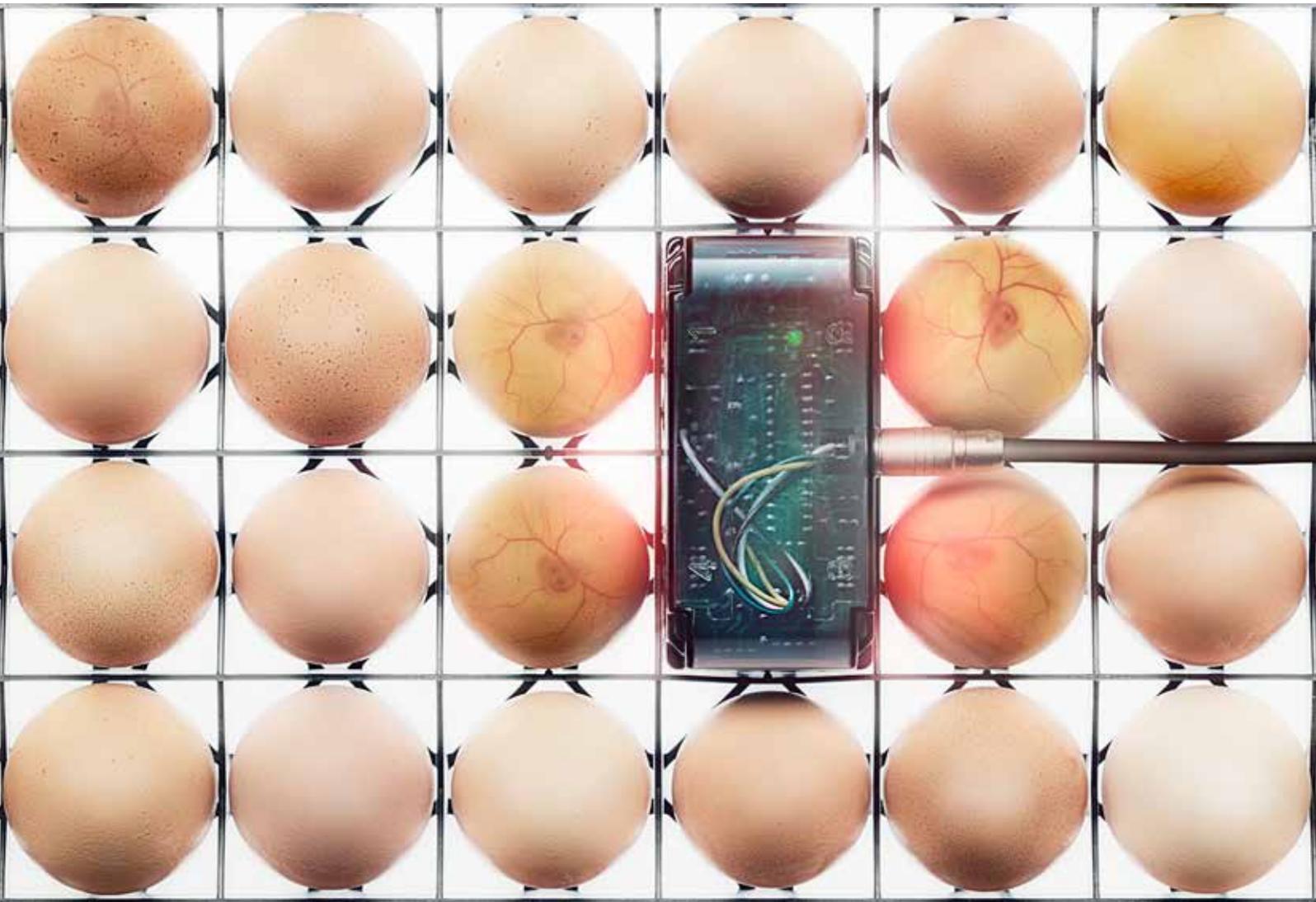




PETERSIME
INCUBATORS & HATCHERIES

BioStreamer™

Embryo-Response incubation™
for maximum profit for life





PETERSIME
WHEN[®]
CHICKS
COUNT



▶ BioStreamer™ for maximum profit for life

▶ Maximize your incubation results

▶ Minimize your operational costs

Reduce labour costs

Reduce maintenance costs

Reduce energy costs

▶ Maximize your chick quality

Embryo-Response Incubation™

OvoScan™

CO₂NTROL™

Dynamic Weight Loss System™

Synchro-Hatch™

▶ Eagle Eye™

▶ Operational Excellence Technology™

▶ Accessories

▶ Specifications

▶ Testimonials

▶ Discover more

▶ Petersime presence worldwide



BioStreamer™

For maximum profit for life

The BioStreamer™, world's best single-stage incubator, maximizes your incubation results and your chick quality, while minimizing your operational costs. For the complete lifetime of your hatchery.

