

Zephyr
HATCHER SERIES

Zephyr

The
Starting Point
for the Best Chicks
in the World



Hatcher Series



Zephyr Hatcher Room

● Variable Speed Fan

The Zephyr functions extremely well with or without variable speed fan motors (Variable Frequency Drives). However, you may choose to order your hatchers with the VFD to maintain commonality of replacement parts in your hatchery and to reduce the cost of energy consumed by the motor itself.

● Hi-Lites

Hi-Lites allow you to view the operational status of your hatchers at a glance without having to touch the control panel. Light displays show hatcher functions and alarm conditions such as heating, cooling, humidity and high temperature alarm. This system is optional but extremely useful for instant peace of mind in busy operations.

● Choice of Cabinet Construction

All 'C' series hatcher exterior walls are constructed of pebbled FRP with a smooth FRP interior. Stainless steel internal walls are optional in the 'C' series. 'H' series hatchers are constructed with a food grade coated steel exterior and stainless steel interior walls. Both surfaces facilitate ease of cleaning and bio-security.

● Choice of Capacities

Many models are available in 15, 16, 17 and 18 stack configurations.

Model/Tray	Stack Height	Capacity (chicken)
C/H384 -165	16 high	63,360 eggs
C/H256 -165	16 high	42,240 eggs
C/H192 -165	16 high	31,680 eggs
C/H128 -165	16 high	21,120 eggs
C/H384 -54	16 high	62,208 eggs
C/H256 -54	16 high	41,472 eggs
C/H192 -54	16 high	31,104 eggs
C/H128 -54	16 high	20,736 eggs
C/H816 -82	17 high	66,912 eggs
C/H544 -82	17 high	44,608 eggs
C/H408 -82	17 high	33,456 eggs
C/H272 -82	17 high	22,304 eggs
C/H816 -73	17 high	59,568 eggs
C/H544 -73	17 high	39,712 eggs
C/H408 -73	17 high	29,784 eggs
C/H272 -73	17 high	19,856 eggs
C/H384 -150	16 high	57,600 eggs
C/H256 -150	16 high	38,400 eggs
C/H192 -150	16 high	28,800 eggs
C/H128 -150	16 high	19,200 eggs

● Physical Flexibility

Comfort with the process of hatching birds allows us to ensure you that we can produce the Zephyr series of hatchers for every known tray/basket on the market and with a footprint that works in most existing hatcheries. All you will need is a source of chilled water and a variable ventilation system. If you want to replace your under-performing hatchers, please check with us. We can, almost certainly, provide you with a cost-effective alternative.

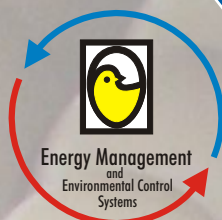
● Reduced Parts Inventory

The components used in the Zephyr series are common to the components used in the Avida series of setters whenever possible. This will help you to minimize your parts inventory and to better train your maintenance personnel.



● Denotes optional system

Due to the large number of models available please contact the Chick Master Technical Department for dimensions and other specifications.



Hatchery Ventilation Solutions
For improved hatch performance and your bottom line

Chick Master
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Zephyr - the Best Performing Hatchers in the World

Chick Master Zephyr Series Hatchers for Avida, Classic and Buckeye incubation systems are designed to produce the highest hatchability and the best possible quality. The Zephyr's superior air flow, modular design, bio-security, high-efficiency and safety features make it the starting point for the best chicks in the world.

When eggs are first transferred to the hatcher environment they need an extension of the last stage in the setter. However, in the hatcher the environment changes rapidly as the hatch progresses, the Zephyr allows you to adjust temperature and humidity settings manually or to use a stage program to control every step of the hatching process. The Zephyr hatcher can also accommodate the tray systems used by most other setter manufacturers and its foot print is flexible to fit almost any building.



