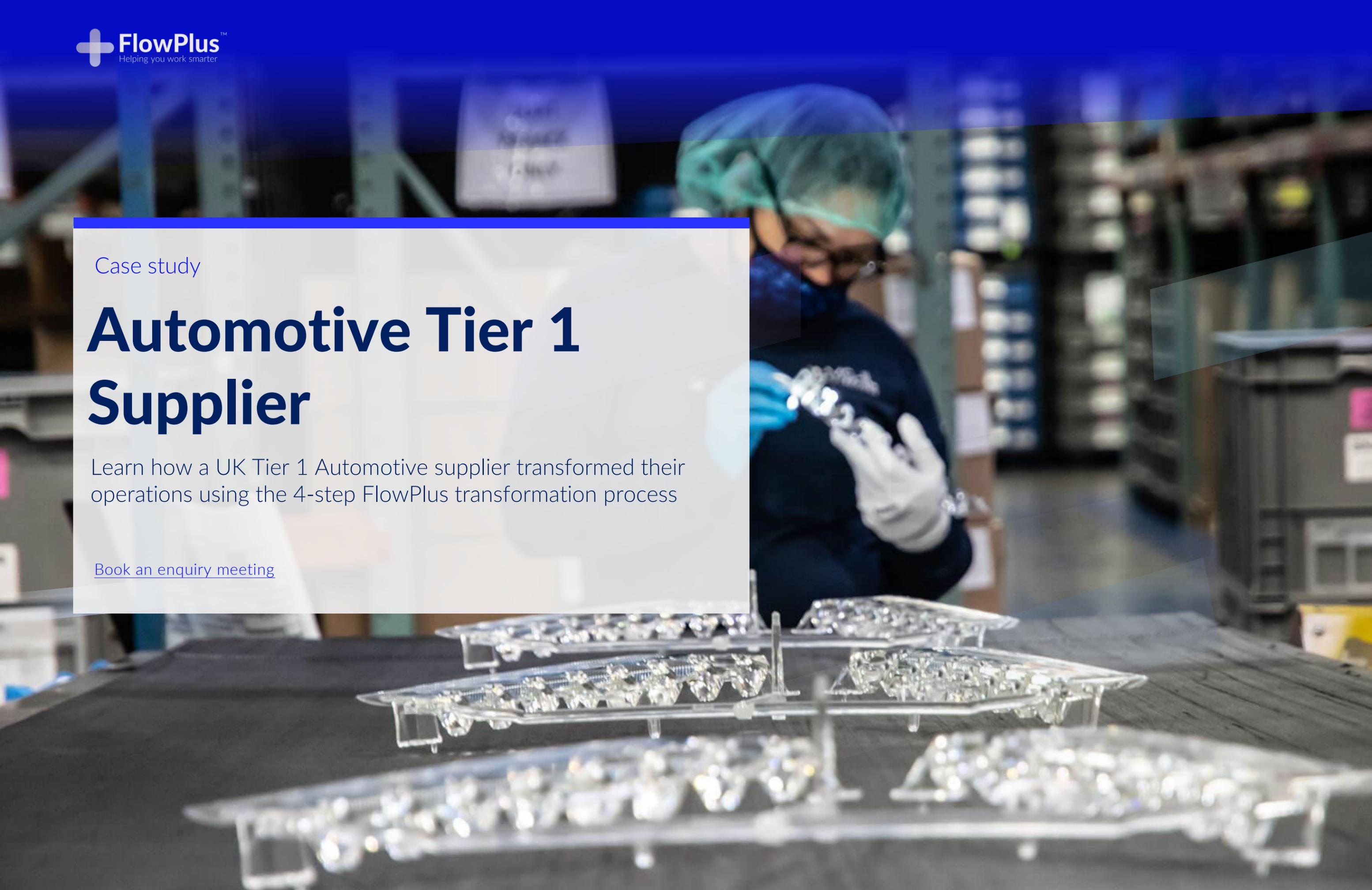


Case study

Automotive Tier 1 Supplier

Learn how a UK Tier 1 Automotive supplier transformed their operations using the 4-step FlowPlus transformation process

[Book an enquiry meeting](#)





SUMMARY

The client



The client is a UK based Tier 1 Automotive supplier, with roughly 400 employees on-site. They produce plastic components for some of the largest automotive manufacturers.