Maximize your incubation results



Achieve **high chick output** by creating the ideal incubation environment. With the BioStreamer™, chicks are more **uniform** and perform optimally after hatch.

Minimize your operational costs



Costs for **labour** are minimal, thanks to the ease of operation. The durable material and intelligent design of the BioStreamer™ reduce your **maintenance** costs. Energy-efficient technologies lower the **energy** bill.

Maximize your chick quality



Embryo-Response Incubation™ technologies create the ideal environment for optimal chick uniformity, hatchability and post-hatch performance. By using nature as a reference, these technologies also safeguard the **welfare** of chicks.

Maximize your incubation results

Achieving more and better chicks starts with using the best equipment. The BioStreamer™ ensures high chick output, a bio-secure environment, maximum hatch rates and increased uniformity of day-old chicks.



- ▶ Embryo-Response Incubation™ technologies create a uniform environment for higher **performance** and higher **uniformity** (see p. 10)
- ▶ With an easy-to-use **calibration** tool you calibrate temperature and humidity
- ▶ An **air-tight** environment provides optimum **bio-security** and perfect control over the incubation environment
- ▶ A back-up temperature alarm protects your chicks

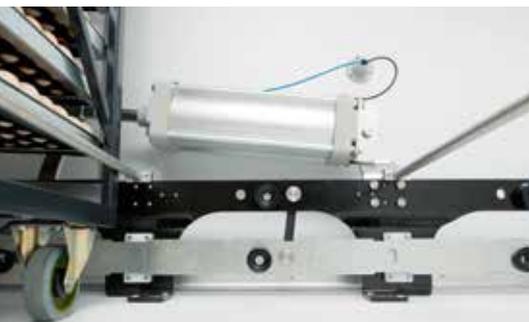


Minimize your operational costs

Reduce labour costs

Petersime incubators are easy to use, so your operators can get the most out of them. Moreover, the ergonomic and intuitive design of the BioStreamer™ and its software allow you to reduce labour costs.

- ▶ The **intuitive interface** makes operating the incubator self-evident
- ▶ The **panoramic windows** give you an instant overview of what is happening in the incubator
- ▶ Trolleys can easily be rolled in with minimum effort
- ▶ The **tray turning system** is self-positioning and **fault-tolerant** for rough or bumpy floor surfaces. This prevents the tray turning system from getting stuck
- ▶ **Eagle Eye™** software allows remote control and analysis of the incubators and monitoring of the conditions in egg storage and chick handling from one single Command Centre PC, enabling you to further optimize your results (see p. 16)
- ▶ **Eye-Blink™** automatically detects the presence of a person in front of the BioStreamer™ and gives you an instant overview of all key parameters of the incubation process



✂ Minimize your operational costs

Reduce maintenance costs

Nobody likes wasting time. Or money. For that reason, Petersime pays special attention to both the product design and the materials used. The BioStreamer™ requires a minimal amount of maintenance, while also lowering downtimes and costs.

- ▶ Maximum use of **maintenance-free** components
- ▶ Maximum use of anodized aluminum and stainless steel for **extreme durability** and corrosion resistance for a long lifetime of the machine
- ▶ The design of the BioStreamer™ avoids dirt traps and allows easy and thorough high pressure cleaning, thereby minimizing bio-security risks and allowing **easy cleaning**
- ▶ **Easily accessible** for maintenance at all times. You do not need to access the top or the rear of the machine
- ▶ Equipped with **maintenance software** to help your maintenance manager



Minimize your operational costs

Reduce energy costs

The design of the BioStreamer™ focuses on higher energy efficiency and reacts fast to changing environmental conditions to lower your energy consumption.

- ▶ The sealed cabinet **avoids energy losses**
- ▶ **Eco-Drive™** minimizes the pulsator motor's energy consumption during the less critical stages of the incubation process, resulting in energy savings of up to 50%
- ▶ Efficient transfer between the cooling elements and the circulated air results in a **lower installed power requirement**. It also enables the system to react fast to changing environments
- ▶ Thanks to the recently introduced **Operational Excellence Technology™**, a more efficient way of cooling decreases energy consumption with 5%. An optimized pulsator design further reduces the energy bill of your machine with 10% (see p. 17)





Maximize your chick quality

Embryo-Response Incubation™

Embryo-Response Incubation™ technologies react to the signals the embryos give to create the ideal environment for each specific batch of eggs. By using nature as a reference, these technologies lead to maximum, consistent chick output and quality.

Different factors such as genetics, breeder management, flock age, storage time, egg age, egg size, shell porosity, etc. make each batch of hatching eggs truly unique. Despite this, traditional incubation systems still use intermediate incubation parameters for ventilation rates, air temperature and air humidity to manage the incubation process.