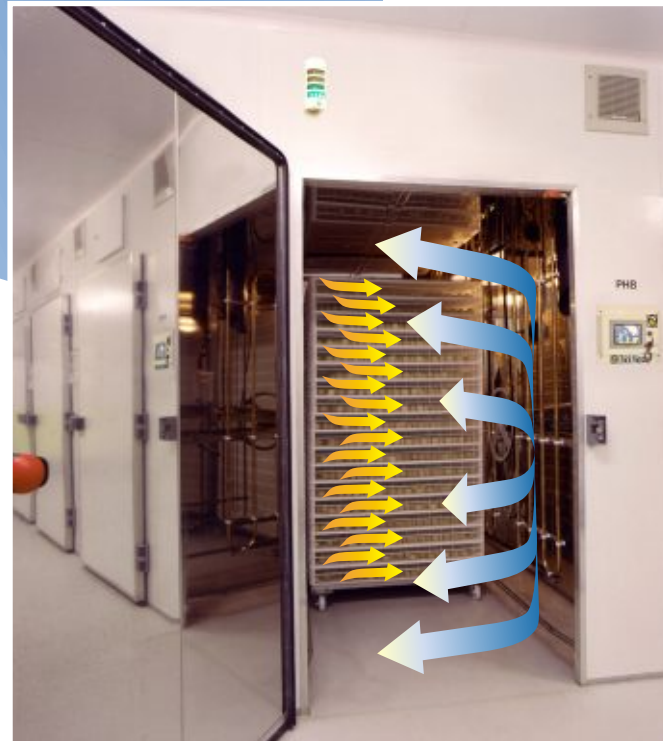
Zephyr C192-165 hatcher

Modular Design

Following the Avida Setter modular concept, the Zephyr hatcher is available in one or two sections and each section has the capacity to hold up to 31,680 eggs. In order to control the internal environment, each section has individual heating elements, cooling coils, air supply intake and exhaust. Also, the Genesis IV controls each section independently with a temperature probe and high-temperature alarm probe. A humidity probe is supplied as standard with an optional CO₂ probe also available.

Superior Air Flow

The Zephyr series of hatchers uses the same proven fan technology that has been instrumental in making the Avida setters the industry standard. The Zephyr fan creates an airflow that ensures a consistent temperature throughout the entire hatcher. It also delivers the oxygen needed and the correct removal of heat and carbon dioxide at each stage of the hatching process.

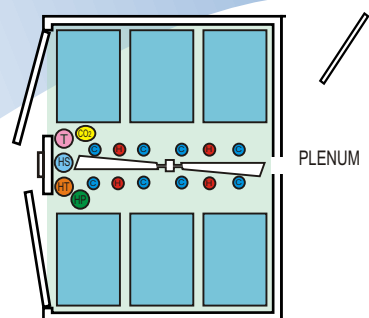


Happy, Healthy Chicks

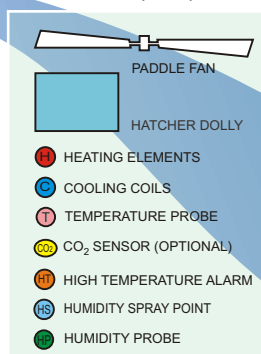
Consistent temperatures and perfect control of the humidity are the key factors needed for a very tight hatch window. Once a chick emerges from the egg, temperature and humidity should be reduced to allow the chick, poult or duckling to rest comfortably before processing. The Zephyr can reach comfort levels unheard of in the other hatchers on the market, giving the hatchery personnel time to process the chicks without inducing stress to the birds.



Zephyr C192 - Internal layout



Internal Layout Key

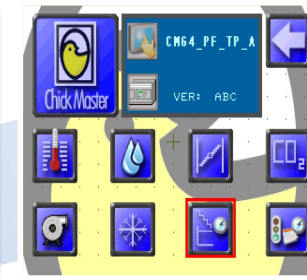


Genesis IV Control

Combines touch screen simplicity with complete control at your fingertips. Stage programs for the hatcher can be entered manually or downloaded to the hatcher. The Genesis IV is completely compatible with the Galaxy and Oracle Hatchery Management and Monitoring systems.



Genesis IV control interface



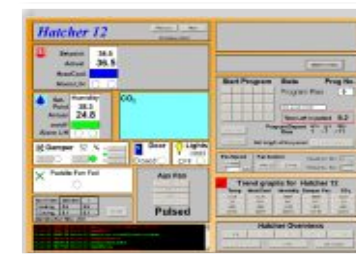
Typical Genesis IV control screen

Customizable Stage Programs

Control of sophisticated stage programs designed to give the hatching chicks exactly the conditions they need when they need it. Customizable programs are available for almost every breed and hatchery type worldwide.

