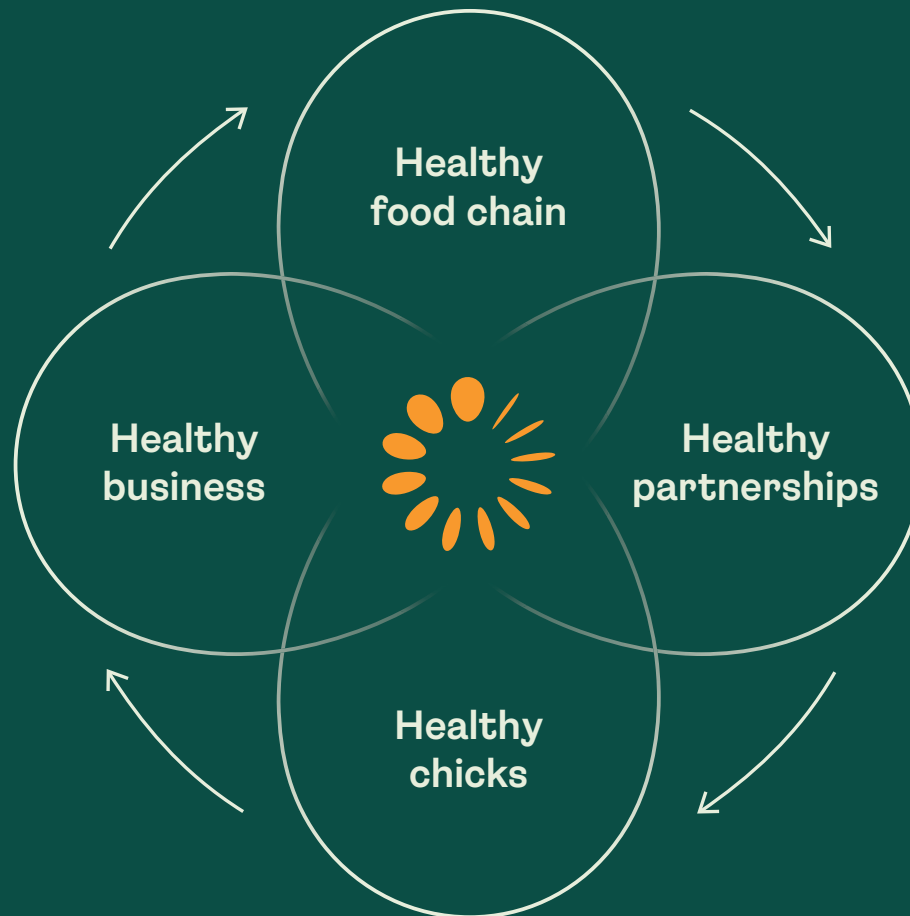


Healthy Hatchery Solutions.

Handling hatching eggs requires knowledge and dedication to achieve animal-friendly solutions that meet welfare standards.

In-Ovo vaccination is a modern way of vaccinating chicks when they are in their late stage of embryonic development. Chicks are better prepared for a healthy future, because they are still in their protected environment during vaccination. In this way, the embryos build up their immune system even before hatch in the most animal-friendly way. The Ultimate In-Ovo is fully equipped for this purpose and offers additional benefits to both the hatchery and the chick. These include little to no stress for the chick, but also time savings for the hatchery.





JOINING FORCES FOR **THE FUTURE** OF HATCHERY HEALTH

Healthy hatcheries and stronger flocks

Innovatec believes that it is important to contribute to a healthy hatchery. Vaccinating chicks before hatch reduces the risk of diseases. In-Ovo vaccination is a proven, safe method, which offers many benefits based on its design features. The precise and reliable application of vaccine results in optimized biosecurity and productivity. In-Ovo vaccination is the best, proven method for early disease protection and improved overall immunity for your flock.