The problem



The client reached out with a challenge - poor OEE (overall equipment effectiveness). They were aware that their OEE was below industry standard and wanted help to increase it as a way of increasing their output. They opted for our [Discovery](#) service to help them kickstart their transformation.

Our Solution



We conducted 4 primary projects. Firstly, we implemented a new CMMS (centralised maintenance management system) and introduced a TPM strategy. The next projects changing the factory layout to separate different product families and improve flow. This was coupled with the introduction of supermarkets and a kanban pull system throughout production.

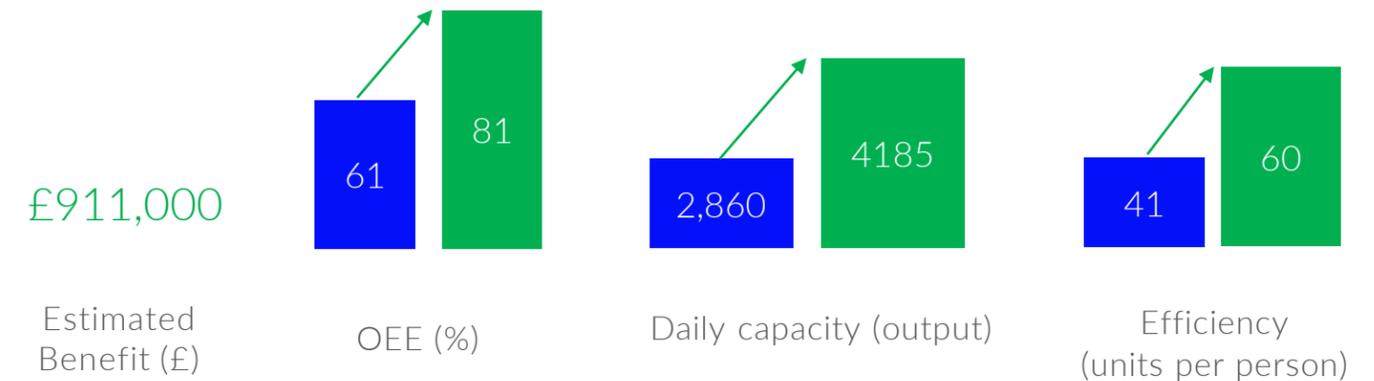
Implementation process



Following the [FlowPlus transformation cycle](#) we started by uncovering where and how they could improve. Once we had a clear improvement roadmap we worked as one-team with the client in workshop style to implement the improvements with the greatest ROI. Upon achieving the results, we trained their team how to follow a structured problem-solving approach and conducted Lean Six Sigma training. This training was followed by coaching to allow the Lean champions to put what they had learned into practice, helping them solve a problem within the different warehouse operations. Finally, we set up daily improvement huddles that empower staff to spot and solve problems, instilling a continuous improvement culture.

Results achieved

We achieved a step-change in performance, transforming their operational performance and establishing a continuous improvement culture.



Client testimonial

“FlowPlus helped us unlock our potential and as a result of their input we have delivered significant business improvement.” Operations Director

Next Steps

If you would like to find out more about how we can achieve similar results within your warehouse operations, please get in contact to schedule a free 30-minute consultation:

[Book an enquiry meeting](#)



FLOWPLUS CASE STUDY

Introduction

Having helped multiple component manufacturers for the automotive industry, we have selected one case study to demonstrate their transformation and showcase the results they achieved.

We understand that every business is unique, with different challenges and aspirations. For that reason, we don't use a 'one-size fits all approach', instead we follow our transformation cycle as a framework to create bespoke solutions that are tailored to each client.

