

# Lean Champions – 2025 Annual Projects Summary

## Continuous Improvement through 5S & Kaizen



Annual ceremony – January 2026, Pravets

[www.lean.bg](http://www.lean.bg)

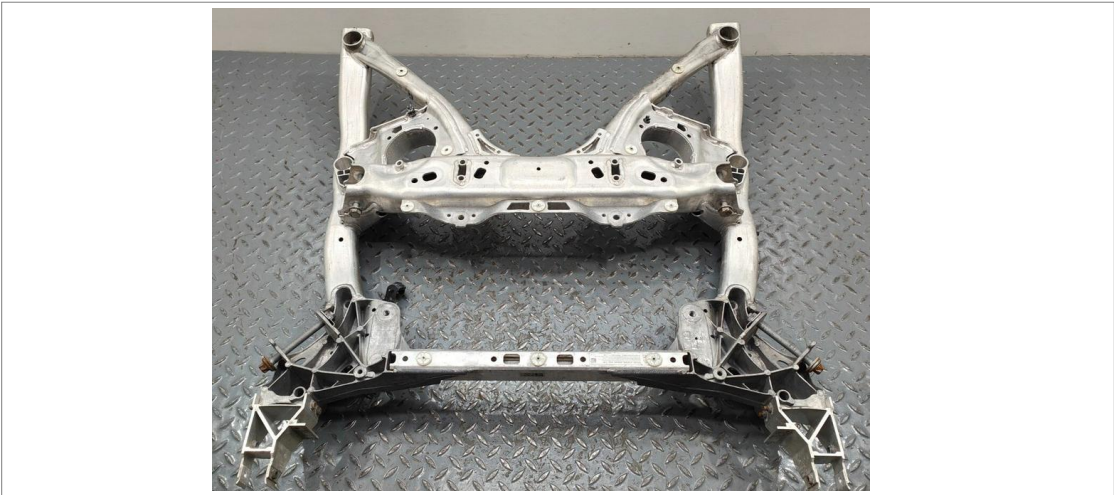
## Team



## Plant



## Products: Parts for Front axle carrier and battery pack



Total area: 370 000 m²

Total number of employees: 1322

Scope of activities:



Core Business:

- **Casting** (billets, slabs, coil casting)
- **Rolling** (cold-rolled sheets, strips, foils)
- **Extrusion** (standard and custom aluminium profiles)
- **Mechanical processing** of automotive parts and components

Customers:

BMW  
GROUP



ROLLS-ROYCE  
POWER CARS



KRAH  
GROUP

NEUMAN  
ALUMINIUM

kloekner metals

# Annual performance – KPI table



## Alcomet Automotive

| Quarters<br>2025 | 5S                       |                           |        |                  | Kaizen projects                     |        |       |        |            | Voting score  |                    | Quarterly<br>results<br>2025 |
|------------------|--------------------------|---------------------------|--------|------------------|-------------------------------------|--------|-------|--------|------------|---------------|--------------------|------------------------------|
|                  | First<br>audit<br>result | Second<br>audit<br>result | Target | 5S<br>score<br>% | KPI                                 | Before | After | Target | Score<br>% | Avg.<br>score | Avg.<br>score<br>% |                              |
| Q1               | 9%                       | 38%                       | 45%    | 84%              | Заети<br>палети                     | 182    | 96    | 98     | 98%        | 4.5           | 69.2%              | 83.9%                        |
| Q2               | 25%                      | 90%                       | 75%    | 100%             | АМ<br>изпълнен<br>ие на план<br>(%) | 0      | 8%    | 8%     | 100%       | 2.0           | 67%                | 89%                          |
| Q3               | 25%                      | 90%                       | 75%    | 100%             | АМ<br>изпълнен<br>ие на план<br>(%) | 8      | 24%   | 24%    | 100%       | 2.07          | 69%                | 89.7%                        |
| Q4               | 25%                      | 90%                       | 75%    | 100%             | АМ<br>изпълнен<br>ие на план<br>(%) | 24     | 64    | 64 %   | 100%       | ---           | ---                | ---                          |

Color indicator: above 90% | 80–90% | below 80%

Note: Final quarterly results are calculated as a weighted average of 5S, Kaizen and Voting scores.



# Q1 Kaizen Project – Problem, Scope and Targets



## Problem

### Defining the problem:

The inefficient process of supplying the Automotive Workshop, including the provisioning of all machines with the required profiles which leads to difficulties in effective and timely production, results in operational delays, increased costs, and potential production losses, as well as customer dissatisfaction.



