

## Hatcher Humidity Control — Cat Pumps for Chick Hatchers

The food production and processing chain provides numerous opportunities for Cat Pumps to demonstrate the benefits that triplex positive displacement (PD) plunger pumps provide in terms of high pressures at low flows, mist creation, variable speeds, variable flows and reliability. In the poultry production business our pumps have a role to play even before the chicks have hatched.

The commercial hatching of chicks is an enormous international industry that involves incubation equipment, ventilation heat recovery and energy management systems.

For chicks to be healthy and stress-free, strict control of the hatchery environment is vital to ensure consistent temperatures and perfect control of humidity throughout the incubation cycle. Because the eggs actually give off a certain amount of moisture, controlling the humidity level in the hatcher is essential. From setting the eggs right through to the emergence of the hatched chicks, temperature and humidity levels need to be strictly controlled to ensure the chicks are fit and healthy. For hatchers, humidity is provided by a fine mist of warm water which is pumped around the system by high-pressure triplex PD plunger pumps. The fine mist is essential to the operation of the hatcher and it is the most cost-effective way of creating and sustaining the correct levels of humidity.

One of the world's leading hatcher suppliers employs Cat Pumps' 15 Frame model 661 stainless steel belt-driven plunger pumps as these satisfy its requirement for multiple nozzle humidity systems and offer complete flow flexibility and added shock absorption. Pumps are supplied with a belt drive motor on a base with a pulsation dampener and captive acceleration tube, and can operate at a fixed flow or with a VFD to adjust the flow as needed. Where a standby is required, the pumps are used in pairs. To meet this requirement, non-return valves are primed with water by another small pump to create sufficient inlet pressure. The belt-drive packages are popular because they provide convenient component sourcing with quick system assembly and can be serviced anywhere in the world because of the readily available spares parts.



### Application Specifications

#### Chick Hatcher Engineered Package

Cat Pumps Model	7CP6111
Pressure	70 bar
Flow	4.5 to 12L/min
Fluid	Ro Water
Duty Cycle	Continuous
Drive	3 kW, 4 Pole, Electric Motor



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