

**STAUFEN.**

# **OPERATION: FUTURE**



**MAQUET**  
GETINGE GROUP

# Lean Transformation in Rastatt

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The first heart transplantation operation, in 1967, was done on an operation table from Maquet. Roughly 50 years later, Maquet, a daughter company from the Getinge-Group have an ongoing operation themselves to be able to face and succeed the challenges in the future. The goal: still be one of the top players in the medicine engineering market.

When Maquet was founded in 1838, operations were still held without anesthesia and in poor sanitary standards. With the medical evolution, Maquet turned from a medium-sized operation table manufacturer to a market leader in the area of wide-ranging therapeutic solutions for the hospital sector. Nowadays Maquet belongs to the Swedish Getinge Group. Maquet turned into one of the leading companies in the highly growing medicine engineering branch by offering innovative therapy and infrastructure solutions in acute sectors of hospitals – such as operation rooms, hybrid op's/catheter laboratory, ICU (Intensive Care Unit) as well as patient transportation systems within the hospital.



An innovative, by the employees, designed assembly line according to the lean principles in the factory of Rastatt



## STARTING POINT

### A factory on the test bench

Dark halls with cranes and massive shelf racks. Hidden assembly boxes as workplaces for employees and a high amount of inventory. That was the Maquet factory in 2014.

Nowadays it is unrecognizable. The halls are light, neat and nearly clinically clean. The employee's workplace is, well visible for everyone, in the middle of the hall, the needed parts close at hand. Clear structures and visualizing boards convey transparency and openness. The times of long walks, tedious search for parts and waiting periods are over. Everything has his place, clearly marked with a yellow line on the light working ground.

But the changes are not only optical. The entire company, with all of their employees and managers, have been through a radical change process. The fundamental principles for co-working and organization alongside the value added stream was put on a whole new basis

“Everything should focus on the needs of the customer, whether it is about products, quality, timetables or cooperation issues.”

Sounds easy, but is isn't. Those who are active in the industry world knows how difficult it is for a company to adapt processes upon strong growth. High inventory, long lead time, double work, waste of time in up- and downstream processes – these are only a few of the problems that companies in Germany, even successful ones, have to deal with. Maquet didn't want to resign and organized the Lean Transformation. The motto:

“We make our factory in Rastatt ready for the future and one of the best factories in Europe.”

# PROCEDURE AND SOLUTION

## Towards top performance in 30 months

### The basis gets set up

With the decision taken to start the journey towards Lean Transformation, the Staufen AG was involved as a strategical partner in the company. With the task of support sustainably the cultural change as a process advisor, moderator and coach. The project had his commence in January 2015, and an overall duration of 30 months. The focus during the first phase was analyze, a successful placement of the Lean Management principles as well as the qualification of employees and managers. The first areas concentrated on were assembly and logistic.

### Proliferation of the areas

The affected areas, direct or indirect, followed in the second phase – from the product engineering up to the customer support. In addition, a continuous optimization of the assembly and logistic areas.

### Every area is involved

They took no prisoners at Maquet. Because Lean Transformation does not only take into account all areas of a company, it also takes into account the whole supply chain. Maquet set the basis for a connected factory with the new designed standardized processes of value added. Furthermore, they also set the basis for a new company culture, with more employee friendliness managing processes on all levels.

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Leadership optimization	Kick-off with all employees and managing parts		Management workshops 3x15participants		Introduction to shop floor management			5S in direct and indirect areas		Optimization Customer Support			Practical problem solution A3			
Added value optimization	Analyze/Business Cases		1 <sup>st</sup> Assembly system A pillar 1160		Qualification of KVP coaches			2 <sup>nd</sup> assembly system B 1160 transporters		Logistic optimization through milk run and supermarket			3 <sup>rd</sup> assembly system C 1160 storage area			
Months	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Leadership optimization	Sensitization for Product Engineering		Value added orientated Q-Management		Establishing the connected factory			Supply Chain Management optimization		Introduction of Lean Development			Second improvement cycle			
Added Value optimization	4 <sup>th</sup> assembly system G 1133 portable table		Repair Center optimization		5 <sup>th</sup> assembly system D 1180 storage area			Introduction Lean Administration		X. assembly system						

## RESULTS AND CONCLUSION

### The results exceed all expectations

The Maquet management attached the lean transformation to ambitious goals. But the results exceeded all expectations: The lead time was reduced from six days to one. The inventory was reduced by 30 percent, the space requirement even by 60 percent. The productivity of the assembly area was doubled.

“Same factory performance with lower resources – at Maquet, Lean has been successfully understood and implemented.”

Profound revolutions like this, can lead to resentment in the workforce. This wasn't the case at Maquet. The employee satisfaction has grown significantly. This is owed not least to the new leadership culture. Nowadays the manager understands themselves as facility managers, “people who make things happen”, as catalysts and being responsible to make the employees ideas happen. Each individual is involved to care about improvements. Because the problem solution competence has increased significantly, the management can react faster and more flexible to changes.

The Lean Transformation at Maquet is still going on and is seen as a Lean journey, which will continuously lead to more improvements.





Designed to optimize work processes: the new assembly line at Maquet

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