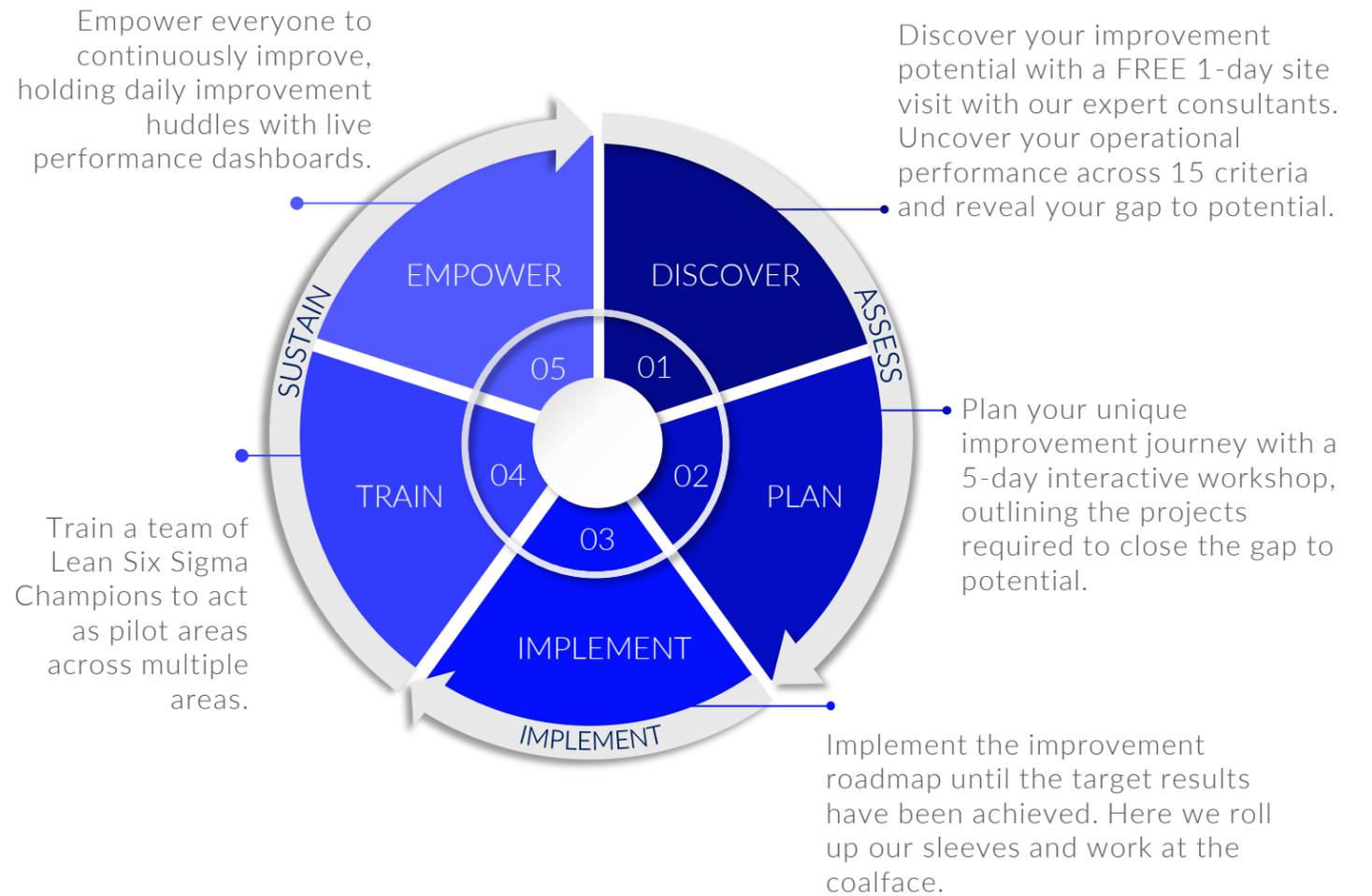
The client in this case study was a Midlands based site with roughly 400 employees, producing plastic components.