## Project Scope

### Define the scope of the problem :

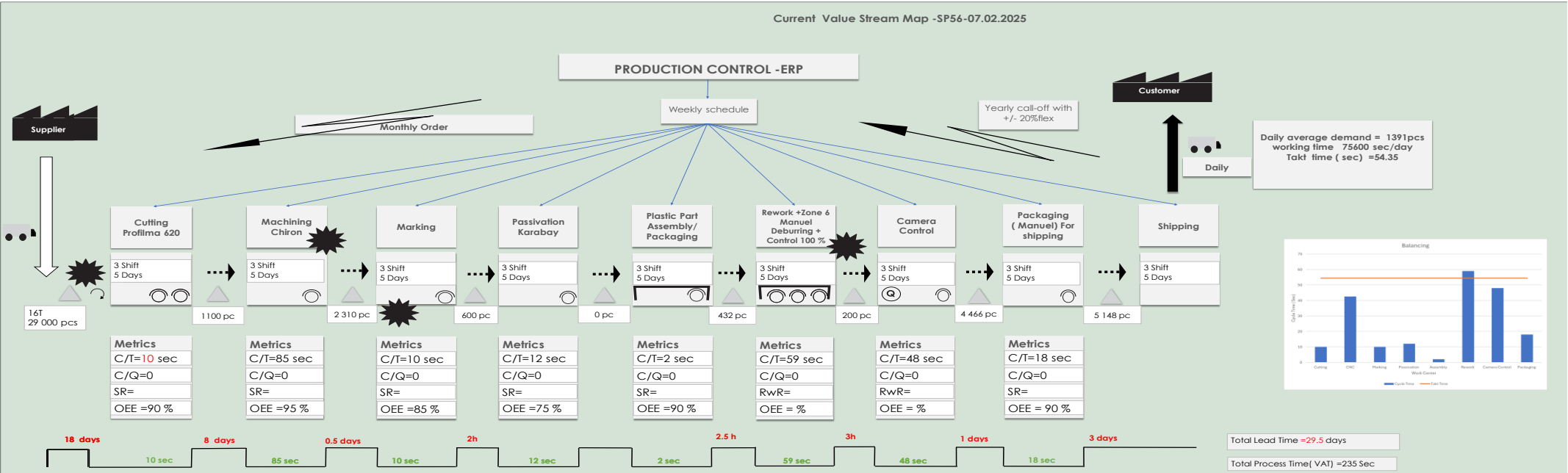
Improvement of the process for supplying the Automotive Workshop with the necessary profiles by optimizing planning and communication between departments, preparing a VSM for visual tracking of the process, and optimizing the delivery of profiles from the Extrusion shop.



