# Finding savings in unexpected places

## It's not just older assets which can be improved



**Looking for cost savings and efficiency improvements is an important part of operating and maintaining your assets. But have you ever thought that, for the most cost-effective and quickest return on investment, you could be looking in the wrong place?**

You may think that older assets will provide the greatest opportunities for enhancing efficiency and recouping maintenance costs. But as ERIKS proved to a major breakfast cereal manufacturer, even newer machines can offer scope for substantial savings – in costs, carbon emissions and downtime.

For this customer, the fact that the asset is crucial to the production process, and operates 24/7, made the risks slightly higher. But the far faster Return on Investment made it all worthwhile.

### Challenge

The customer was looking for efficiency improvements and cost savings across their plant. Although the extruder system was relatively new, ERIKS believed there could be savings to be made on compressed air use. In addition, one of the older crimpers was repeatedly jamming, causing production downtime.

And lastly, because the asset was relatively new, the customer was still sourcing replacement parts from the original equipment manufacturer (OEM). These were priced at a premium, and coming from suppliers in Europe meant longer lead times too.

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Industry sector:
**Food & Beverage**

Application:
**Extruder**

Actual saving:
**£26,660 p.a.**

Payback period:
**Immediate**

**Product/Service:**

- Flow Control
- Compressed Air Optimisation

**Customer Benefits:**

- Energy savings
- Shorter lead times
- Reduced carbon footprint
- Cost effective replacements

## Solution

ERIKS' first step was to fit a pulse air valve to the extruder's crimper head, to reduce the amount of compressed air required. Although this was generally an immediate success in terms of compressed air usage, there were still issues with the older crimper.

Temporarily increasing the compressed air pressure would unblock it, but this wasn't possible with a pulse air valve fitted. As the machine was still set to the OEM's operating parameters, the engineering team felt it should be possible to operate at a lower air pressure overall – and without a pulse valve. This would not only reduce costs but also complexity.

To help the customer avoid premium OEM pricing, ERIKS worked with a partner fabrication supplier based in the UK. Each of the 16 extruder nozzles was costing the customer £384 for a replacement from the OEM. ERIKS' fabrication partner designed a number of lower-priced alternatives.

The OEM compression fitting was similarly premium priced, and the OEM supplied a complete replacement even when only the compression olive failed. ERIKS looked for a lower-priced, more reliable fitting.

> "however new - or old - your assets may be, there are nearly always savings to be made if you know where to look."

## Result


By experimenting with a gradual reduction of compressed air pressure – first with the pulse valve in place, and then without – compressed air usage was brought down from 265cfm to 147cfm. This represents a cost saving of £15,660p.a., and a reduction in carbon emissions of 20.3 tonnes a year. In addition if there is a crimper blockage, the pressure can easily be temporarily increased to clear it.

After a successful trial of alternative extruder nozzles, the customer chose a newly-fabricated version from ERIKS, costing just £188. This generates savings on replacements of £9,500p.a. Lastly, ERIKS sourced a lower-priced compression fitting from a UK supplier, which also allows for replacement of the olive alone. This saves the customer £1,500p.a.

As the customer is about to install an identical extruder, the improvements can be carried over to the new asset – doubling the savings already made. So however new – or old – your assets may be, there are nearly always savings to be made if you know where to look. And you know you can find the know-how at ERIKS.