Embryo-Response Incubation™ goes much further. By on-line diagnosis of the real embryo temperature, actual CO₂ output, egg weight loss, etc. the system constantly and interactively adapts the incubation parameters to **create the optimal environment for each specific batch of eggs.**

The Embryo-Response Incubation™ technologies **mimic** how a **mother hen** listens and responds to the signals of the embryos. By letting the embryos decide which incubation environment is best for them, Embryo-Response Incubation™ technologies optimize chick quality, hatchability and post-hatch performance. At the same time, they safeguard the **welfare** of the chicks.

Embryo-Response Incubation™ technologies include the patented **OvoScan™**, **CO₂NTROL™**, **Dynamic Weight Loss System™** and **Synchro-Hatch™**.



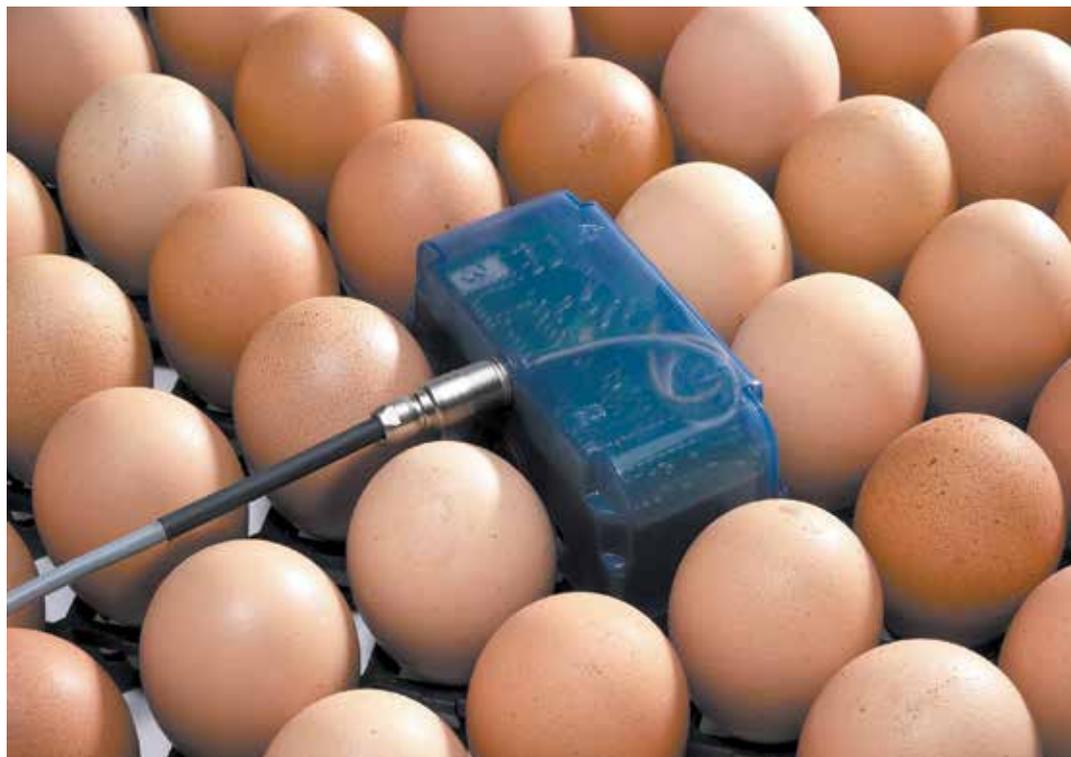


Maximize your chick quality

OvoScan™

Temperature is the most vital factor for embryo development and chick quality. OvoScan™ continuously creates the optimum temperature for any batch of eggs, leading to improved hatchability and outstanding post-hatch performance.

- ▶ Automatically creates the **optimum temperature** for any batch of eggs, **whatever the size, flock age or genetic content of the eggs**
- ▶ Continuously adapts the incubation temperature in response to the actual egg shell temperature
- ▶ Precisely controls the rate of the **metabolic development** of the embryo, allowing you to hatch chicks with extraordinary performances
- ▶ Mimics nature
- ▶ Consistent control over the incubation process
- ▶ Optimal, **consistent** results day after day
- ▶ **Improved hatchability and post-hatch performance**, such as optimum growth, better feed conversion ratio and lower post-hatch mortality
- ▶ Safeguards the welfare of chicks





Maximize your chick quality

CO₂NTROL™

To develop a healthy chick, it is vital that oxygen is supplied to the egg and carbon dioxide removed. CO₂NTROL automatically provides the optimal ventilation conditions to get the best quality chicks.



