

AGGREGATES

Two Form Fill Seal Bagging Lines



THE CLIENT

Derbyshire Aggregates was founded in 1984 built with a reputation of problem solving, sourcing the unusual and processing difficult materials. They initially started as locally based merchant however due to dynamic growth, the company has now secured itself as an industry leader in aggregates. Their products are exported globally and contribute to a vast array of applications such as landscaping, decorative surface dressing for resin bound applications, surfacing driveways, pebble dashing and flooring in addition to the extensive specialist aggregates.



THE CHALLENGE

- Derbyshire Aggregates required a integrated system capable of doubling their packing rate with enough throughput to satisfy a growing customer demand for their quality, decorative aggregates.
- To reliably and accurately fill 20kg & 25kg bags with abrasive decorative aggregates at a high speed.
- The high speed bagging machine must be able to fit into the limited space available.
- To be able to have fully automatic bagging without any manual intervention to maximise their OOE (Overall Operating Effectiveness).
- To be able to respond immediately and economically to peaks in demand and avoid the cost of adding an additional shift.



THE SOLUTION

- We recommended utilising Form Fill Seal Technology to deliver cost effective, high throughput bagging at an affordable price.
- Two Hi-speed Form Fill Seal machines which can produce 20-25kg pillow or gusseted bags in machine with Ropex sealing systems.
- The FFS velocity has a high throughput of 950-1100 bags/hr.
- Highly accurate bagging of dry free flowing aggregates at +/- 1%.
- One surge hopper to receive product from Derbyshire Aggregates inclined belt conveyor or buffer hopper.
- One automatic volumetric product doser.
- Robust heavy-duty mild steel frame suitable for industrious environments.
- One mild steel bag forming tube sized to fit the 25kg flat bag.
- One PLC operators touch screen control panel with 44 pre set packing recipes.



THE RESULT

- The Form Fill Seal system is a self contained, modular machine which occupies less space than a conventional auto bagging machine with it's automatic bag placing and closing mechanism and conveyors.
- The Form Fill Seal system saves on the consumption of plastic film as it makes a shorter bag with smaller ullage between the product in the bag and the top seal.
- To improve presentation of the bags on the pallet, the FFS Bagger automatically makes bags with a side gusset and squarer ends.
- The Webster Griffin FFS Velocity Bagger runs fully automatically without an operator in attendance – as reel of film lasts for hours.
- Zero dust emissions – the 'continuous flow principle' of the FFS Velocity means that the passage of powder is totally encapsulated inside the bag forming tube and hence it's dust free.

AGGREGATES

Two Form Fill Seal Bagging Lines



