Background
For over 40 years family run Ballygarvey Eggs has been packing and supplying free range and intensive eggs fresh from laying farms around their base in Northern Ireland. Today, with flocks totalling 840,000 birds, Ballygarvey are annually supplying 250 million eggs in a 60/40 split to supermarkets and foodservice customers respectively – throughout the UK and Ireland. Faced with this growth Ballygarvey realised that their original packing plant, which was manually operated, could not sustain the volume of output required and built a new, state of the art packing plant just 5k away from the original unit.

Scenario
While the original site would remain manual handling small volume lines the new site would be a fully automated state of the art egg packing plant to deal with the number of variations in packs for larger customers. However, with 25 different configurations of egg boxes Ballygarvey needed an automated line which was reliable, high speed and, above all, flexible to deal with the changing demands from supermarkets.

Solution
Once all the eggs, within the new Ballygarvey site, are checked and graded, and packed into egg boxes via Moba systems they are run through one of two packing line types. One is low speed manual operation with workers manually erecting outer boxes and filling them, via six packing lines with egg boxes. The second line features RACE - a random automatic case erecting system designed by Endoline - which feeds formed outer boxes to a further six packing lines, which are operated by robots. Once all the cases of eggs are filled at the 12 packing lines they ALL feed into the Endoline 744 fully automatic case sealer – at a rate of 126,000 eggs per hour.

Results
- Sealing from 12 separate packing lines
- 126,000 eggs packed per hour
- Automatic random adjustment to deal with 25 different sized cases

“Our new facility is the high-spec packaging plant I envisaged and it offers Ballygarvey scope for future growth, and all of the systems have contributed towards this” Mark Davison, Managing Director of Ballygarvey Eggs