a packaged ventilation system designed to obtain ideal incubation conditions to improve chick quality and maximize hatchability. This complete climate control system with built-in redundancy is designed to provide individual room ventilation and pressure control while administering water from its integrated chilled/hot water system. These essential functions and its innovative design make the CC3 the most sought after hatchery ventilation system in the world.



Savings from day one in Space, Time and Installation costs

The CC3 arrives factory-tested and ready for installation, requiring minimal use of contractors and startup time. With outside ground level installation in one central location, it will save valuable building space and reduce future maintenance costs.

Reduce your Energy Costs

Each CC3 comes equipped with dehumidification and an energy efficient **Heat Recovery System** that when combined with the reduced load on the chiller means substantial reductions in electrical consumption.

All motors are **VFD Controlled**, increasing energy efficiency and tailoring air or water supply.

Optional **Dry Air Cooling Module** offers additional energy savings by reducing water chiller demand.

Range of Capacities

Model	Weekly Egg Set
C05	380,000
C07	500,000
C10	760,000
C14	1,000,000

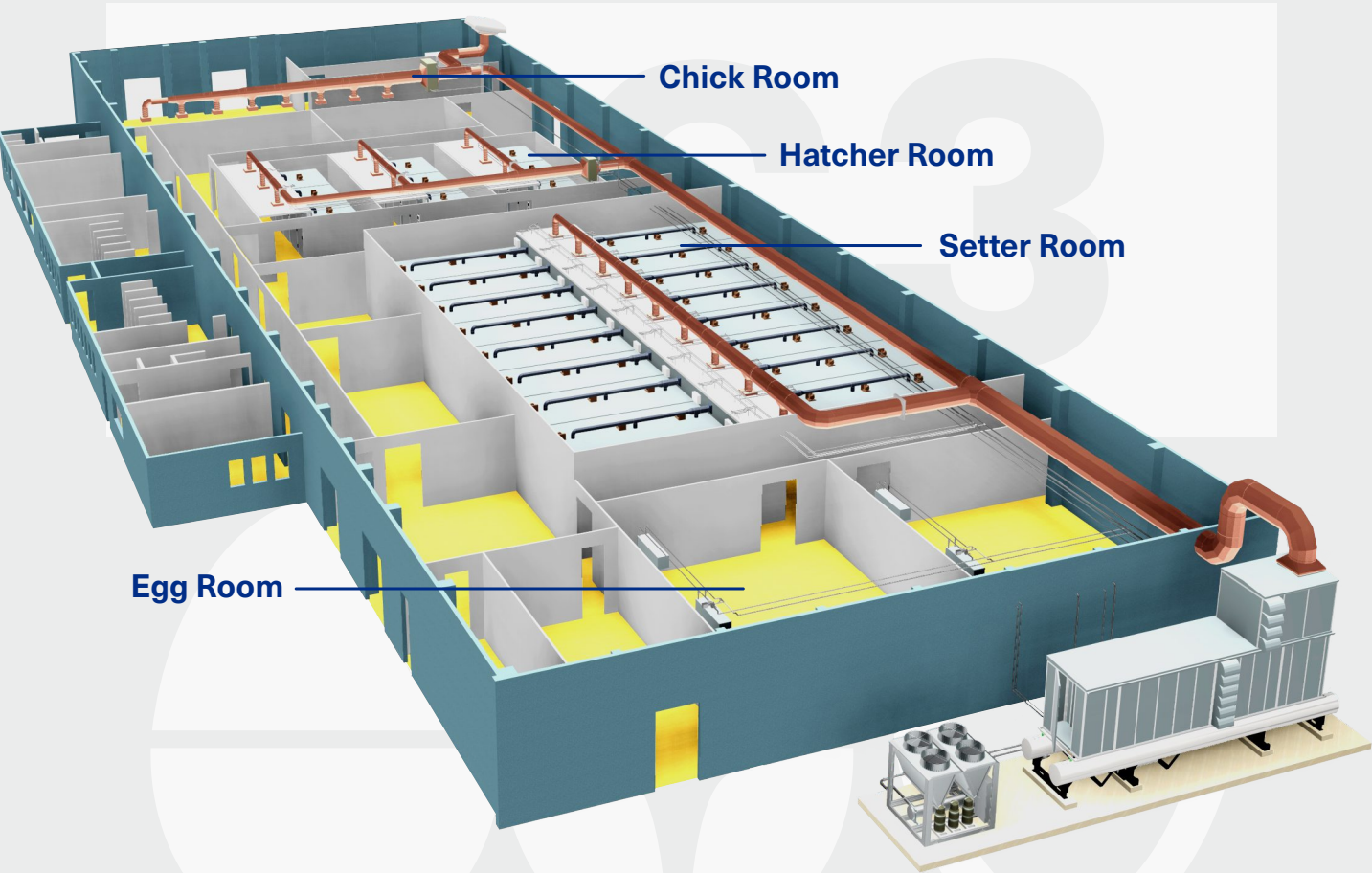
Additional modules are available to increase capacity. All units require an external water chiller.



