

# CASE STUDY

# MAP

# QUALITY

# ASSURANCE

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"Our investment will be recovered within eight or nine months" – Jens Damgaard Hansen, Skare Director.

## Top-quality meat producer opts for on-line gas analysers

### Skare

Skare is one of the leading producers of fresh beef products in Europe. The company, whose headquarters are in the small town of Vejen in southern Denmark, supplies high-quality cuts of beef to the retail and catering trade throughout Europe and the rest of the world. Each year the company debones some 450,000 pieces of beef quarter, producing nearly 50,000 tonnes of meat at its main factory in Vejen, where 425 people work.

### Stringent demands

"35 per cent of our sales are to the Danish home market, and 65 per cent to the export market. We have an annual turnover of around 230 million euros," says Skare Director Jens Damgaard Hansen. "Retail is a growing part of our markets and retailers are making increasingly stringent demands on quality and consistency as well as safety and hygiene," adds Hansen. "While some countries in Europe have historically had very stringent criteria, this is now being seen throughout the rest of Europe."

### Modified Atmosphere Packaging

Many of the products are packaged in sealed containers under a modified atmosphere of carbon dioxide and oxygen. "Modified Atmosphere Packaging [MAP] extends the shelf-life of the meat for around seven to nine days," says Hansen.

"If you did not use MAP the shelf-life would be around 24 hours only." In addition, MAP improves the freshness, appearance and texture of the meat products.

The company produces some 40-50,000 packages each day on four MAP lines. It



Skare factory, Vejen, Denmark



is crucial that the correct gas mixture is present in the sealed packages and this must be monitored in a reliable and efficient way.

#### On-line gas monitors

This is why Skare has just installed new on-line gas monitors on each of its four MAP packaging lines. The machines are CMV-2 analysers provided by the specialist Danish company PBI-Dansensor. The analyser works by continuously measuring the gas content of the packaging chamber before the packages are sealed.

"Previously we carried out manual testing of the packages," explains Hansen. "This involves stopping the packaging line, removing a package for testing, then

starting the line again once the test has confirmed that the gas mixture is correct." If the mixture is not correct, the packages that have come through the system since the previous test need to be repacked.

"The main problem is that this results in significant lost production time, given that we were taking around 100 samples daily," Hansen says. "Also if a problem is detected the repackaging also results in lost production time and waste."

The new machines get around this problem

by constantly monitoring the gas mixture. If a problem is detected the line is stopped automatically. "By having 100 per cent continuous measurement we no longer have to stop the line for testing," says Hansen. "This will not only improve our quality assurance systems, importantly it will save us money. Because we can run the lines continuously this makes the production more efficient with fewer stoppages and less waste and I estimate that our investment in this new technology will have been repaid within eight to nine months."



*CMV-2 - Analyser designed for use with thermoforming (TFFS) and tray sealing machines equipped for Modified Atmosphere Packaging. The analyser works by measuring the gas content non-destructively before sealing the packages.*

### Quality is the key

If there is one aspect of Skare that matters to them above any other it is quality. "Quality is paramount," states Director Jens Damgaard Hansen. "We select our suppliers very carefully and we apply extremely stringent quality criteria to our materials. Quality is a major part of our brand and top quality is our key priority." This philosophy is reflected in the company's quality assurance statement. "The quality objective of Skare is to develop, produce and supply beef and veal of high, uniform quality while maintaining the very highest hygienic standards. The purpose of this objective is to fulfil customer requirements through perception of the company in terms of quality, hygiene and food standards." To achieve this goal, individual production processes are organised to give faultless products, the quality system being designed to prevent the occurrence and repetition of faults.

The installation of four new PBI-Dansensor CMV-2 on-line gas analysers on the company's MAP production lines will play a major part in maintaining the company's commitment to the highest standards of quality.