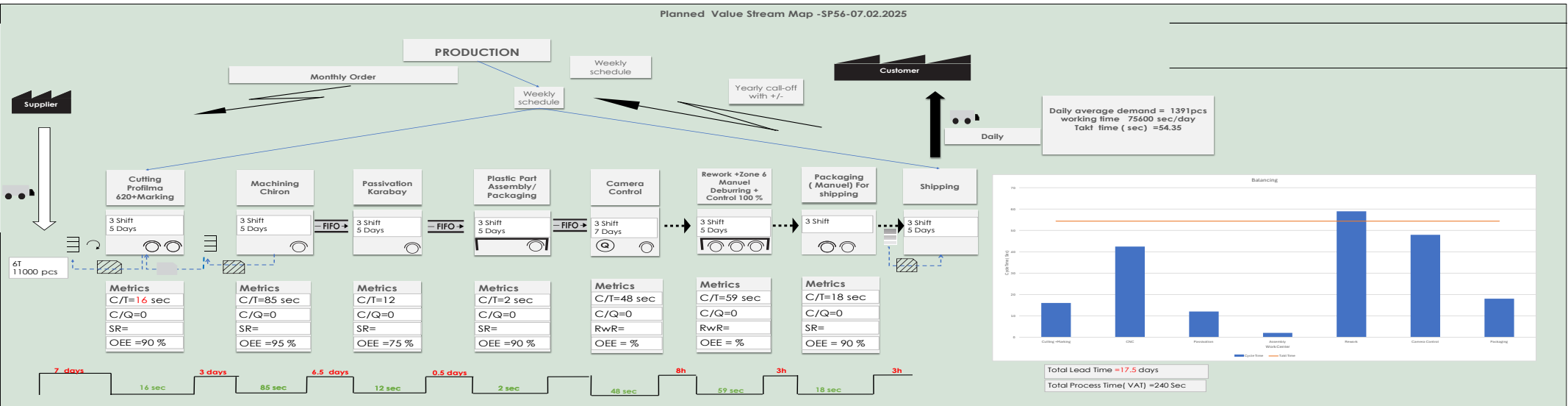
## Target and result

| KPIs                      | Measurement unit | Baseline     | Target        | Result    | Savings |
|---------------------------|------------------|--------------|---------------|-----------|---------|
| Used Pallet in production | pcs              | 182          | 96            | 98        | 22 000€ |
| 5S                        | %                | 9            | 45            | 35        |         |
| Loss of production area   | M <sup>2</sup>   | 236,5        | 124,8         | 127,4     |         |
| Period                    |                  | January 2025 | February 2025 | Mart 2025 |         |

# Q1 Kaizen Project – Before & After



**Before**



**After**

# Q2 Kaizen Project – Problem, Scope and Targets



## Problem

### Defining the problem:

In a period of expansion and investment in new equipment, the lack of a stable maintenance culture is becoming increasingly apparent. Although the CNC Heller 3 is a new machine, there are signs of premature wear and tear and accumulation of dirt. This indicates a lack of systematic maintenance and control.



## Project Scope

### Define the scope of the problem :

Increasing operator engagement through TPM (Total Productive Maintenance) Implementing in CNC Heller 3 **Autonomous Maintenance** will:

- Slow down machine amortization.
- Reduce future spare parts and repair costs Increase equipment useful life
- Free up maintenance department time and resources



## Target and result

| KPIs                        | Measurement unit | Baseline   | Target   | Result    | Savings |
|-----------------------------|------------------|------------|----------|-----------|---------|
| Autonomous Maintenance (AM) | %                | 0          | 8        | 8         | 8 000 € |
| 5S                          | %                | 25         | 75       | 90        |         |
|                             |                  |            |          |           |         |
| Period                      |                  | April 2025 | May 2025 | June 2025 |         |

# Q2 Kaizen Project – Before & After

**Before**



**After**





# Q2 Kaizen Project – Before & After

**Before**



**After**





# Q3 Kaizen Project – Problem, Scope and Targets



## Problem

### Defining the problem:

After the successful implementation of autonomous maintenance for CNC Heller 3, the project is being expanded to Heller 1 and 2 with the aim of standardization and sustainable implementation.



## Project Scope

### Define the scope of the problem :

Implementing Autonomous Maintenance for CNC Heller 1 & 2 will:  
Extend the service life of the machines  
Increase operator engagement through a clear structure of responsibilities  
Slow down machine amortization  
Reduce future costs for spare parts and repairs  
Free up time and resources from maintenance department



## Target and result

| KPIs                        | Measurement unit | Baseline  | Target      | Result         | Savings  |
|-----------------------------|------------------|-----------|-------------|----------------|----------|
| Autonomous Maintenance (AM) | %                | 8         | 24          | 24             | 15 000 € |
| 5S                          | %                | 25        | 75          | 90             |          |
|                             |                  |           |             |                |          |
| Period                      |                  | July 2025 | August 2025 | September 2025 |          |