The Powerful PLC Control

Specifically designed for hatchery ventilation, the dynamic PLC control system oversees and manages all the room conditions by automatically adjusting the amount of heat, humidity, air pressure and water flow accordingly to increase the efficiency.

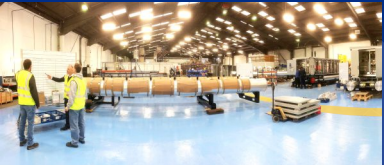
The integrated control is able to communicate with either the Guardian or Maestro control system, and will manage all functions to optimize the operation of the CC3 and maximise hatchery performance.



CC3 SYSTEMS

		C05		C07		C10		C14	
THERMAL SYSTEM		HE	DE	HE	DE	HE	DE	HE	DE
Setter/hatcher/egg store application	Eggs/wk	380,000		507,000		761,000		1,015,000	
Nominal (HR/cooling coil) supply fan airflow	m³/s	2.6		3.4		5.1		6.8	
Maximum supply fan airflow	m³/s	N/A		4.42		6.63		8.84	
External resistance	Pa	500		500		500		500	
Nominal supply Fan	kW	4		11		15		22	
Dry air cooling supply Fan	kW	N/A		3		7.5		7.5	
HR coil capacity	kW	90		120		180		240	
Cooling coil	kW	74	190	99	267	149	403	198	538
Max. chiller capacity (incl. egg & chick room)	kW	220	347	500	520	730	1000	1000	1386
Maximum boiler requirement	kW	90	N/A	200	34	301	51	401	68
ELECTRICAL DATA/REQUIREMENTS									
Basic CC3 unit	kW	23	22	38	30	47	42	64	68
Basic CC3 unit + Dry air cooling module	kW	N/A	N/A	41	33	54	50	72	75
Maximum current loading @ 3 ph 50Hz 380V	A	41	39	66	53	86	80	115	120
Maximum current loading @ 3 ph 60Hz 220V	A	71	68	113	91	149	138	198	207
HYDRONIC PUMP SYSTEMS									
Incubator/ventilation pumps @ 350kPa	L/s (kW)	10 (11)	14 (11)	20 (11)	20 (11)	20 (11)	30 (15)	30 (15)	55 (30)
Hot water circulation pumps @ 350kPa	L/s (kW)	1 (1)	N/A	2.9 (4)	0.4 (0.9)	4.4 (5.5)	0.6 (1.2)	4.6 (5.5)	0.8 (1.2)
Base tank capacity	L/s	2000	2000	2000	2000	4800	4800	6000	6000
GAS FIRED HOT WATER HEATER (G20 NG)									
Natural gas heaters - supply pressure	m/bar	20		20		20		20	
LPG (Propane) gas heaters - supply pressure	m/bar	37		37		37		37	
Approx. maximum consumption	m³/h	9	N/A	17	4	25	4	34	8
Maximum output	kW	84	N/A	168	42	252	42	336	84
No. of water heaters	#	2	N/A	4	1	6	1	8	2
UNIT DIMENSIONS/WEIGHT									
Width	mm	2200		2200		2300		2300	
Length	mm	6000		9200		10800		10800	
Total Height	mm	2300		2330		3450		3450	
Weight*	kg	5000		6500		8000		9500	

*Weights are estimates only and will vary according to the specification of each unit



Information above correct at time of print. Please contact us to check the latest specification.

MODULAR VENTILATION SYSTEM

Create the perfect environment for your hatchery while saving energy

The Modular is a cost effective and flexible ventilation system designed for hatcheries of any size with easy-to-install ground level modules to ventilate all incubation and process rooms. With built-in redundancy, the system provides 100% fresh air and is equipped with heat recovery technology to dehumidify incoming air, maximize chick quality and reduce energy costs.



With its integrated PLC, the Modular system automatically manages the correct temperature, humidity, water flow and room pressures in the setter and hatcher rooms, creating the optimal environment for the incubation equipment.

Variable frequency drive (VFD) controls supply fans to maintain room pressure while saving energy.