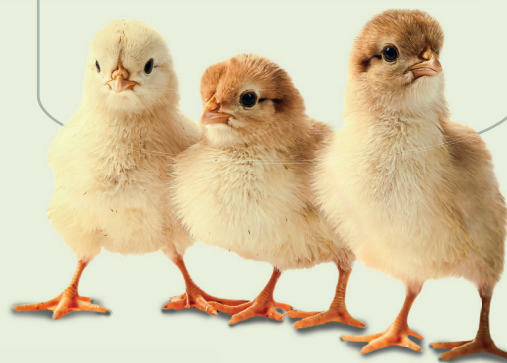
Precision and efficiency

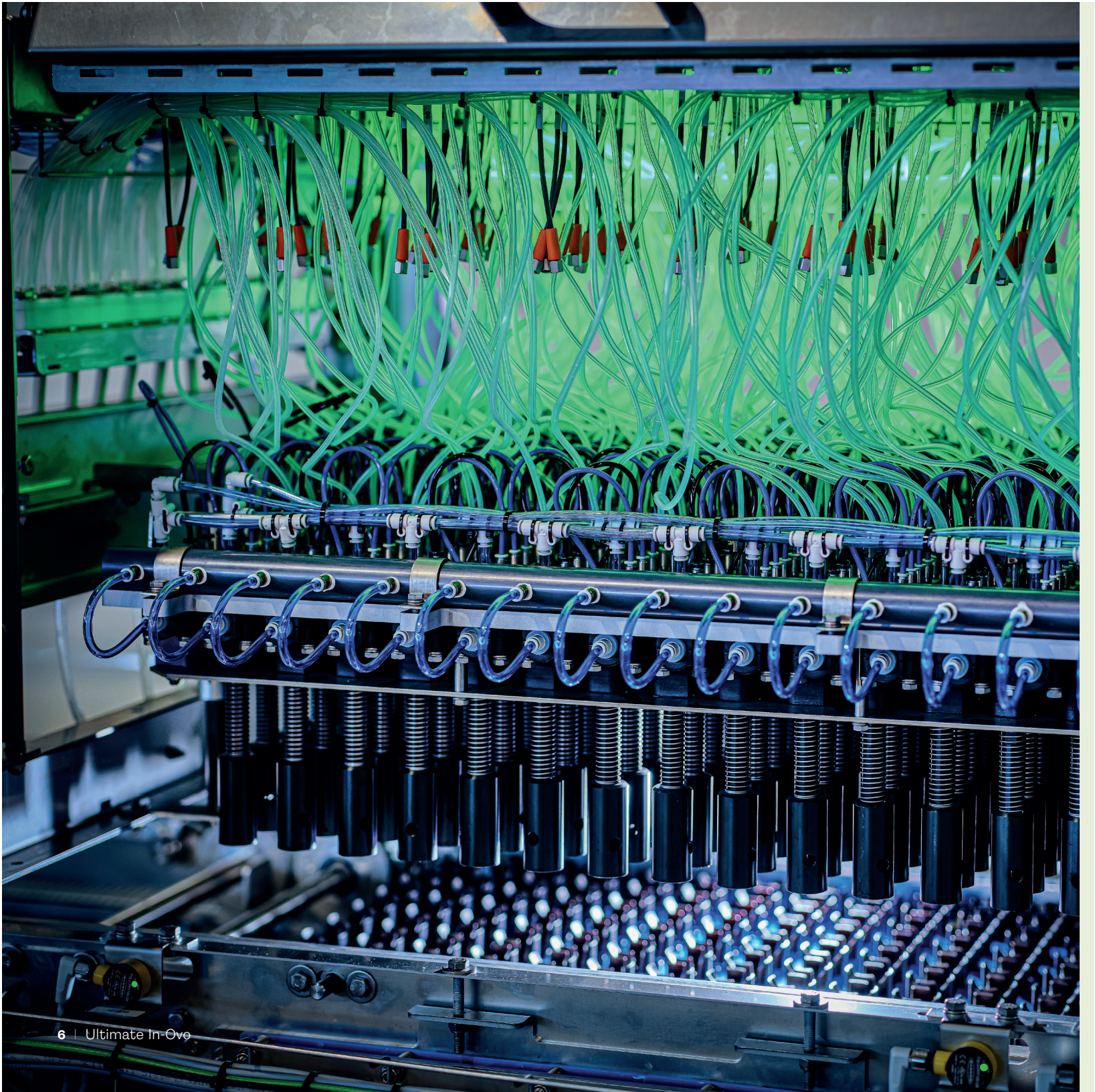
Combined with the CLEANchick's live embryo detection, our backfillers which refill the setter tray completely, or to the desired number of eggs, maximum efficiency is ensured. The advantages of combining the Ultimate In-Ovo with our CLEANchick are a cleaner In-Ovo process with less disturbance by pollution and improved hatchery hygiene.

With the utmost precision, each egg will be individually approached by the spring-loaded injector unit, automatically adjusting to egg size differences. The Ultimate In-Ovo is also equipped with a vaccine saver, which means that the machine does not vaccinate the empty pockets, if present, on the setter tray.