Some of the clients we work with:



The 5-step cycle has proven to deliver operational transformations that are sustainable and develop a continuous improvement culture that stands the test of time. By following the cycle, businesses have the chance to discover where and how they can improve, uncovering how their operational performance compares to best-in-class Automotive manufactures. Once an improvement plan has been developed, we help our clients make the changes and implement the improvements required to close the gap to potential. The final stage of sustain ensures the client is equipped to raise and solve problems long into the future.

The FlowPlus Transformation Cycle™



01. Discover

The client contacted us with a particular challenge – poor OEE (overall equipment effectiveness). Their average OEE was 61% and they knew that to increase site capacity, this needed to improve. They contacted us to help them with this alongside identifying further areas for improvement.

Our first stage – DISCOVER did exactly that, it benchmarked their operational performance and uncovered their gap-to-potential (difference between current performance and best-in-class performance across 15 criteria).

Visiting their manufacturing site, we made observations, spoke with operators, supervisors and the factory manager to collect data to better understand their processes and challenges. The results of the discovery report uncovered exactly where and how much they could improve. ● Red (<50%), ● Amber (50-70%), ● Green (>70%).

We uncovered 3 main areas for improvement; their maintenance strategy, line layout & design changes and finally quality improvements.



02. Plan

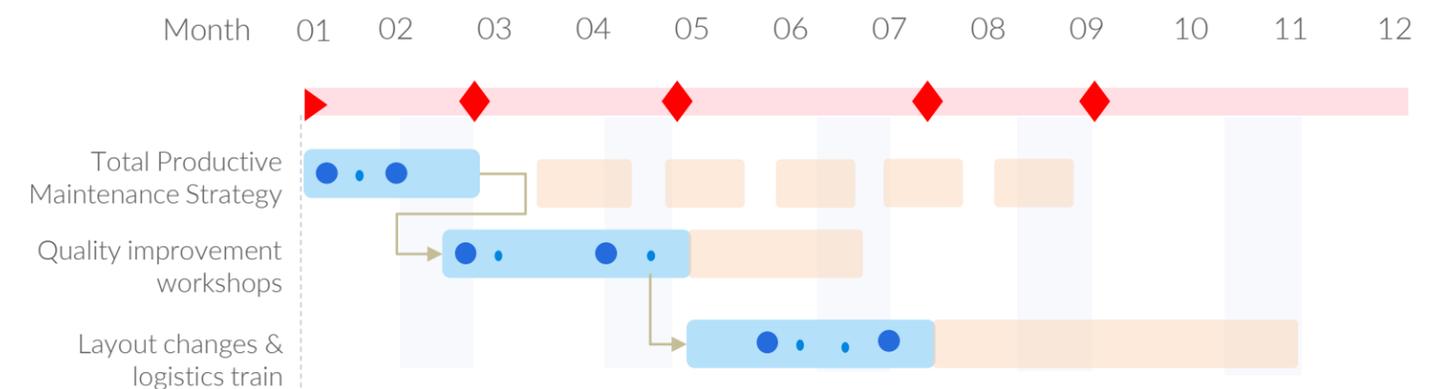
The findings of the discovery phase highlighted the main areas for improvement, next we needed to work out how to make the changes required to close the gap to potential (difference between current performance and best-in-class performance).

Through a collaborative 5-day workshop on site, FlowPlus worked with a multi-disciplinary team to dig deeper into each improvement area and devise a solution. Analysing production data to help quantify each improvement opportunity, a bespoke improvement roadmap was created – outlining the projects required to achieve their potential. The Plan stage involved a value stream mapping exercise, a future-state value stream design and a Return-on-investment analysis.