- ▶ Monitors and adapts CO₂ levels in real-time
- ▶ Listens to the signals of embryos to provide the **optimal ventilation** conditions and air flow (see illustration)
- ▶ Based on the natural behaviour of a mother hen
- ▶ Better development of the **cardiovascular system, muscles and skeleton**
- ▶ Healthier and more **uniform** chicks
- ▶ Narrows the hatch window, so chicks hatch more **simultaneously** and waiting time after hatch is shorter
- ▶ Ensures well-being





Maximize your chick quality

Dynamic Weight Loss System™

Eggs need to lose a certain amount of weight to achieve optimal chick hatchability and day-old chick quality. The Dynamic Weight Loss System™ (DWLS™) adjusts humidity levels automatically to achieve the desired weight loss trajectory.

- ▶ For eggs to lose weight, water needs to be transported from the egg to the environment via the egg shell. By controlling the humidity level in the incubator, the rate of this water (and weight) loss can be managed
- ▶ Dynamic Weight Loss System™ weighs eggs constantly during all incubation stages and **adjusts humidity levels** to meet the demands of the embryos
- ▶ Ensures an **optimum weight loss** trajectory that follows a non-linear profile as found in nature for any batch of eggs
- ▶ Results in **higher hatchability rates, lower post-hatch mortality** and **optimum feed conversion ratios**
- ▶ Safeguards welfare



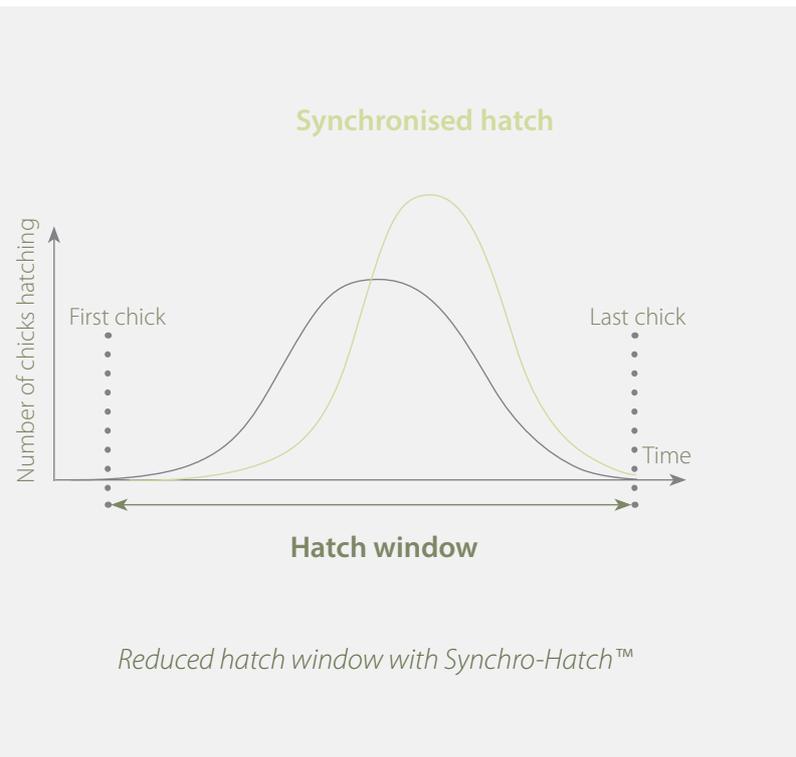


Maximize your chick quality

Synchro-Hatch™

To shorten the hatch window, Synchro-Hatch™ triggers simultaneous hatching and guarantees uniform day-old chicks.

- ▶ Automatically detects the exact timing of 100% internal pipping and then initiates a sequence of modifications to the incubation environment in order to stimulate **simultaneous hatching**
- ▶ Mimics the hatching triggers of a mother hen
- ▶ **Reduces the hatch window** by up to 30%
- ▶ Shortens waiting time after hatching, diminishing the risk of dehydration and weight loss
- ▶ Consistent results
- ▶ **Uniform** day-old chicks
- ▶ **Higher hatchability rates and post-hatch performances**
- ▶ Takes care of the welfare of chicks





Eagle Eye™

Software for superior hatchery control

Sharp overview of your entire hatchery at a glance



- ▶ Monitor and control your entire hatchery from a single Command Centre PC
- ▶ Remote control of your incubators
- ▶ Integrated control of all the **key parameters** and settings in the hatchery: incubators, room conditions, cooling water temperatures ...
- ▶ Custom-made: based on the layout of your own hatchery
- ▶ **Zoom in** on any room to view its particular conditions
- ▶ Take a virtual tour in your setter or hatcher room to check the status of your incubator
- ▶ Immediate and complete overview of all the **alarms** in your hatchery, allowing you to interfere instantly
- ▶ **Enhanced bio-security** management with active filter control on the air handling systems and continuous control of temperature and humidity
- ▶ Improve your hatchery's results with **real-time and historical trending analysis**
- ▶ For hatchery managers who aim to further optimize their equipment's performances and their hatchery's results



Operational Excellence Technology™

Optimized incubator features for maximum profit for life

Petersime single-stage incubators are now all equipped with Operational Excellence Technology™.



