

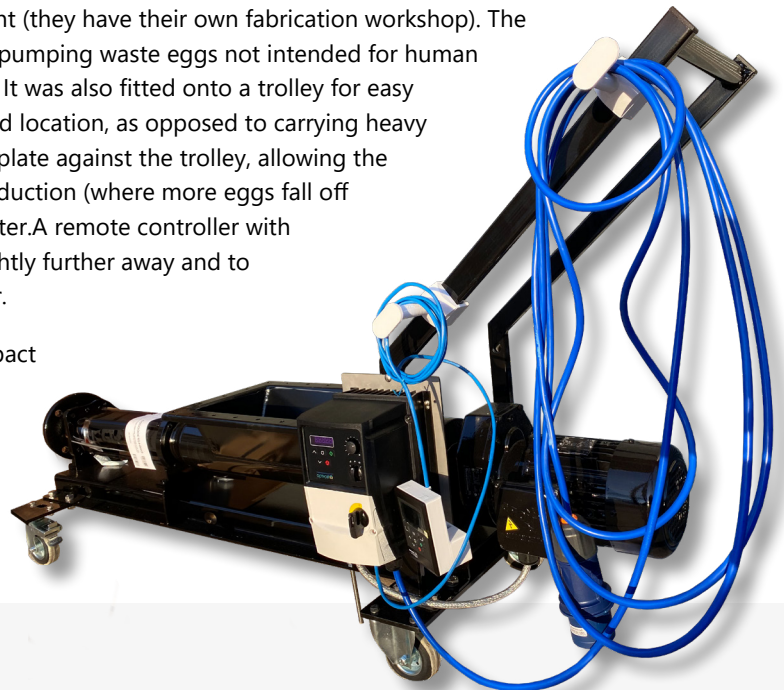
## » HOPPER FED PROGRESSIVE CAVITY PUMP (FOR EGG WASTE)

A customer in the agriculture industry needed to streamline their egg waste protocol, as their current method was time-consuming & labour intensive. They were working with eggs falling off the conveyor line & being collected into 20-litre buckets, to be carried up a 2-metre ladder & emptied into a large silo by hand. Depending on production levels, 200-300 buckets were filled in a day. This posed health & safety concerns, especially when the buckets were full.

### Pump Specifications:

We suggested a **Hopper Fed Progressive Cavity Pump** that would be fitted with the client's own fabricated hopper. This removed some cost elements for the client (they have their own fabrication workshop). The pump was selected in painted steel as it's being used for pumping waste eggs not intended for human consumption, and so a sanitary execution wasn't needed. It was also fitted onto a trolley for easy mobility (operators could move the system to the required location, as opposed to carrying heavy buckets to the pump). An inverter was fitted onto a steel plate against the trolley, allowing the on-site operators to speed the pump up during peak production (where more eggs fall off the conveyer line), or slow down when production is quieter. A remote controller with a 2m cable was supplied to control the inverter when slightly further away and to prevent bending down to adjust the speed of the inverter.

Overall, the Progressive Cavity Pump System was as compact as possible, reducing the space required on-site for the mobile pumping solution, and proved to cost-efficient whilst still retaining the necessary features required with the highest build quality. The pump was supplied by our partners in Italy, [Nova Rotors](#).



### Technical details:

- ✓ **Fluid:** Egg w/shells
- ✓ **Duty:** 1.8m<sup>3</sup>/hr @ <12bar(g) @ 50Hz
- ✓ **Selection:** DH 4K2 – Hopper Fed Progressive Cavity Pump in Carbon Steel
- ✓ **Installation:** Horizontal
- ✓ **Hopper:** 350x220STD mm (internal dimensions), Standard execution with drain plug G3/8", Carbon steel
- ✓ **Outlet connection:** UNI 2278/EN 1092 – PN 16 DN065, Standard connection, Cast Iron G25
- ✓ **Stator:** NBR
- ✓ **Rotor:** Execution Standard, AISI 420B / W. 1.4028 induction hardened 55-59 HRC
- ✓ **Joint:** Standard execution, Rubber sleeve NBR black food grade
- ✓ **Transmission shaft:** Standard execution with auger feed screw, Carbon steel
- ✓ **Driveshaft:** Standard Execution Ø30 with a plug-in shaft, AISI 420B / W. 1.4028
- ✓ **Seal housing:** Single-acting mechanical seal – G0K9, Grey cast iron G25
- ✓ **Seal:** Model 120 Ø45 rotating body
- in st.st., super sinus springs/not balanced, bidirectional SIC/SIC/FPM/316
- ✓ **Lantern:** Standard execution block construction with shaft seal protections, Cast iron G25
- ✓ **Painting:** Antirust & anti-oil immersion primer >20um  
-Two coats finishing bicomponent acrylic-based > 80um  
-Black+silver (std) RAL 9005+9006
- ✓ **S235JR** – Carbon steel S235JR / W. 1.0037 trolley with 4 wheels
- ✓ **IP66 Switched Inverter Drive w/ Remote Controller**