

# Company Profile Sigma Alimentos Lacteos S.A. de C.V. Celaya Plant 23034, Guanajuato, México 22 January 2024

"Award for Excellence in Consistent TPM"







#### 1. PLANT PROFILE

**1.1.** Founded in 1974, ALFA is a Mexican company of worldwide recognition. We manage a portfolio of leading global businesses in the food and petrochemicals industries.



Leading producer of PTA, PET & EPS worldwide.



Leading multinational food company, that produces, commercializes, and distributes cooked & fresh meats, dry meats, cheese, yogurt, other refrigerated, frozen and plant-based foods.

#### ALFA has a presence in:

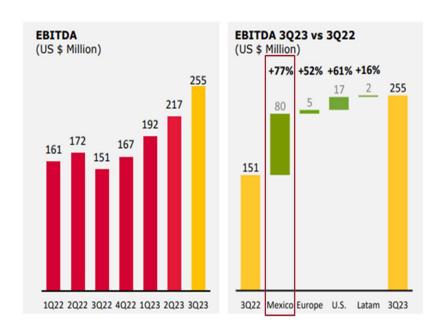








Currently, with the contribution of Sigma's plants in Mexico, there was a 77% increase in EBITDA in the 3Q2023 compared to the 3Q2022:

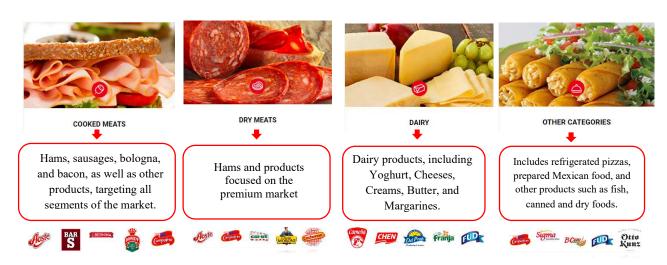


In 1980 ALFA acquires Brener, the origin of **Sigma Alimentos**. Thanks for its fast growth, in only six years ALFA becomes one of the most important companies in Mexico.





## Our wide variety of products by brand or category







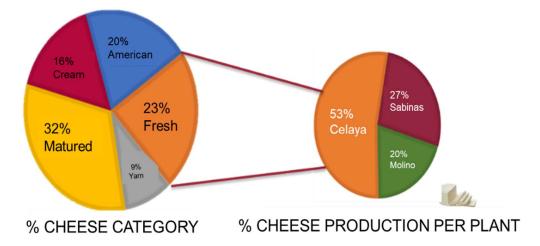
# Extensive supply chain and distribution network



#### SIGMA CELAYA PLANT

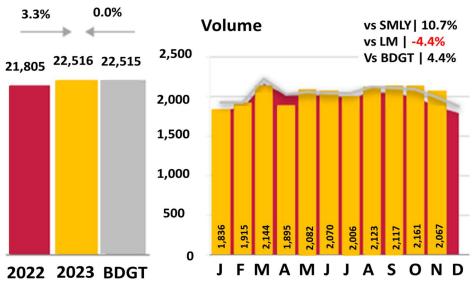
1.2. Our plant was built in 1977 for "La Mesa" food company; in 2001 acquired for New Zealand Milk Mexico, then in 2005 became part of SIGMA ALIMENTOS, later in 2010 started the implementation of work systems such as high-performance equipment and Take 2 Security Program, in 2013 start-up of TPM and pilot equipment.

Our Sigma Alimentos Celaya Plant contributes 53% of the total volume in the fresh cheese category of all Sigma Alimentos Dairy Products Plants.









We produce Fresh Cheese and our financial goals in plant are aligned to the company strategic business plan. Talking about process technology we include few automated areas, most of them are still hand-made.



We have flexible lines where we can change flavors or forms to satisfy our consumer's needs.







Our volume has been increasing year by year, since 2013 with the most pronounced growth when we started with the TPM methodology. TPM helped us to improve our processes and eliminate losses.

#### **OUR PRODUCTS:**



#### 2. MILESTONE ON THE JOURNEY OF MANUFACTURING EXCELLENCE

- **2.1** The main reason why we acquired TPM in our Celaya plant is that we did not have a solid or organized work team, we had a lot of waste, many of which were not accounted for or measured, we did not meet the service levels, we had machines with very low efficiencies, there were unnecessary expenses, unplanned repairs, constant and costly machine stoppages and the worst part of this is that we did not know how to start acting and even less how to identify the root cause.
- **2.2** We have an artisanal operation with several pieces of equipment with an average of 44 years old, they were not given preventive maintenance, so the losses were uncountable, the personnel





did not know their machine and waited for it to be fixed, so the customer's requirements were not met.

- **2.3** The organization started with high performance teams attacking quality, safety, and cost issues, but the results were not so surprising. When TPM and the first pilot teams arrived, a transformation, a structure and a more solid system began, achieving more favorable results.
- **2.4** In 2013 the TPM Kick off was carried out with 4 autonomous maintenance pilot teams, currently we have 23 teams, and we are developing more generations. In addition, we began to integrate multidisciplinary teams for the solution of the main losses of the plant, acquiring experience and anticipating obstacles in the implementation.