Operational Excellence controller

The large 12" touchscreen controller with **intuitive interface** allows for easy operation of the incubator. Daily routine tasks, changing and installing incubator programs, overviewing alarms and history are obvious and easy. The use of personal access badges enables accurate **access control** and traceability of all user interventions to maximize your incubation results.



Optimized pulsator fan

The design of the pulsator blades has been improved, leading to a **reduced energy consumption** of 10%. The new blade design allows further reduction of the rotation speed of the pulsator fan without compromising the required airflow inside the incubator.



Optimized cooling system

A more efficient way of cooling ensures more uniformity and **reduces the energy bill** of your chiller with 5%. This cooling system is precisely regulated and considers the stage of embryonic development for optimal accuracy. This **uniform** and efficient way of cooling leads to a better chick quality.

Accessories

Trolleys to last a lifetime

- ▶ Robust
- ▶ Solidly welded
- ▶ Two-layer coating to avoid corrosion
- ▶ Suited for on-farm traying and transportation from farm to hatchery
- ▶ Easy to clean and suitable for automated washing machines
- ▶ Easy to handle and shock-absorbing thanks to the big rubber wheels
- ▶ The trolley's self-positioning system ensures error-free operation of the tray turning system
- ▶ Compatible with almost all previous and current single- and multi-stage Petersime setters and hatchers



	Setter trolley				Hatcher trolley			
	Chickens		Turkeys/Ducks	Turkeys	Chickens		Turkeys/Ducks	Turkeys
	Setter trolley	Setter trolley HD	Setter trolley turkeys/ducks	BioS-4TS trolley	Hatcher trolley	Hatcher trolley HD	Hatcher trolley turkeys/ducks	BioS-4TH trolley
Dimensions								
Length (mm)	1,666	1,666	1,666	1,165	1,607	1,607	1,607	1,250
Width (mm)	565	565	565	930	580	580	580	808
Height (mm)	2,037	2,037	2,037	2,065	2,048 ¹ /2,132 ²	2,048 ¹ /2,132 ²	2,136	2,135
Capacity								
Trays/baskets per trolley	32	64	28	28	32 ¹ /64 ²	32 ¹ /64 ²	28	28
Eggs per trolley	4,800	5,376	3,528	3,528	4,800	5,376	3,528	3,528

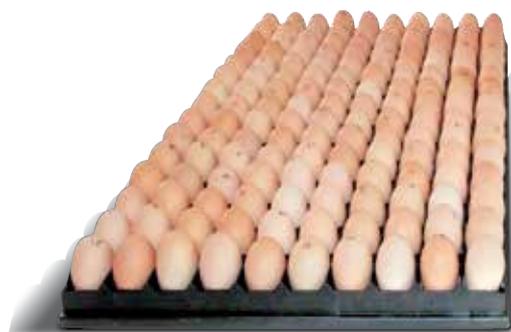
¹When stacked to the recommended height of 16 hatcher baskets

²When stacked to the recommended height of 16 universal chick baskets

Accessories

Solid, durable trays

- ▶ Specially shaped for the correct positioning of the eggs, regardless of their size and shape
- ▶ Suitable for bigger eggs of modern high yield birds
- ▶ The special design of the setter tray ensures an adequate air flow around the entire surface of the egg shell
- ▶ Easy to stack
- ▶ Retains its shape
- ▶ Suited for hatchery automation systems
- ▶ Easy washing up to 85°C
- ▶ Excellent chemical resistance
- ▶ Compatible with almost all single- and multi-stage Petersime setters and hatcher
- ▶ Adapted hatcher basket of 13.5 cm deep for poult and ducklings



	Setter tray					Hatcher basket		
	Chickens		Turkeys/Ducks			Chickens		Turkeys/Ducks
	Setter tray	Setter tray HD	Setter tray HD - stackable	Setter tray 126	Setter tray 63	Hatcher basket	Universal chick basket	Hatcher basket turkeys/ducks
Dimensions								
Length (mm)	732	373	373	730	379	795	596	795
Width (mm)	506	505	505	505	505	565	398	565
Height (mm)	38	40	74	38	41	133	167	156
Capacity								
Number of eggs	150	84	84	126	63	150 ¹ /168 ²	75 ¹ /84 ²	126

