

CONTAQ Z6

Key standard features

- Contact incubation, conventional moving air and hatching modes
- Reliable, flexible and easy to use microprocessor control system with improved temperature stability with Enhanced Proportional Derivative (PD) temperature control.
- Microprocessor controlled roller turning system allowing full control of turning interval, angle and direction including randomization feature.
- Mains and 12v DC supply inputs allow battery backup in case of mains failure
- High accuracy calibrating thermometer supplied so control system calibration can be checked easily
- High accuracy automatic humidity control
- High quality stainless and galvanised steel cabinet construction for long life and ease of cleaning with integral heat retaining insulation panels improving electrical efficiency and temperature control.
- Two stage air filtration in moving air and hatching modes to keep the air clean for emerging chicks
- Front loading drawer design gives ideal access to eggs and chicks whilst being stackable and space efficient

Contact incubation Technology



Conventional artificial incubation is very artificial. It surrounds the eggs with warm air, rotating them regularly but not changing their environment greatly. This has proved successful for the mass breeding of poultry, particularly as, over many generations, the breeding programmes have self-selected for birds which flourish in the artificial environment. But for other species, artificial incubation is less satisfactory.

Compare this artificial environment with natural incubation in the nest. The bird sits on the eggs with a brood patch, often plucked to bare skin, passing body warmth from the bird to the egg through a small contact area. At irregular intervals the bird gets up and rearranges the eggs. This exposes them to cool air. When she settles down, a different part of the egg is in contact with the brood patch. Some species even leave the eggs exposed, letting them cool while they forage for food or defend their territory.



Academic research on egg incubation has shown that for some species in the nest there can be a temperature difference across the egg of over 10 degrees. The top of the egg, in contact with the brood patch, can be as high as 40 degrees centigrade while the bottom of the egg can be as low as 29 degrees

while brooding. (And during bird absences, the whole egg can fall to as low as 20 degrees). How heat flow, the developing embryo and the brood patch interact to produce strong chicks, has proved to be far more complex than previously suspected. It is now established that the heat flow through the egg, passed downward from the contact area, is important in determining embryo growth and successful incubation.



Building on this research, Brinsea have created Contact Incubation Technology (CIT). This reproduces the brood area by inflating a plastic skin with warm air. As it inflates, the skin presses gently but firmly on the eggs sitting on rollers on a moveable base. Air can flow through this base, creating an environment which mimics the nest. Deflating the skin simulates the bird standing while moving the base reproduces the natural egg movements.

Brinsea **Z6** **C-I-T**
Incubation Specialists CONTACT INCUBATION TECHNOLOGY

Specifications:

External dimensions: 32cm x 66cm x 59cm (12½" x 26" x 23¼") – H x W x D

Weight: 30Kg

Power consumption: 110W max and 60W nominal operating

Input voltage: 12v DC and 115v AC or 12v DC and 230v AC as specified

Examples of typical maximum egg capacities:

Quail 152, hen 60, goose 24, macaw 100, parakeet 200

Guarantee

All Brinsea incubators are fully guaranteed for 2 years on return of the guarantee card.

Manufactured to ISO9001 2000 Quality Assurance Std. International patents applied for.

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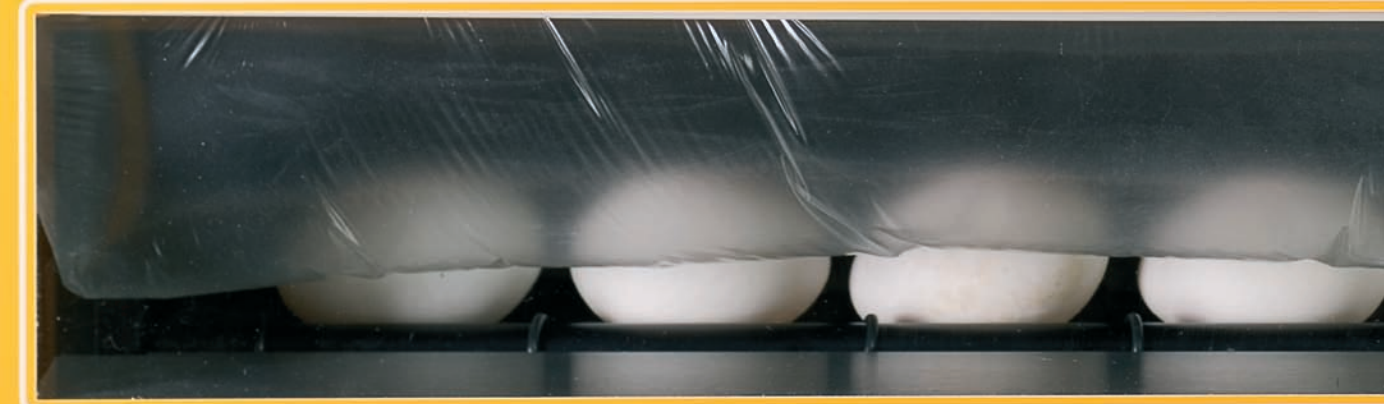
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The most flexible high performance incubator available

Brinsea **Z6** **C-I-T**
Incubation Specialists CONTACT INCUBATION TECHNOLOGY

2ND GENERATION CONTACT INCUBATION



CONTAQ Z6

Brinsea

www.brinsea.com

**C.I.T & Z6 the complete combination
of bird and nest**

the best solution to every stage of incubation - *naturally...*

THREE INCUBATORS IN ONE

Contact Incubator

Conventional Moving Air Incubator

Hatcher

The Brinsea **CONTAQ Z6** – designed to enable you to set all the incubation parameters your eggs would experience in their natural nest.

