

ENERGY AND RESOURCE EFFICIENCY

CASE STUDY

Brow Packaging

THE COMPANY

Brow Packaging is a family run business which was established in 1943. It employs 58 staff in Belfast and manufactures film products such as shrink film and bags.

The company supplies a wide range of packaging, catering disposables, paper hygiene and cleaning products across multiple industry sectors. A substantial proportion of business turnover comes from exporting manufactured goods to Europe and its key markets are within the food, industrial and pharmaceutical sectors.

THE CHALLENGE

Brow Packaging wanted to make resource efficiency savings throughout its operations to reduce raw material costs, prepare for Brexit, protect jobs and create further job opportunities for the future.

The company had a project in its manufacturing-extrusion department that operates six extruders, 24 hours per day, six days a week. This department manufactures film wound onto compressed cardboard cores. The length of every core is unique for every customer and to each job operating on each machine and multiple cores can be used on each machine at a time.

Cores are cut to suit each job from standard length 1500mm cores purchased by the company. If a job required a 600mm core the existing machine produced two cores out of the original core using up 1200mm and the remaining 300mm was scrapped.

The scale of wastage was multiplied by the fact that up to four cores were used every 10 minutes on one machine. The company were wasting at least 30% of all incoming core materials. Although the cardboard waste was being recycled, the company wanted to adopt a more resource efficient waste management practice by preventing the waste in the first place.

This project aimed to significantly lower the consumption of raw materials by reducing the volume of cardboard cores wasted in the process while at the same time removing paper dust from the cutting process.



THE SOLUTION

The solution required capital investment and the company approached Invest NI for assistance through its Resource Efficiency Capital Grant Scheme to purchase a unique patented core cutting and jointing machine.

A successful application for 40% funding towards this project was made in April 2017 and the company installed the new system by February 2018.

The new machine cleanly cuts cores and extracts any paper dust to a hopper. Once it gets down to the remaining offcut, it joins the offcut to the next new core with an integral taping function. The machine cuts the next core which includes the area securely joined, thereby removing all waste.

THE OUTCOME

The new machine saves the company approximately 85% on its current core waste. The remaining 15% waste relates to damaged extrusion cores and cores from the conversion operation which are recycled.

With a capital investment of £29,657 the new cutting machine prevents the purchase of 7,385 cores and raw material savings of £16,985. The company also save on skip recycling costs providing a further £1,043 saving. This produces annual financial savings of £18,028 with a payback in just over 18 months.

By investing in this technology Brow Packaging have released resources and space as well as improving cash flow. This will enable the company to invest in future sustainability projects that will reduce the volume of plastic raw materials purchased.

“The resource efficiency capital grant has enabled us to make significant savings by reducing our raw material costs through reducing waste. This has also led to the increased quality of our manufactured goods, freed up space in our raw material areas and a cash flow saving which has enabled us to invest in further machinery improvements.”

Jamie Brow, Managing Director

Contact the team today - E: ere@investni.com T: 08001814422 W: www.investni.com