¹In case of BioStreamer

²In case of BioStreamer HD

Specifications

BioStreamer™

	Setters						Hatchers		
	BioS-24S	BioS-16S	BioS-12S	BioS-8S	BioS-4S	Bio-4TS	BioS-8H	BioS-4H	BioS-4TH
Capacity									
Chicken eggs (C)	115,200	76,800	57,600	38,400	19,200	-	38,400	19,200	-
Turkey eggs (T)	-	-	42,336	28,224	14,112	14,112	28,224	14,112	14,112
Duck eggs (D)	84,672	56,448	42,336	28,224	14,112	-	28,224	14,112	-
Trolleys									
Number	24	16	12	8	4	4	8	4	4
Trays									
	C/D	C/D	C/T or D	C/T or D	C/T or D	T	C/T or D	C/T or D	T
Trays/baskets per trolley	32/28	32/28	32/28	32/28	32/28	28	32 ¹ or 64 ² /28	32 ¹ or 64 ² /28	28
Eggs per tray/basket	150/126	150/126	150/126	150/126	150/126	126	150 ¹ or 75 ² /126	150 ¹ or 75 ² /126	126
Total number of trays/baskets	768/672	512/448	384/336	256/224	128/112	112	256 ¹ or 512 ² /224	128 ¹ or 256 ² /112	112
Dimensions (cm)									
Height ³	301.0	301.0	281.5	281.5	281.5	281.0	275.3	274.7	274.7
Width ⁴	419.1	336.9	419.1	336.9	336.9	292.6	336.9	336.9	292.6
Depth ⁵	704.6	704.6	373.5	373.5	220.6	281.8	372.6	220.6	303.3
Supplies									
Heating	Electrical					Electrical			
Cooling	Water					Water			
Humidification	Spray nozzle					Spray nozzle			
Turning	Pneumatic					-			
Energy management									
Eco-Drive™	Yes					Yes			
Embryo-Response Incubation™									
OvoScan™	Yes					-			
CO ₂ NTROL™	Yes					Yes			
DWLS™	Optional					-			
Synchro-Hatch™	-					Optional			
Controller									
Operational Excellence	Operational Excellence BioS Controller					Operational Excellence BioS Controller			
User interface									
Display	12" touchscreen					12" touchscreen			
Badge control	Yes					Yes			
Eagle Eye™	Yes					Yes			
Eye-Blink™	Yes					Yes			
History track	Extended					Extended			
Accessories & add-ons									
Base panel	1 per row					1 per row			
Calibration probe	Optional					Optional			
Preheating & delayed start	Yes					Yes			
Automatic Disinfection System	Optional					Optional			

¹Hatcher baskets | ²Universal chick baskets | ³Including clearance for Air Mixing Centre | ⁴Dimensions for machines within a row. For the first machine in a row, add 45 mm.

⁵Including handle and bumper

Specifications

BioStreamer™ High Density

	Setters					Hatchers	
	BioS-24S HD	BioS-16S HD	BioS-12S HD	BioS-8S HD	BioS-4S HD	BioS-8H HD	BioS-4H HD
Capacity							
Chicken eggs (C)	129,024	86,016	64,512	43,008	21,504	43,008	21,504
Turkey eggs (T)	-	-	-	-	-	-	-
Duck eggs (D)	-	-	-	-	-	-	-
Trolleys							
Number	24	16	12	8	4	8	4
Trays							
Trays/baskets per trolley	64	64	64	64	64	32 ¹ or 64 ²	32 ¹ or 64 ²
Eggs per tray/basket	84	84	84	84	84	168 ¹ or 84 ²	168 ¹ or 84 ²
Total number of trays/baskets	1,536	1,024	768	512	256	256 ¹ or 512 ²	128 ¹ or 256 ²
Dimensions (cm)							
Height ³	301.0	301.0	281.5	281.5	281.5	275.3	274.7
Width ⁴	419.1	336.9	419.1	336.9	336.9	336.9	336.9
Depth ⁵	704.6	704.6	373.5	373.5	220.6	372.6	220.6
Supplies							
Heating	Electrical					Electrical	
Cooling	Water					Water	
Humidification	Spray nozzle					Spray nozzle	
Turning	Pneumatic					-	
Energy management							
Eco-Drive™	Yes					Yes	
Embryo-Response Incubation™							
OvoScan™	Yes					-	
CO ₂ NTROL™	Yes					Yes	
DWLS™	Optional					-	
Synchro-Hatch™	-					Optional	
Controller							
Operational Excellence	Operational Excellence BioS Controller					Operational Excellence BioS Controller	
User interface							
Display	12" touchscreen					12" touchscreen	
Badge control	Yes					Yes	
Eagle Eye™	Yes					Yes	
Eye-Blink™	Yes					Yes	
History track	Extended					Extended	
Accessories & add-ons							
Base panel	1 per row					1 per row	
Calibration probe	Optional					Optional	
Preheating & delayed start	Yes					Yes	
Automatic Disinfection System	Optional					Optional	

¹Hatcher baskets | ²Universal chick baskets | ³Including clearance for Air Mixing Centre | ⁴Dimensions for machines within a row. For the first machine in a row, add 45 mm.