**A HEALTHY
HATCHERY
DELIVERS
PROFITABILITY
AND
CONTINUITY.**

innovatec.com →





Gentle approach

All eggs are carefully lifted from the tray to ensure a solid support of every individual egg and optimal contact with the injector. In addition, this support also aims to prevent eggs from cracking. The adjustment to each egg size is optimally done as each unit approaches each egg individually. By raising the eggs, the Ultimate In-Ovo resolves minor tolerances in setter trays. Thanks to this technique, control of needle depth is guaranteed. Once all injectors have made good contact, the injection follows and the vaccine is given in the right spot.

**“We create
the future of
hatchery health.”**

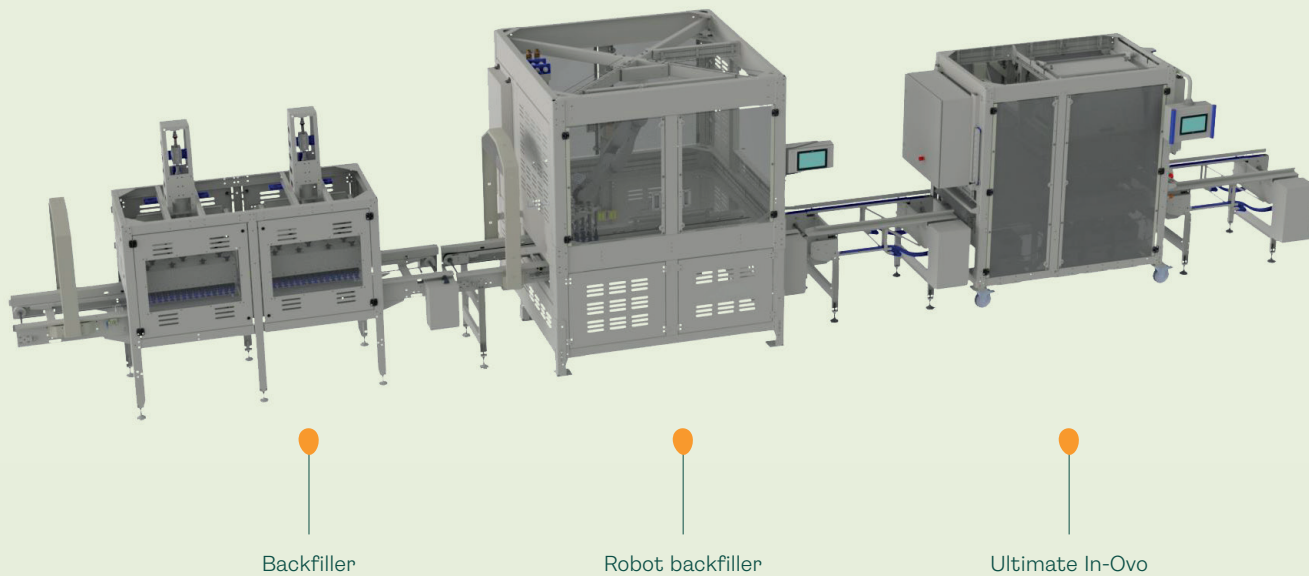
Dual needle technology

The Ultimate In-Ovo is equipped with dual needle technology. After the injector heads are properly aligned on the eggs, the outer needle punches the eggs with high velocity. This high velocity will reduce egg stress and risk of cracking. The smaller, inner needle is entering the egg without touching the eggshell, thus keeping the needle clean and sharp. A pump for each individual egg will dose vaccine through this needle. The injector head can adjust to an angle of 12 degrees. This technique also supports that the egg receives the vaccine in the right place.



Ultimate In-Ovo production line.

The Ultimate In-Ovo performs best when fully integrated into a production line. The main benefit of full integration is less contamination in the machine and maximum production capacity.



Stand-alone Ultimate In-Ovo.

As our Innovatec modules are very flexible, we are able to offer also a mobile version of an In-Ovo vaccination line. The line is completely equipped with a candling and removal unit, Ultimate In-Ovo and a transfer unit. Mobile, compact and durable.



Disinfection ensures a healthy start.

After the vaccine is administered, the in- and outside of the outer needle and the outside of the inner needle, are disinfected. In this way, the Ultimate In-Ovo ensures, that each subsequent egg is vaccinated with disinfected needles.

Options:

Waste water tank

A square tank on wheels for the collection waste water coming from the Ultimate In-Ovo with quick release and a tap.

Docking station

When the Ultimate In-Ovo is moved in and out a certain location, Innovatec is able to provide a docking station. This will guarantee proper alignment in a production line every time.

Replacement conveyor

When the production doesn't require vaccinated eggs, the Ultimate In-Ovo can be replaced by a movable conveyor. This keeps the production line operational.

UL/CSA certified

Innovatec equipment complies with CE (Conformité Européenne) safety regulations. If required, equipment can be delivered according UL or CSA regulations.