3 KPI's were set with assigned targets to track the improvements made:

	OEE	Daily capacity (output)	Efficiency (units per person)
Current	60.9%	2,860	41
Target	80.0%	4,000	57

The improvement roadmap can be seen below:



03. Implement

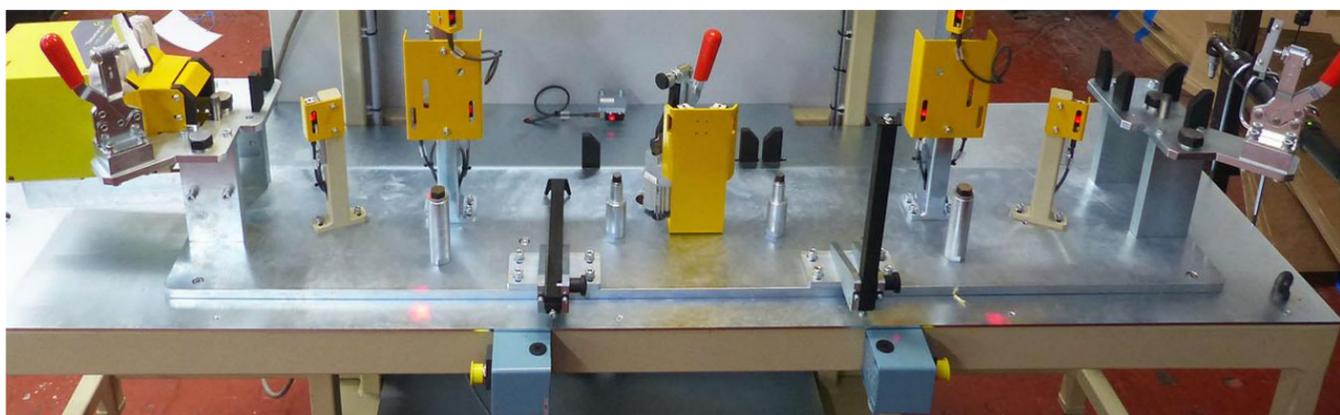
We started by digging deeper into the data they capture from their production tracking system – Redzone. By reviewing historic OEE values across all equipment, we then selected a pilot area with the greatest scope for improvement to act as an example to replicate across other equipment. The OEE within the pilot area was 49%, with availability being the lowest of the 3 values at 61%.



A low availability value signified poor equipment maintenance and a high level of unplanned downtime. Working closely with the maintenance and production teams, we identified 6 main causes for downtime and implemented countermeasures to prevent them from reoccurring. The solutions ranged from additional training and upskilling of operators to conduct daily preventative maintenance activities such as lubrication and inspection of bearings, to a review of planned maintenance frequencies to reduce downtime frequency. By implementing all 6 changes we increased availability to 0.89, creating a subsequent OEE of 0.72 or 72%.

The result was an increase in Availability to 0.89 and a subsequent increase in OEE up to 72%. This was later further increased to 81% through quality improvements.