⁵Including handle and bumper

Testimonials

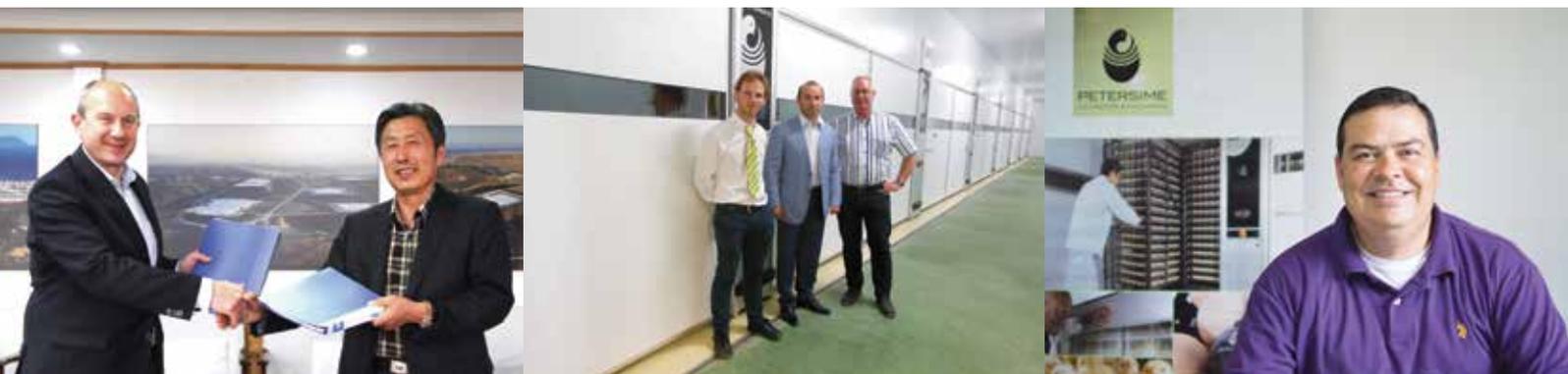
From all over the world

'The technological advancements of this equipment resulted in a superior performance, so Petersime is our undisputed supplier of choice for both our broiler and layer hatchery projects.' **Mr Ismail Hakki Yilmaz, Chairman of the Board of HasTavuk, Turkey**

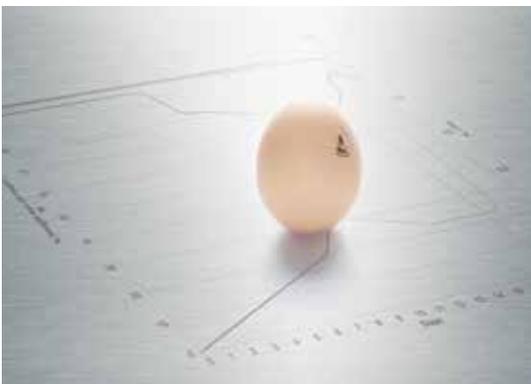
'We wanted to cooperate with Petersime again, because Petersime delivers very good product quality and their product design focuses on bio-security. But even more important is their professional after sales service. Paying attention to product quality and service is in line with Minhe's management policy and allows us to supply very good quality day-old chicks to our customers.' **Mr Sun Ximin, Chairman of Minhe, China**

'Eurodon is one of the most up-to-date turkey breeding complexes in the world. Therefore we decided to provide our hatchery with the latest modern and innovative equipment from Petersime to meet our quality standards.' **Mr Vadim Vadeev, General Manager of the Eurodon Group, Russia**

'We have really achieved, and exceeded, our hoped-for expectations.' **Mr Santiago Correa Restrepo, Legal Representative of PolloCoa, Colombia**



Discover more



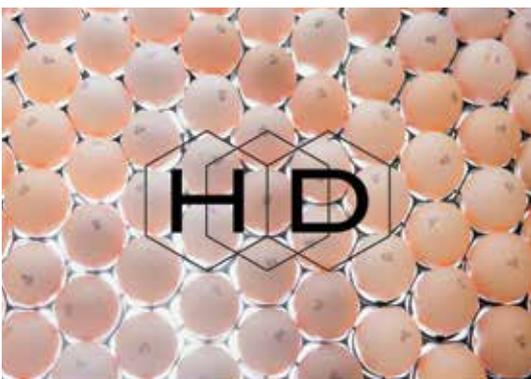
Embryo-Response Incubation™

The BioStreamer™ incubators are standard equipped with Embryo-Response Incubation™ technologies (OvoScan™, CO₂NTROL™, DWLS™ and Synchro-Hatch™) to **maximize chick quality** (see p. 10-14). Discover more details in the Embryo-Response Incubation™ leaflet.



