1. Organization profile

Bahlsen is a German family business, originating from Hanover, that has been producing biscuits for over 130 years. The origins of the company date back to 1889, when Herman Bahlsen opened "Hannoversche Cakesfabrik H. Bahlsen" and employed ten people. It is worth mentioning the year 1905, when the first assembly line in Europe was introduced. The beginning of the 90s of the 20th century marked the beginning of Bahlsen's activity in Poland. In 1993, Bahlsen took over Skawińskie Zakłady Koncentratów Spożyczych, and 10 years later they launched a biscuit mix packaging plant in Jawornik. Today, more than 130 years later, the company has an international presence with its products employing around 2,500 people across the Bahlsen Group, including Poland's 500 employees. The diverse product portfolio ranges from classic biscuits and wafers, through seasonal products and cakes, to biscuit-based bars as well as organic bars. Internationally the products are marketed under the strong and popular BAHLSEN, LEIBNIZ and PiCK UP! brands. The group's portfolio also includes local brands such as KRAKUSKI, HIT and RAWBITE



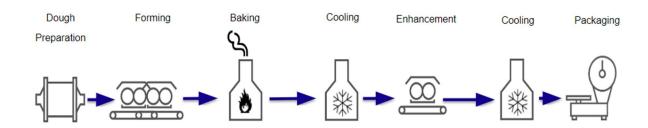
Every single part of the company focuses on quality. The high quality standards start with the choice of raw materials and apply equally to their processing, packaging and delivery.

Everything that is good, could be even better. Bahlsen sets this benchmark not only for its products, but also for all processes in the company. From purchasing and production to logistics and sales: the guiding principle that defines the company at all times is continuous improvement. In addition four values constitute the pillars of the organizational culture of Bahlsen Group: COURAGE, CURIOSITY, SUPPORT and AMBITION. They give employees direction to daily activities, give the strength and ability to develop the company and achieve its goals.





In the **Plant Skawina** – **Jawornik**, The biscuit production process begins in the dough preparation area, followed by shaping and baking. The next stages are the cooling of the cookies and their refinement, depending on the type of cookie, this is the dosing of cream or jelly, coating with chocolate, etc. After cooling the cookies again, they are packed in individual packaging and then collective cartons.



2. Milestones on the journey of Manufacturing Excellence



Bahlsen Polska (Plant Skawina - Jawornik) started TPM implementation under the name of "B.Excellent". The system is based on four key elements. We improve processes to get the best business results. We do this with the use of newly implemented digitization tools, using the competences of our employees.

In 2016, production results in Skawina were not good. To rectify this, a decision was made to launch the TPM program. Work began with a pilot phase in which the current level of losses and potentials was checked. This was done through two audits: "Production System Assessment" and "Loss/cost model". Due to the fact that the Production System Assessment turned out to be an effective tool for finding potentials. from now on, it is planned to carry out this diagnosis once every year. Thanks to Loss/cost model, we know what to focus on. Its development and analysis have been permanently included in the routines of the FI pillar.

The most important part of the inauguration of the new management system was Kick off, which we organized on a grand scale. We organized off-site workshops, to which we invited all managers and specialists from the area of the Supply Chain. We considered it extremely important to invite all key employees to co-create the program. During the workshops, everyone contributed to the creation of our vision. There was also a place for celebration. The workshop began with an Expose delivered by the Area Director. Support comes from the top.

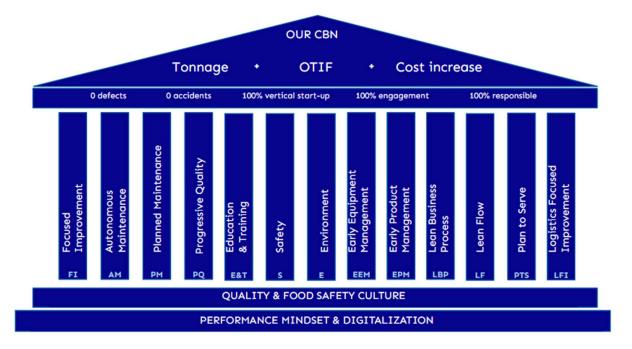
Next important element was the organization of benchmark visits. Key employees - from all levels of the organizational structure participated in visits to companies that have been working with the TPM program for many years. These were very inspiring meetings.