# Q3 Kaizen Project – Before & After

Before



After



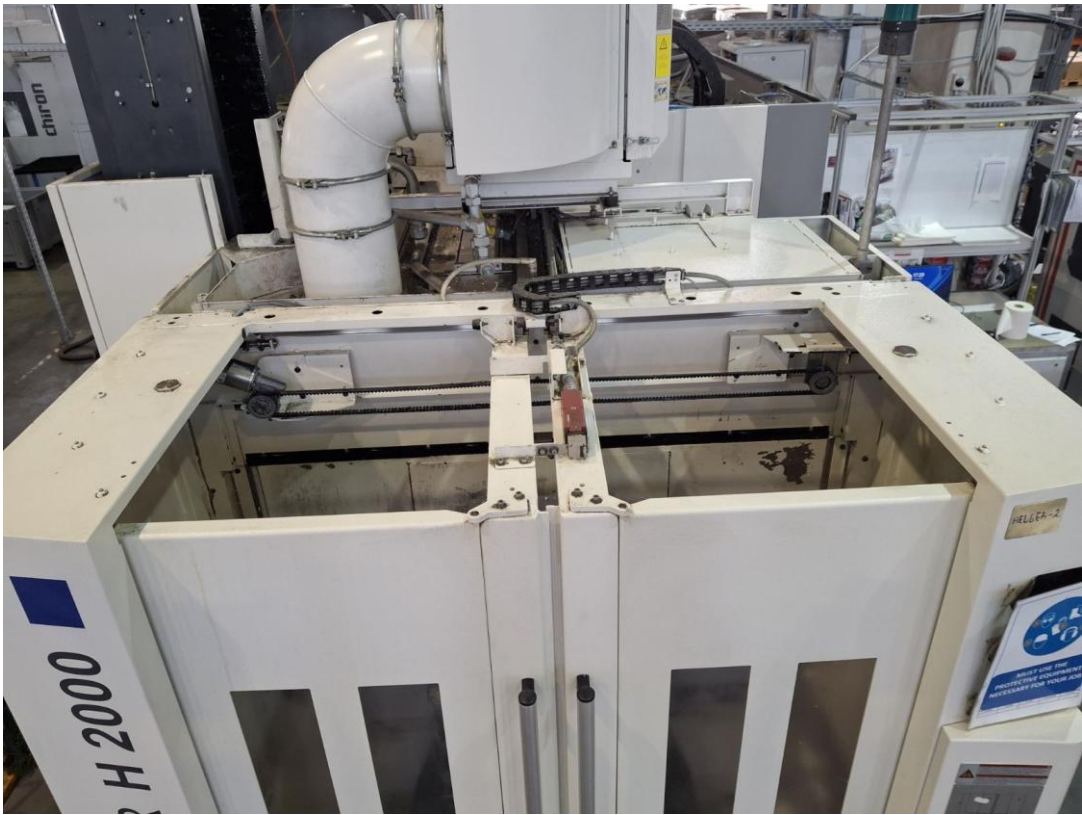


# Q3 Kaizen Project – Before & After

Before



After





# Q3 Kaizen Project – Before & After

Before

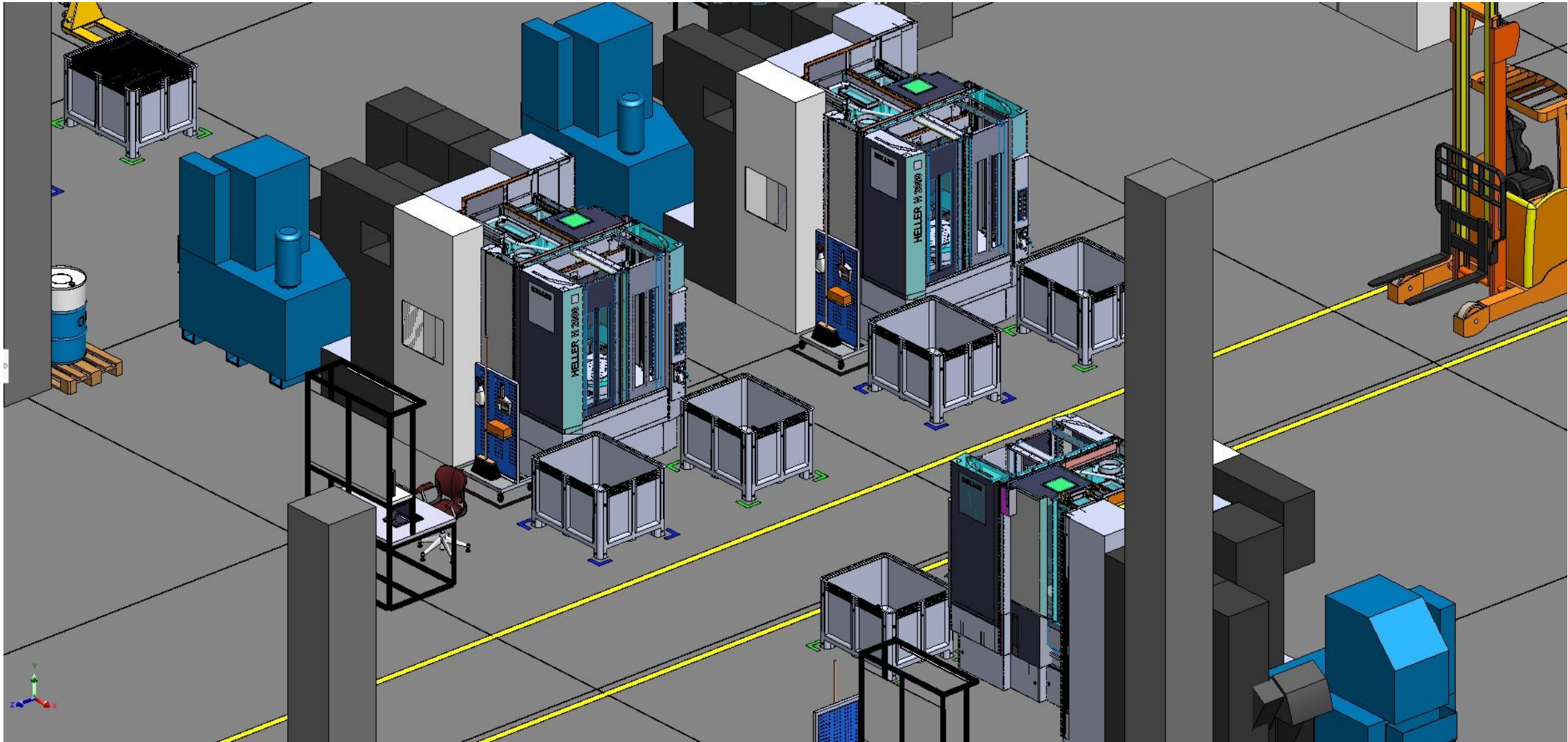


After



# Q3 Kaizen Project – Before & After

After Complete all Heller zones





# Q4 Kaizen Project – Problem, Scope and Targets



## Problem

### Defining the problem:

*During the machining of aluminum components on CNC Chiron, a significant volume of lightweight aluminum chips is generated. Due to their low density, these chips spread across the working area, frequently accumulating in critical zones such as guides, sensors, tooling interfaces, and robotic handling points. This results in rapid contamination and increases the risk of premature wear, unplanned stops, and quality deviations.*

*The machine operates with high autonomy through robotic loading, requiring minimal operator intervention. However, the absence of defined standards for cleaning frequency, ownership, tools, and duration has led to inconsistent execution of basic care tasks. Currently, there are no clear rules.*



## Project Scope

### Define the scope of the problem :

*This initiative directly supports Alcomet’s strategic focus on maximizing asset efficiency and strengthening operator ownership within the TPM framework. Implementing Autonomous Maintenance on CNC Chiron’s will reduce accelerated wear, extend equipment lifetime, and optimize maintenance resources, contributing to sustainable production performance.*

*Protecting assets today to safeguard productivity tomorrow.*



## Target and result

| KPIs                   | Measurement unit | Baseline     | Target        | Result        | Savings  |
|------------------------|------------------|--------------|---------------|---------------|----------|
| Autonomous Maintenance | %                | 24           | 64            | 64            | 13 000 € |
| 5S                     | %                | 25           | 85            | 87            |          |
|                        |                  |              |               |               |          |
| Period                 |                  | October 2025 | November 2025 | December 2025 |          |