BioStreamer™ Re-Store

Egg storage times do not longer have to lead to losses. By applying heat treatment during storage, you **restore the fertility of stored eggs** and you hatch more chicks. These chicks are born within a shorter hatch window, are more uniform and of better quality.



BioStreamer™ High Density

The BioStreamer™ HD or High Density setters and hatchers are designed to further **minimize the investment cost** of your entire hatchery project. As the BioStreamer™ HD incubators hold 12% more eggs while occupying the same footprint, you need to install fewer machines to achieve the total hatchery capacity you have in mind.

Petersime presence worldwide

Petersime headquarters

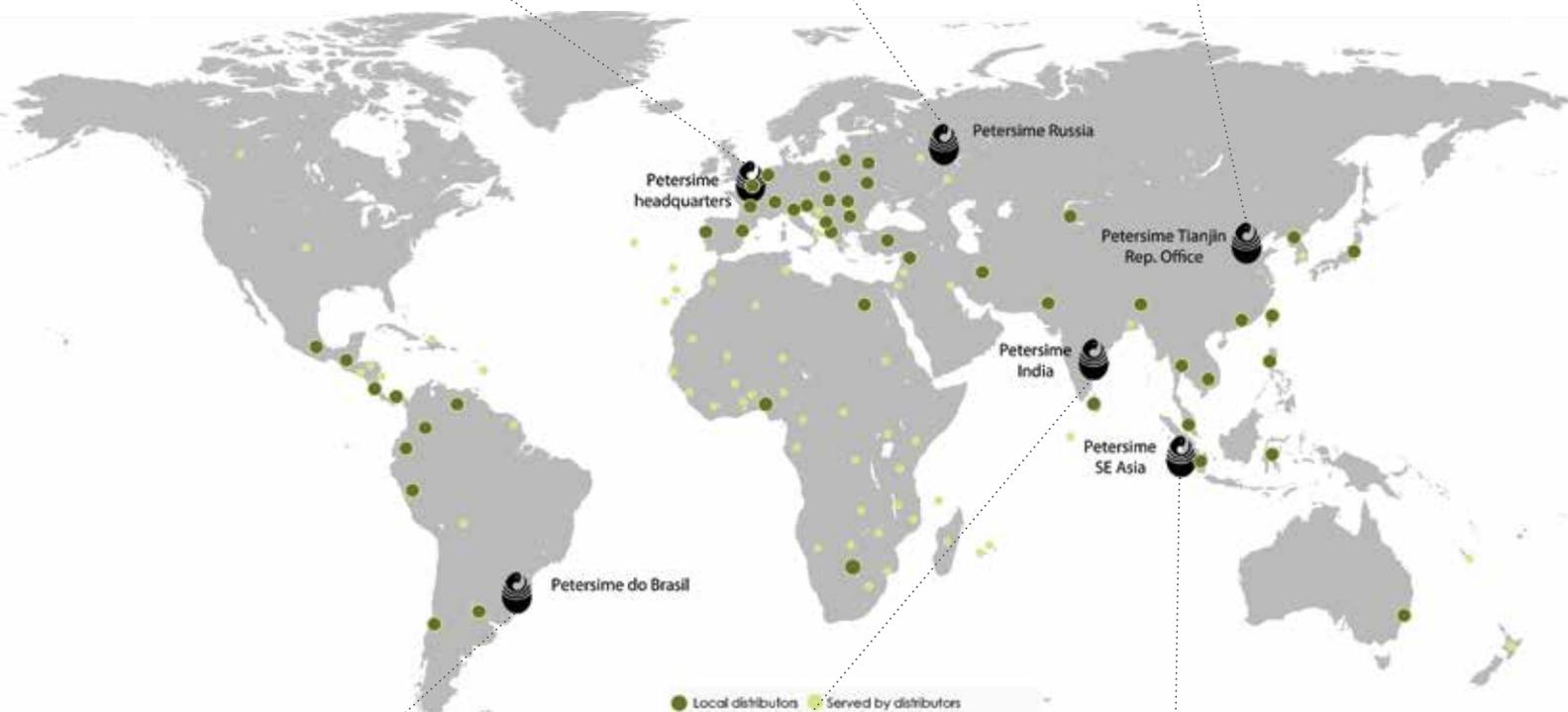
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