The Z6 is the latest high performance egg incubator to feature patented Contact Incubation Technology (CIT) which accurately mimics the nest conditions and warms the egg by contact with the top of the shell.

Added Flexibility

The Z6 also operates as a very high performance conventional moving air incubator or as a top quality hatcher – with a dedicated hatching mode as part of its control system.



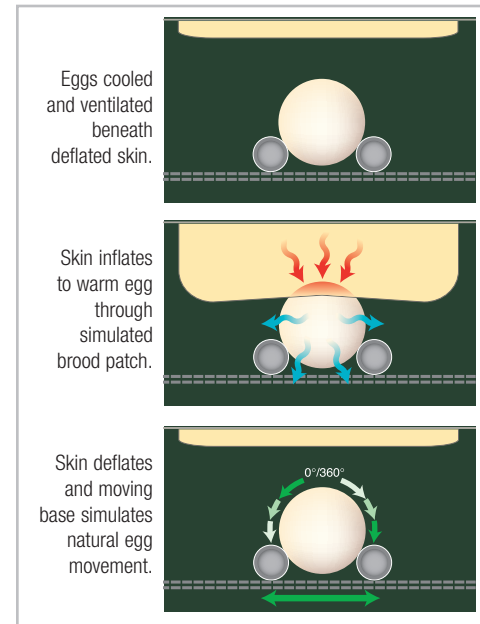
Since initial field trials in 2000 Brinsea's patented Contact

Incubation Technology has established itself as a real step forward in incubation.

Eggs are warmed by contact with an artificial skin, rather than being surrounded by warm air, and the result is much stronger and faster development of the embryo in early stages of incubation. Many breeders of exotic, rare and valuable species across the world have switched to CIT.

The Z6 also allows the breeder to use conventional moving air mode for later stages of incubation and hatching where the benefits of contact incubation are less important and the greater control of humidity can outweigh the advantages of incubation by contact.

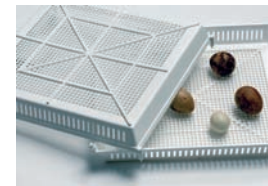
A purpose designed hatching tray completes the Z6 specification, giving the best possible hatching results for any species.



Humidity pump accessible for easy maintenance.



Hatching Tray with cover.



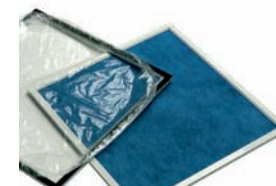
Temperature calibration facility.



Advanced roller system.

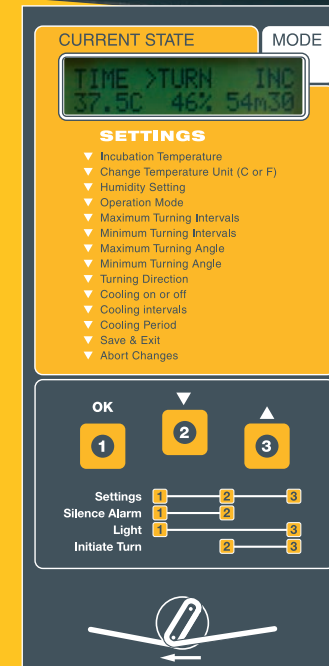


Air Filter and Contact 'Skin'.

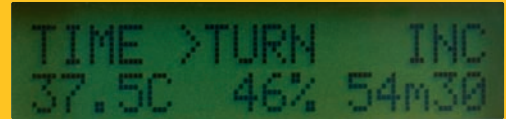


Better than the real nest

Although CIT aims at reproducing the environment of bird and nest, with the CONTAQ Z6 the incubation environment can be seen as better than the real nest. There are no predators and no egg damage from inexperienced brood birds, no risks of disease or disturbance interrupting the parents. The professional breeder or advanced amateur now has an incubator which can be relied on to produce consistently higher yields of precious eggs – *for birds of prey, for parrots and for endangered species.*



The electronic controls, based on well-proven technology, can be used to define precisely the environment required, controlling temperature of the skin, the time it spends sitting on the eggs and away from the eggs and the amount of movement to take place for each change of egg position.



Control display in Contact Mode



Control display in Hatch Mode

Control System

The Z6 recreates the brood patch with a warm air-filled plastic diaphragm (the skin), which can be inflated and deflated. A conveyor belt system rotates the eggs. To control the Z6 Brinsea has developed a fully flexible system using an 8 bit microcontroller with a 16 character display. Through a simple 3 button, menu-driven interface the breeder can control:

- Temperature** – of the skin in contact mode or air temperature in moving air mode
- Humidity level** – of the egg chamber
- Cooling** – duration and interval that the skin is retracted from the eggs, simulating the bird leaving the nest.
- Turning** – direction, angle and frequency of egg rotation with option to randomise egg turning within user defined limits.
- Alarm** – for high and low temperature. Internal alarm sounder and message on the display.
- Power Back-up** – battery may be connected at same time as mains for auto back-up

PLUS: Predictive temperature stability system incorporating active temperature overshoot elimination.

...the most flexible high performance incubator