**2.5** After years of learning the methodology, in 2020 we obtained the Excellence Award, category A, thanks to our commitment to maintaining and improving our results, as well as the collaboration and enthusiasm of the personnel working at the Celaya Plant.

The TPM path has been very satisfactory as the staff has acquired a new culture in Genba, which we continue to work on, as well as the staff of the other pillars with a better focus and motivation to meet the results of the strategy and the company.





#### PARTICIPATE IN TPM AWARDS



**HEALTH CHECK** 



**EXCELLENCE AWARD 2020** 



In 2020, faced with the threat of the global pandemic caused by COVID-19, it was thanks to the solid and systematic organization achieved with TPM that we were able to avoid risks to the health of our employees and continue with the supply of our products in supermarkets, guaranteeing the availability of food in those difficult times. And now, in these years, we are once again on our way to obtaining the JIPM Consistency category award.

#### 3. BENEFITS ACHIEVED

- **3.1** In the TPM path we have achieved benefits that we did not believe possible. The change of culture can be perceived since the operators use a more technical language, they talk about breakdowns, unscheduled stops, poka yokes, they have learned to solve problems autonomously, they did not have such a close contact with the machines, now they are owners of them. This has allowed us to challenge ourselves to change our work and training schemes.
- **3.2** The implementation of methodologies has been an important key to identify our main losses and attack the root cause, these have been developed by more personnel from different areas, the degree of complexity has increased from excellence to consistency, thanks to that we are better able to eliminate the loss with more focus and not repeat the causes.





**3.3.** We have had benefits such as a 85.7% decrease in lost time accidents, increased equipment efficiency, customer complaints have decreased by 80%, quality failures have decreased considerably, internal defects are measured in the lines, breakdowns have decreased 43% positively, we have a sustainable approach such as the use of recyclable materials in our packaging and the decrease in energy and water consumption.

#### 4. KEY OF OUR MANUFACTURING EXCELLENCE

- **4.1** Ensure the strategies and objectives set out in the Hoshin kanri and cascade them from management down to the operators.
- **4.2** Implementation of risk analysis and a preventive system for the total elimination of accidents within the plant.
- **4.3** Implement and have better tools to attack complaints and quality defects on the line, implementing improvement projects to reduce shrinkage and rework.
- **4.4** Promote and encourage the nationalization of domestic tools, as well as reduce inventories in the warehouse and reduce maintenance expenses.
- **4.5** We are committed to the development of skills and knowledge of our employees, as well as the participation of 100% of our collaborators.
- **4.6** Continue with the autonomous maintenance steps to maintain and improve your standards to complete these steps and achieve the 4 zeros.
- **4.7** Currently our vision is to expand our reach to suppliers and customers, having a robust and efficient system to identify and eliminate losses with implementation and improvement projects.
- **4.8** Start with lead time in the process to reduce downtime, increase capacity and gain a competitive advantage in the supply chain.
- **4.9** With early management continue with the development of PM sheets for new equipment and products to have an adequate investment.
- **4.10** A new concept that is being implemented is the OPE, which will allow us to identify the losses in the previous process in order to attack them.





#### 5. ACHIEVEMENT RECORD

#### 5.1. TPM Award Assessment Achievement Sheet

## 2023 TPM Award -Achievement Sheet

Company	Sigma Alimentos S.A. de C.V.			
Plant name	Sigma Alimentos, Celaya Plant			
TPM Slogan/Objectives				
Year when TPM activity started	Kick Off 2013			
Year of benchmarking	2020			

Category	Index (Calculation Formula)	Unit	Last time awarded	Actual Status	Target
			Year 2020	Year 2023	Year 2023
S	Number of work-related accidents requiring days off work	Cases/ year (Acumm)	7	1	0
S	Number of work-related accidents not requiring days off work	Cases/ year (Acumm)	24	10	0
Р	Productivity for main products	Pieces/person (AVG month)	6544	7259	7277
Р	OEE	% (AVG)	80.1%	82.1%	83.0%
Р	Availability	% (AVG)	91.1%	87.3%	87%
Р	Performance Rate	% (AVG)	88.9%	95.5%	96%
Р	Quality Products Rate	% (AVG)	100.0%	99.5%	100%
Р	Number of breakdowns	Breakdowns/ year	35	20	6
Р	мтвғ	Hour	470	554	597
Р	MTTR	Hour	1.88	0.91	0.82
Q	Number of customer complaints	Number/year	15	3	1
Q	In-line defect rate (scrap)	% (AVG)	0.96	1.2	1.3
Q	In-line defect rate (rework)	% (AVG)	3.6	0.44	0.49
С	Cost index- Conversion Cost	Cost/Kilogram	0.74	0.77	0.75
D	Production Lead time	Hours	22.2	21.8	20.9
D	Delivery performance	%	91.6	93	98
S	Safety index	Accidents per 1,000,000 operator hours	18	0.92	0
М	Number of Employee Suggestions	Number/year	1151	2181	2484