



WHEN THERE ARE NO COMPLAINTS

Is it possible to bring not just the control function, but also staff onboard in addressing product quality? Oleg Simkin, Vice President of Europlast, is sure that it is. In his interview, the top manager spoke about his experience of implementing quality management tools in the company.

Europlast is a Russian company producing PET preforms, plastic packaging and polymer packaging. The association comprises seven plants located across Russia, including a plastic recycling plant, a plant producing new polymers, and an outsourcing enterprise manufacturing screw caps for TetraPak. In 2020, the company announced that it had achieved a record low number of complaints from consumers and partners.

Why is quality management a relevant topic for Europlast enterprises?



OLEG SIMKIN

Vice President of Europlast

It is Europlast's long-standing area for development. In 2008, we became the first company in Russia to implement FDA (Food and Drug Administration) standards. For 12 years now, seven Europlast plants have been audited annually by the US Food and Drug Administration to assess our compliance with international requirements. The requirements of FDA standards are constantly tightening and evolving in response to consumer demands, the emergence of new materials, and government regulation measures. Improving product quality and minimising the number of customer complaints is one of the steps needed to confirm that the company's practices meet the international level. Our ambition is to achieve zero complaints.

To work towards this goal, the company has revised its quality management system. Currently, all Europlast units are responsible for this metric.

Which quality management technology has Europlast selected?

We have analysed approaches to quality management and selected the tools that are convenient and effective. For example, we have adopted the 4M (man, material, method, maintenance) production anomalies analysis method from the lean production range of tools. This method of case analysis is used by focus groups formed at plants. These groups comprise shift leaders, shop managers, senior supervisors, heads of maintenance and quality assurance functions. A defect may have different causes, so we analyse each case in detail. The ideas expressed undergo statistical analysis and are translated into numbers and a sequence of steps.



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The Cp/Cpk statistical control indices are implemented at the company's production lines. They do not evaluate every single item, but the process of finished product manufacturing, and manage deviations in the production process. The Cp/Cpk index reflects the stability of the measured parameter (geometric dimensions, technological characteristics, etc.) and shows how close the values obtained for the period are to tolerance limits. Index monitoring allows us to identify anomalies and start root cause analysis before the controlled parameter is out of tolerance.

EUROPLAST'S AMBITION IS TO ACHIEVE ZERO COMPLAINTS

Another technology adopted at Europlast plants involves Industry 4.0 tools. I'm talking about the machine vision system, which controls equipment performance by evaluating product parameters. The system's scanners can read the number of a preform with minor deviations from the standards and determine its mould of manufacture. This same technology rejects products if they do not match a pre-programmed template. Machine vision identifies such occurrences with 100% accuracy.

A further area of work is the selection of partners to supply feedstocks of the required quality to our production sites. One of them is SIBUR: its products always meet the stated specifications.

This is far from an exhaustive list of the entire range of technologies used at our plants.

What difficulties did you face when implementing new quality management mechanisms?

It was a long and difficult journey. The production process had to be revised, and capital investment was required. But the most difficult thing was to change the staff's perception of the issue. It was not easy to convince people that all production employees using energy, consuming materials or operating equipment are responsible for quality. Guidelines, incentives, organisational efforts and role modelling by managers have enabled this mindset shift. Today, the quality control team is at the end of the production chain, and the efforts to improve product quality and eliminate defects have become a production habit.



The company uses a multi-level quality control system for its products.

How close is Europlast to its zero complaints target today?

We should never stop our efforts in this area. Today's success does not guarantee tomorrow's results. However, we have a reason to be proud. Europlast cooperates with a global manufacturer of aseptic packaging, who has been producing caps at our facilities since 2007. Over the past five years, the company has had no complaints from the customer, i.e. no defective products have been shipped.

All the same, customer feedback is very important. Our customers' and partners' expectations form the basis for methods to improve product quality.

To what extent is Europlast's experience applicable to other enterprises?

I believe that it is relevant for any company in the PET industry that cares about product quality. I am confident that holding regular focus groups and inviting experts on a regular basis are key to conducting comprehensive analysis, designing strategies and developing problem-solving methods. It is important that each employee believes in what they are doing, understands the importance and significance of their work, and starts to focus on the end result. It can be achieved at most enterprises even without major investment.

Please tell us how the company is doing during the pandemic.

Our industry has been affected by the decline in consumer demand. Nevertheless, Europlast is exploring ways to overcome these difficulties. Despite the coronavirus-related restrictions, this year we were able to launch new products.

