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 repositions the eggs. This exposes them to cool air. When the bird 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 this heat 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 20 degrees while brooding and during incubation, 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 from the contact area is important in determining embryo growth and successful 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.

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.

Since initial field trials in 2000 Brinsea’s patented Contact Incubation Technology has established itself as a real step forward in incubation.

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No compromise laboratory grade egg incubators for the most demanding applications.

Specifications:

**External dimensions:** 330mm x 660mm x 590mm (13” x 26” x 23 1⁄4” ) – H x W x D

**Weight:**
- K7: 27 – 39kg
- Z7: 39 – 42kg

**Input voltage:** 115v AC or 230v AC as specified

**Examples of typical maximum egg capacities:**
- **K7**
  - Quail 110
  - Partridge 81
  - Pheasant 64
  - Hen/Falcon/Saker 49
  - Duck/Turkey 20
  - Emu/Rhea 8
  - Ostrich 4
- **Z7**
  - Quail 88
  - Partridge 63
  - Pheasant 48
  - Hen/Falcon/Saker 42
  - Duck/Turkey 20
  - Emu/Rhea 8
  - Ostrich 4

Guarantee

The Z7 and K7 are fully guaranteed and will be repaired or replaced if a fault should arise within the 3 year guarantee period (see terms of guarantee). Brinsea Products Ltd and their agents will not be responsible for loss or damages in the event of a failure, however caused, and the user is advised to arrange their own insurance cover where loss of power, mechanical or electrical failure might result in unacceptable losses.

In order that we can continue our policy of innovation and improvement we reserve the right to alter specifications without notice.

Manufactured in ES007 2001 Quality Assurance Std.

International patents apply.

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 K7 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 K7 specification, giving the best possible hatching results for any species.
Patented Contact Incubation Technology for improved embryonic development

Contaq Z7 RAPTOR

3rd Generation no-compromise contact incubator for unbeatable hatch rates with wild species, developed in conjunction with world-leading bird of prey breeders.

- Patented Contact Incubation Technology for improved embryonic development and greater numbers of healthy chicks.
- Improved temperature control and stability with predictive temperature stability system incorporating active temperature overshoot elimination.
- Contact Thermometer to independently show actual egg surface temperature, incorporating high and low temperature alarms as well as a power failure alarm with battery backup and status display.
- Robust programmable rack and pinion turning with optical turn counter and independent alarm for complete confidence that eggs have turned overnight.
- Complete with a comprehensive set of rollers to suit all egg types.
- Power failure, incubation and room temperature alarms.

Full stainless-steel construction for longevity and ease of cleaning.

- Supplied with a high accuracy calibration thermometer to verify control system accuracy.
- Stackable, front-loading space efficient design.
- Matching K7 moving air incubator/hatcher.

Contaq Thermometer to independently show actual egg surface temperature.

Contact Thermometer to independently show actual egg surface temperature.

No compromise