# Q4 Kaizen Project – Before & After

**Before**



**After**



## 💡 What we have learned from our kaizen projects

### 1. Standards create freedom.

Clear work standards and visual management allow people to focus on solving problems, not surviving the day.

### 2. Gemba is the strongest communication channel.

Decisions taken close to the process are faster, more accurate, and respected. Leadership lives on the shop floor, not in offices.

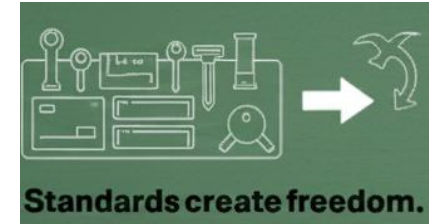
### 3. Culture beats tools.

5S, TPM, SMED — these are structures. The real enabler is mindset, consistency and respect.

### 4. If improvement stops, problems start.

Every day without Kaizen brings the process one day closer to failure. Progress is a habit, not a project.

- **Clean machine = clear mind = stable quality.**



## Summary of the main results and benefits of the year.

### Tangible (quantitative):

- 5S scores improved by +80%
- Reduced Breakdowns by 50%
- Saved 58 000 € in total efficiency gains
- Maintenance cost less
- Less spare parts in stock
- Less breakdowns on machines

### Intangible (qualitative):

- Higher motivation and engagement
- Improved workplace organization
- Clear workplace



# Benefits and Achievements



Example of a Skill Certification & Meister Qualification Board from Yamazaki Mazak. It visualizes operator skills, technical qualifications, and certified master levels, ensuring transparent competence management and supporting skill-based task assignment.”

| ヤマザキマザックグループ 技能士                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  | The MEISTER                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 一級以上は厚生労働大臣の認証を、二級は県知事の認証を受けた資格です。                                                                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 賞状受章                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 賞状受章                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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- Continue Kaizen training  
for all operators

**ALCOMET**  
PROVIDING OPPORTUNITIES



# Thank You

We would like to thank our management, colleagues, and Lean Champions community for their support and collaboration throughout the year.