Galaxy Setter and Hatcher Control

Simple to use and proven effective in hundreds of installations, our Galaxy system allows you to view, adjust and control the key elements of the incubation environment from your office or your home.



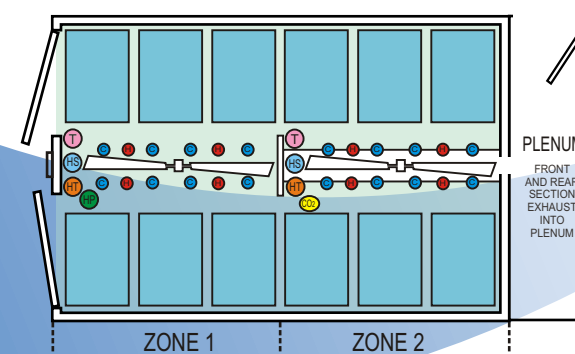
Hatcher overview



Humidity trends graph



Zephyr C384 - Internal layout showing two individually controlled zones



Plenum Efficiency

Plenums serve the double purpose of helping to maintain a consistent negative pressure pulling spent air thru the Zephyr hatcher and allowing a place for easy cleanup of accumulated airborne debris. If you are utilizing a Chick Master Secondary Heat Recovery system or you want to further clean exhausted air, Chick Master offers economical air cleaners to reduce the particle content of the plenum exhaust.



Hatcher plenum

Homogenous Temperature

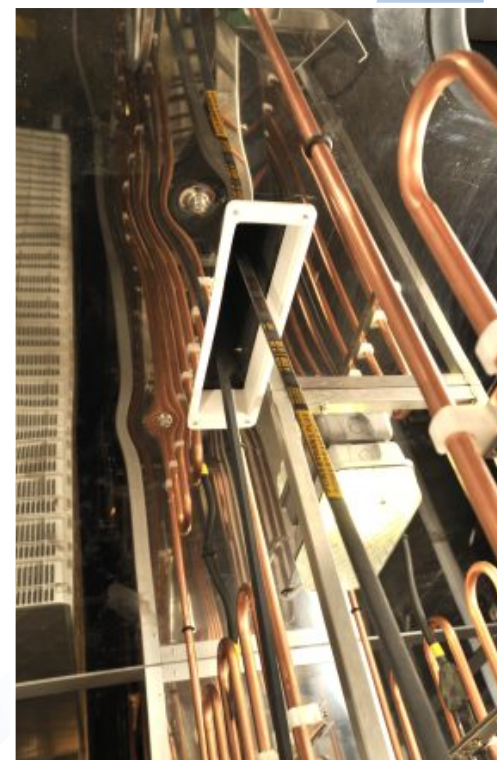
The difference between the Zephyr and the rest of the pack is measured by its ability to maintain a consistent temperature from top-to-bottom in a stack of hatcher baskets. The Zephyr series hatchers are specifically designed to deliver even cooling throughout all the stacks of baskets in each section of the hatcher.

The Cooling System

The Zephyr is designed to provide the majority of the cooling needed through the chilled water system, which provides an excellent opportunity to recover heat energy with Chick Master's CC3 or a Heat Recovery Package.

Normally Open Valve

As a safety measure, the system is designed to fully open the water cooling control valves in the event that contact with the Genesis IV control is lost. If the fans stop or the electricity is fully lost, this Normally Open Valve will give you a few precious minutes that can make a big difference!



Inside the Zephyr hatcher with the stainless steel interior option looking up at the sealed pulley guard, cooling coils and heating elements

Fail Safe Processor

An innovation from Chick Master is the optional Fail Safe Processor for hatchers. If the main processor fails, the Fail Safe will take over; it attempts to turn the fans to full speed, open the damper, turn on any inline blowers, turn on humidity sprays and ensure that the cold water system is operating at 100% of capacity. Each of these functions can be programmed individually when you configure the unit. You can add another level of security if you connect the control to the Chick Master Alarm System.