In 2017, pilot design teams and the Shopfloor Management program were established based on the indicated places for improvement. In the following years, the program expanded. Pillars were established, trainings were launched as part of the Green Belt Academy, and leaders' competences were

developed at the Leadership Academy. At the same time, the Bahlsen Smart Factory digitization program was launched.

In the expansion phase, inter-departmental teams counteracting individual losses, called pillars, were established. The main task of the pillars is to analyse losses, eradicate them and prevent their occurrence.

The pillars were launched gradually based on data from Loss/cost model and Production System Assessment. The pillar of Progressive Quality and Planned Maintenance was launched first. Then, it was Training & Education, Focused Improvement and Autonomous Management. Sequentially, the Safety Pillar, the Lean Flow Pillar, Early Equipment Management and Early Product Management were launched. Finally, the Environment, Lean Business Processes, Plan to Serve and the Logistic Focus Improvement were established.



3. Benefits Achieved

Since the launch of the B.Excellent program, a positive trend of many business indicators has been observed in our organization. During the implementation of the program, a number of activities were launched that resulted in the improvement of key KPIs.

This results over the years from a series of activities conducted by the improvement teams, which were focused on improvement:

- OEE increase
- Scrap decrease
- Reduction of number of breakdowns per year
- Reduction of technical issues
- Increasing problem solving competencies
- Service Level increase
- Learning curves realization increase (EEM vertical start-up)

For our organization, other important indicators for the development of the B.Excellent program are: - engagement in TPM program among all employees

- implementation of steps by AM teams
- number of launched projects and other improvement teams

Company & plant name	Bahlsen Polska spolka z ograniczona odpowiedzialnoscia Sp. k. Plant Skawina - Jawornik	
TPM Slogan/Objectives	B. Excellent	

Category	Index	Unit	Kick off/TPM Started	Actual Status (2023)
S	Number of work-related accidents requiring days off work	Cases/ year	16	3
s	Frequency rate	1000-man-quota occupational accidents with lost time	30.25	5.13
P	Productivity index (from TPM Start) SKAWINA	kg/labour (direct) hour	100	175
P	Productivity index JAWORNIK	kg/labour (direct) hour	100	124
Р	OEE (or Overall Plant Efficiency)	%	89	91.7
Р	Volume Skawina + Jawornik	tonnes	30270	31961
P	Complexity Rate	tonnes/recipes	259	544
P	Number of breakdowns	Breakdowns/ year	1428	467
Р	МТВГ	Hour	29	60
Р	MTTR	Hour	1.1	0.7
Q	In-line defect rate (scrap + rework)	%	4.29	2.04
D	Avaiilability Index	%	79.1	92
М	Engagement index (in TPM program)	% (engaged / total number of employees)	15.3	85.14

4. Key of our Manufacturing Excellence

The direction in achieving our goals is given by the consumer, to whom we want to provide added value in the form of our products - in the best quality, time and price. To achieve this, we must constantly improve our processes, collaborate better, increase efficiency and reduce costs. For this we need the B.Excellent program, which continuous development is possible thanks to:

- involvement of all employees, "Inspire instead of order" attitude
- strengthening employees' sense of responsibility

- focus on teamwork and the involvement of each employee
- building a "zero loss" culture that improves business results
- a clear direction and strategy for action in the long term
- digital solutions enabling the provision of reliable data on a continuous basis, both for people working on the line and for people managing the area.

With the support of digital solutions, we work on a continuous, measurable, enterprise-wide and results-oriented system of Continuous Improvement. It will support our processes so that in the future we can make decisions based on numbers, data and facts, and predict our production results more precisely. Ultimately, we want our Supply Chain to generate continuous business growth for Bahlsen Group.

The base of our long-term strategy is CBN (Compelling Business Needs). It is an overarching, long-term goals that set the direction for all activities in the organization.

The B.Excellent Program is subject to constant expansion. We started our adventure in the "Factory Operational" environment, the so-called level 1. We are gradually extending the "excellence" approach to subsequent levels of the Supply Chain: "Integrated Supply Chain", the so-called level 2. Finally, we aspire to extend the B.Excellent program to the entire Supply Chain: "Extended Value Chain", the so-called level 3.