Figure 1 – Sonic Welding error proofing jig

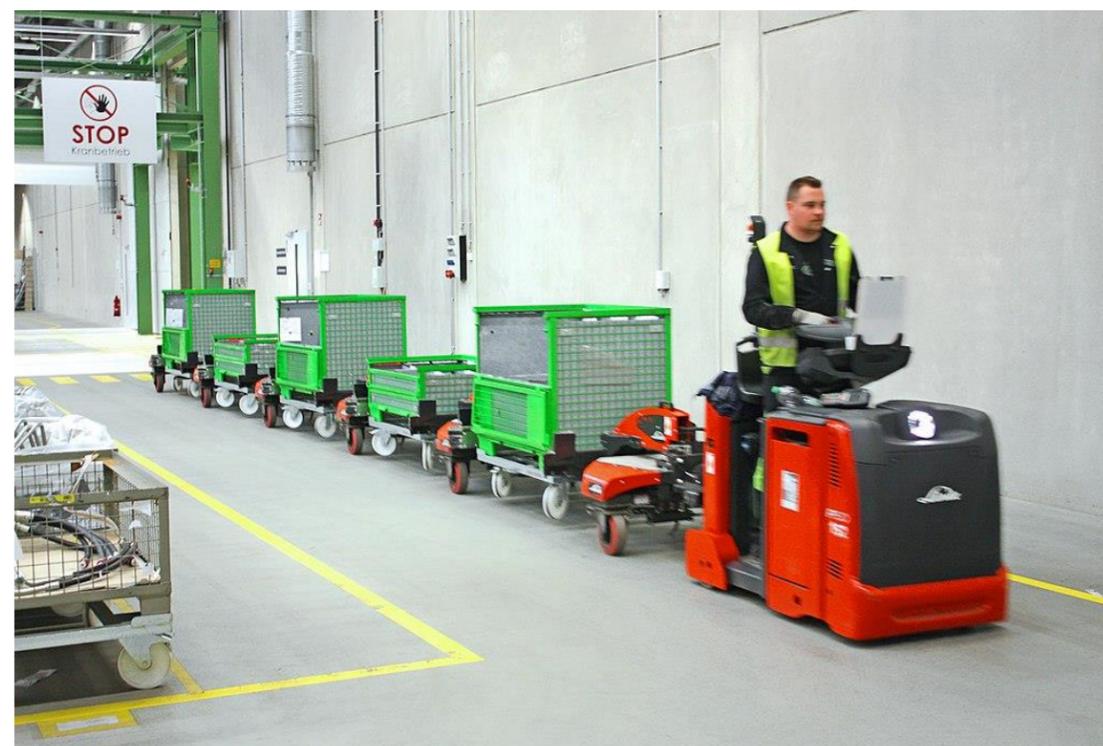


The next focus was on quality, what could we implement to reduce rework and establish processes that produced products right first time. Working with the quality department, we conducted a deep-dive exercise to uncover what the root causes for the rework were. It was found that the sonic welding process was the largest culprit for rework and often due to process errors, where steps are missed or completed incorrectly. The new jig can be seen in Figure 1.

Working with the production team on the shopfloor, we implemented a new jog system that prevented mistakes and would only release the component when all 16 sonic welds had been detected. This error-proofing device was then replicated across all sonic welding stations and resulted in an increase in quality score from 0.87 to 0.95.

A milk run logistics style train was introduced, delivering parts in a JIT fashion to the workstation that required them. This made a significant impact on the amount of stock stored line-side and allowed the production cells to be made much smaller and as a result- much more efficient. The average level of motion/transport waste was reduced from 36% of operators time to less than 8%.

Figure 2 – Logistics train

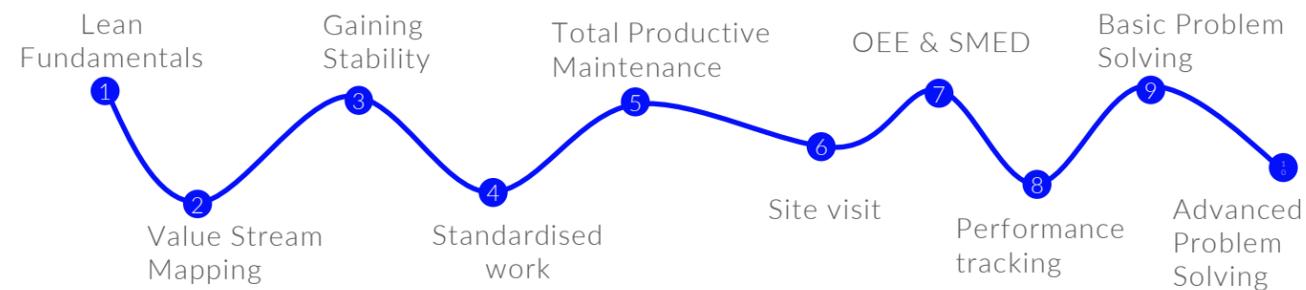


	OEE	Daily capacity (output)	Efficiency (units per person)
Before	61%	2,860	41
Target	80%	4,000	57
After	81%	4185	60

04. Training

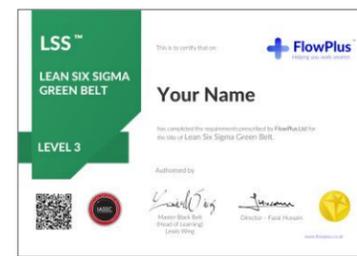
To ensure improvement is sustained and a continuous improvement culture is established, these 2 phases – Training & Empower are essential. It's very simple, to drive change and improvement in the long run you need a team of problem solvers. By driving the change internally, the Lean champions can solve problems throughout the business and empower team members/operators in improvement identification.