Lower your Installation and Maintenance Costs

All modules can be based at external locations at ground level to save on valuable building space

Modules have simple inter-connections for chilled water, hot water and system communications

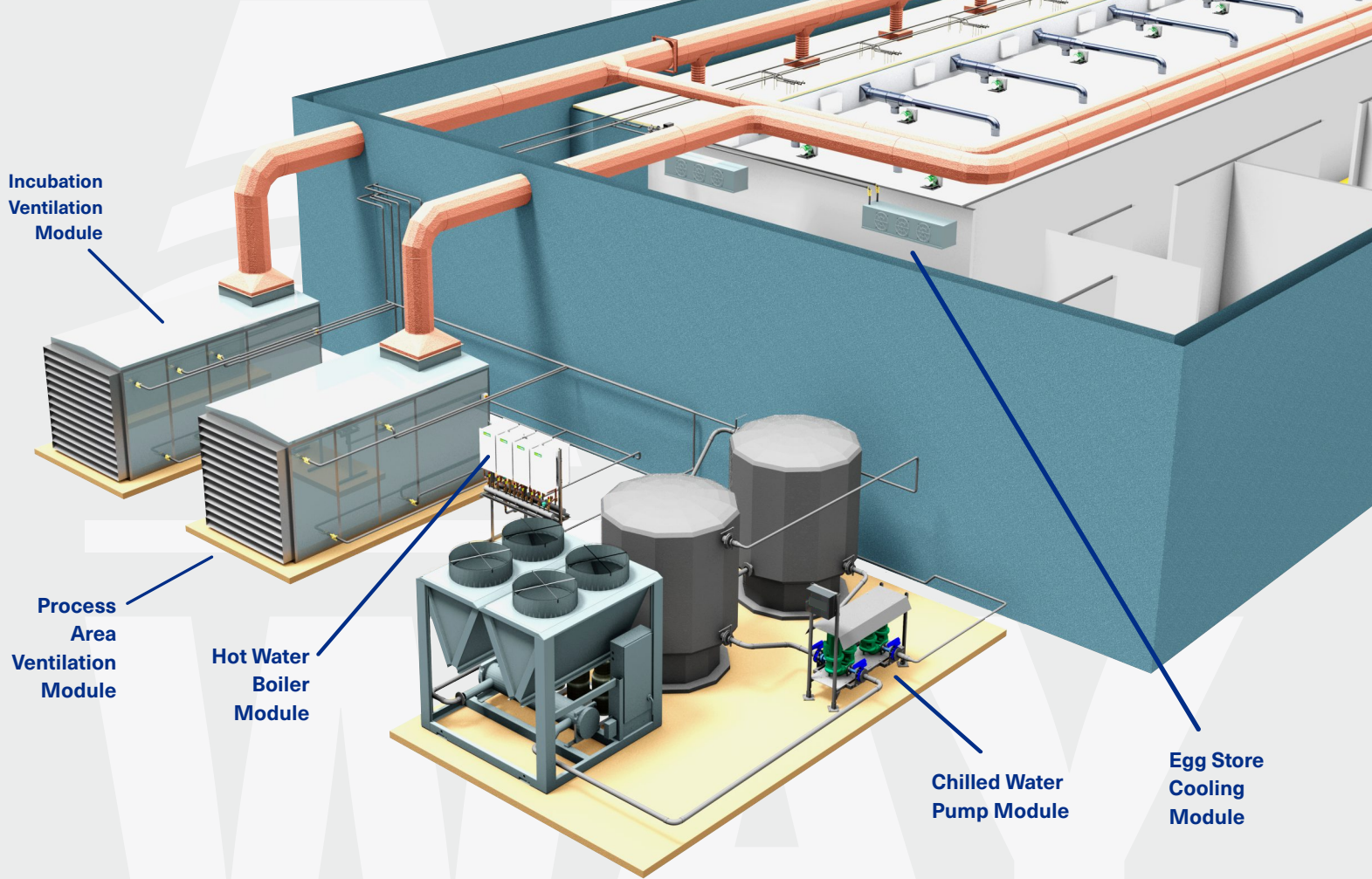
Easy to install and scalable for expansions

Hot Water Heating

Floor mounted module with up to 560 kW heat using natural gas or liquid propane, or 60 kW of electric heating*. Integrated hot water circulation pump, controller and expansion tank. Optional twin head pump available for redundancy.

**Other fuel sources are available such as diesel or oil*





Modular comes in two energy savings options for any climate

DE - designed for hot and humid climates that require dehumidification for improved control over moisture loss and chick quality

HE - designed for colder climates and offers free air heating

For ideal incubating conditions in any climate, delivering 100% fresh air for increased bio-security



VENTILATION MODULES

		M02	M05	M07	M11	M16	M22
THERMAL SYSTEM							
Setter/hatcher/egg store application	Eggs/wk	191,000	381,000	507,600	761,000	1,140,480	1,520,640
	Nominal supply fan airflow	m³/s	1.3	2.5	3.4	5.0	10.1
	External resistance	Pa	500	500	500	500	500
	Cooling coil capacity	kW	45	86	116	173	346
	HR coil capacity	kW	32	61	82	121	242
	Heating coil capacity (HE models only)	kW	63	121	149	242	485
ELECTRICAL DATA / REQUIREMENTS							
	Electrical power supply	kW	2.2	4.0	5.8	7.5	15.0
	Maximum current loading @ 3 ph 50Hz 380V	A	4.0	7.0	9.0	13.0	27.0
	Maximum current loading @ 3 ph 60Hz 220V	A	7.0	12.0	25.0	23.0	46.0
OVERALL UNIT DIMENSIONS / WEIGHT							
	Width	mm	1390	1950	2030	2110	2310
	Length	mm	2850	3050	2900	3850	3950
	Height	mm	1650	1650	1550	2300	2450
	Weight*	kg	965	1400	1550	2250	2330

*Weights are estimates only and will vary according to the specification of each unit

CHILLED WATER PUMP MODULE

		MCWP01	MCWP02	MCWP05	MCWP08	MCWP10	MCWP15
HYDRONIC PUMP SYSTEMS							
Incubator/ventilation pumps @ 350kPa	L/s (kW)	5 (4)	12 (11)	24 (15)	36 (30)	48 (30)	71 (45)
Chiller circulation pumps @ 185kPa	L/s (kW)	6 (3)	15 (5.5)	30 (11)	45 (15)	60 (18.5)	89 (30)
ELECTRICAL DATA/REQUIREMENTS							
	Electrical power supply	kW	7.0	16.5	25	45	48.5
	Maximum current loading @ 3 ph 50Hz 380V	A	13	29	45	80	87
	Maximum current loading @ 3 ph 60Hz 220V	A	22	51	77	139	150
OVERALL UNIT DIMENSIONS/WEIGHT							
	Width	mm	1200	1300	1300	1300	1300
	Length	mm	2300	2300	2300	2300	2600
	Height	mm	1500	1500	1500	1890	1890
	Weight*	kg	530	810	950	1400	1450

*Weights are estimates only and will vary according to the specification of each unit

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HOT WATER
BOILER MODULE

		MHW-1	MHW-2	MHW-4	MHW-8
GAS FIRED HOT WATER HEATER REQUIREMENTS					
Natural gas heaters - supply pressure	mbar	20	20	20	20
LPG (Propane) gas heaters - supply pressure	mbar	37	37	37	37
Approx. maximum consumption	m³/hr	5	11	22	43
Maximum output	kW	57	114	228	456
No. of water heaters	#	1	2	4	8
HYDRONIC PUMP SYSTEMS					
Hot water circulation pumps @ 350kPa	L/s (kW)	1 (3)	2 (3)	4 (5.5)	8 (5.5)
ELECTRICAL DATA/REQUIREMENTS					
Electrical power supply	kW	3.1	3.1	5.8	6.0
Maximum current loading @ 3 ph 50Hz 380V	A	5	6	10	11
Maximum current loading @ 3 ph 60Hz 220V	A	9	10	18	19
OVERALL UNIT DIMENSIONS/WEIGHT					
Width	mm	1000	1000	1000	1000
Length	mm	1850	1850	2450	3750
Height	mm	1850	1850	2100	2100
Weight*	kg	220	275	395	850

*Weights are estimates only and will vary according to the specification of each unit

HOT WATER
PUMP MODULE

		MHWP-1	MHWP-2	MHWP-3	MHWP-4
HYDRONIC PUMP SYSTEMS					
Hot water circulation pumps @ 350kPa	L/s (kW)	2 (3)	8 (5.5)	12 (7.5)	20 (15)
ELECTRICAL DATA/REQUIREMENTS					
Electrical power supply	kW	3	5.5	7.5	15
Maximum current loading @ 3 ph 50Hz 380V	A	5	10	13	27
Maximum current loading @ 3 ph 60Hz 220V	A	9	17	23	46
OVERALL UNIT DIMENSIONS/WEIGHT					
Width	mm	1050	1050	1050	1050
Length	mm	1210	1210	1210	1210
Height	mm	1050	1050	1050	1050
Weight*	kg	150	180	200	270

*Weights are estimates only and will vary according to the specification of each unit

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RTU ROOFTOP/GROUND
MOUNTED SYSTEM



The Airway RTU is a simple to use, single room ventilation system, available with mechanical cooling and your choice of heating (natural gas, propane, hot water or electric). These units may be roof or ground mounted.