Over the space of 10 days, we trained 20 Lean Six Sigma Green Belt champions with practical problem-solving training, equipping the champions with the ability to drive improvement within different areas of the business. The training included a site-visit to an automotive manufacturing client of FlowPlus to see how they had progressed on their lean journey and the tools/techniques that worked for them, offering food for thought and a chance to see the practical techniques in place.



Our training is different for 3 main reasons:

- 1) It's Practical
- 2) It's Bespoke
- 3) It's Accredited



Practical – We do most of the learning on the shop floor, using exercises and case studies to provide real, usable skills that can be easily applied within their work environment.

Bespoke – We tailor each training to the clients unique business, providing training where the greatest scope for improvement has been identified and specific to their processes;

Accredited – At the end of the training, each Lean Six Sigma Champion is coached over 90-days to solve a problem within their department. This not only creates substantial tangible benefits but provides confidence that each student can practically apply what they have learnt. Upon completion of a successful project, each student will receive their globally recognised certification.

05. Empower

This final stage of the transformation cycle is what makes the transformation sustainable. We introduced 8 continuous improvement tracking boards and daily huddles throughout our client's site. These huddles act as a vital part of the continuous improvement journey, providing operators with visibility of their performance and the ability to raise any improvement ideas they have. Some of the key metrics measured include; OEE, output/day, quality faults identified and number of improvement actions.

By holding continuous improvement huddles, each natural team became empowered to solve problems and improve daily. Team leaders/supervisors run the meetings and using their Lean Six Sigma training, solve problems that really matter.

Within the first 3 months of holding the improvement huddles, the client identified 16 improvement opportunities and has already solved 11 of them – resulting in an additional annual benefit of £196,000. The improvement huddles are still in place and have established the habits and culture needed to drive continuous improvement throughout the business.



16

Improvement ideas raised

11

Implemented improvements

£196k

Estimated benefit



FlowPlus helped us
unlock our potential and
as a result of their input
we have delivered
significant business
improvement.

Caroline Grant - Production Director



ABOUT US & NEXT STEPS

About FlowPlus

Having helped over 30 UK manufacturers with their Lean & Continuous Improvement journey, we believe every organisation can improve, and that starts with a discovery.

We understand that every business is unique, with different challenges and aspirations. For that reason, we don't use a 'one-size fits all approach', instead we follow the transformation cycle as a framework to create bespoke solutions that are tailored to each client.



Discovery phases completed



Improvement opportunities identified



(£) Millions saved

Our team of consultants are experts in continuous improvement and lean manufacturing. We help our clients to work smarter – not harder. With experience ranging from lean manufacturing and operations management, to artificial intelligence and finance, we provide a unique insight to improvement, tailored to your unique business.

We are headquartered in Surrey and were founded by two friends from the University of Warwick studying Physics and Engineering. All our consultants are Lean Six Sigma Black Belts and have 5+ years of experience within the industry.

We provide a wide range of consulting services based on your specific needs, ranging from Lean Six Sigma training to focused improvement projects.

Risk-free consulting

We only charge our clients based on the results we achieve. No traditional charging for days on-site, we believe we should be judged and rewarded only if/when we achieve the target. This means no risk for you, if we don't get tangible results, we won't charge.

Next Steps

If you are interested in achieving similar results or have any queries about how we work, our payment terms etc then please book a free 30-minute consultation with one of our consultants below:

[Book an enquiry meeting](#)

Or email:

enquiry@flowplus.co.uk with your request.

We believe every Organisation can improve.

Right now, within your organisation, there are complex and apparently insurmountable challenges to solve.

Equally, there's hidden opportunity to tap into. If you're going to overcome those obstacles, unearth that potential and keep on improving as an organisation – change is essential. But where to start? How do you make the right changes? And how do you make them stick?

That's where we come in...

Get in touch to book a free 30-minute consultation and accelerate your improvement journey.

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