- Integrated hot gas reheat provides efficient and effective dehumidification.
- Recirculating air in a single room increases stability.
- Single room ventilation tailors the output to the room's specific needs.
- Compatible with Guardian ventilation controls, your data can be integrated into Hatchcom providing an entire hatchery view at your fingertips.
- Boilers, chillers, and pumps are all available to provide what your hatchery needs.
- Mix and match with our other ventilation systems for a fully customized design.



OUR EXPERT PLANNING AND INSTALLATION SERVICES

Our hatchery experts will prepare the optimal Airway design for your operation. We consider your budget, available power supply, geographic location, bird type . . . you name it. No one knows hatchery HVAC like Jamesway Chick Master Incubator!

We design the solution, supply the equipment and commission the control systems. All installations are done by local contractors, saving you money and establishing local relationships. Our technicians are specifically trained and know how to commission Airway so that your operation enjoys all the benefits.

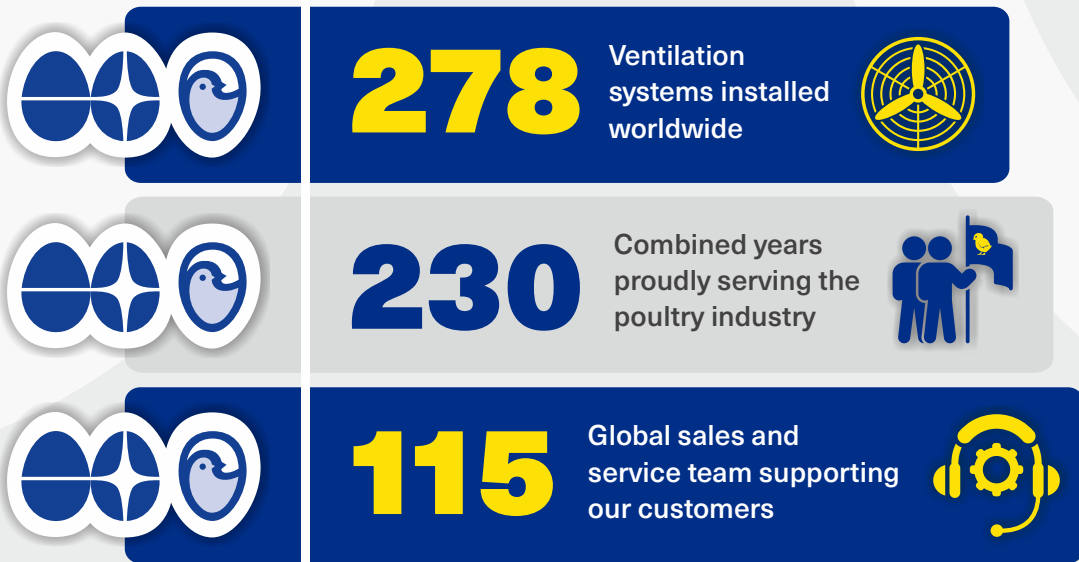
Our ventilation specialists are available to assess, advise and troubleshoot existing and future HVAC solutions.



WHAT TO CONSIDER WHEN PLANNING YOUR CURRENT AND FUTURE VENTILATION NEEDS

- Embryos and day-old birds need the right environment.
- Have you planned correctly, since under-sizing or over-sizing can inhibit efficiency and affect hatch results?
- What are your heating options: natural gas, propane, electric or hot water?
- What are your ventilation options: single-unit ventilation, multiple unit ventilation, heat recovery, water chillers?
- What are your installation options: rooftop units, indoor, ground-mounted?
- Have you considered bio-security, redundancy, alarming, spare parts, supply availability and future growth?
- Are your costs realistic and in-line with future plans?
- Does your designer understand the particular, highly specialized environment of the hatchery?

TWO LEGENDARY BRANDS, ONE FANTASTIC PARTNER





Check our website for more information
on our products and services:

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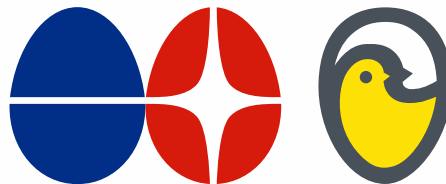
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Two **Legendary** Brands, One **Fantastic** Partner