# All in a Good Night's Sleep!

Purple Deploys L2L's Lean Execution
System to Great Success

**L2L**

# AT A GLANCE

**In this case study you will learn how a software solution provided:**

A way to move from reactive to preventive maintenance that improved efficiency

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Machine uptime tracking that lead to higher operational availability (OA)

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Visibility to technician efficiency and effectiveness which lead to significant improvements

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A process for spare parts control that lead to reduced costs

## purple

🏭 Matress Manufacturing
🌐 www.purple.com
📍 Lehi, UT

Any company that decides to enter the mattress business is no doubt entranced by one undeniable fact: everybody needs one. Those companies that start producing and selling mattresses also quickly run into a harsh fact: everybody already has one.

Purple saw opportunity. It looked at the positives and the negatives of the mattress business, and decided the only way to have success was to be better than everyone else. Better innovators, better manufacturers, better fulfillment specialists. Simply put, Purple had to change the game.

So, it did. Purple is a comfort technology company that designs and manufactures products to help people feel and live better through innovative comfort solutions. Purple designs and manufactures a range of comfort technology products, includingmattresses, pillows, and seat cushions. Brothers Tony and Terry Pearce, both engineers, founded Purple.

Their quest to design and build the world's best mattress resulted in an incredibly responsive, pliable, strong material called Hyper-Elastic Polymer®. They had a game-changing innovation — now,they just had to build it.
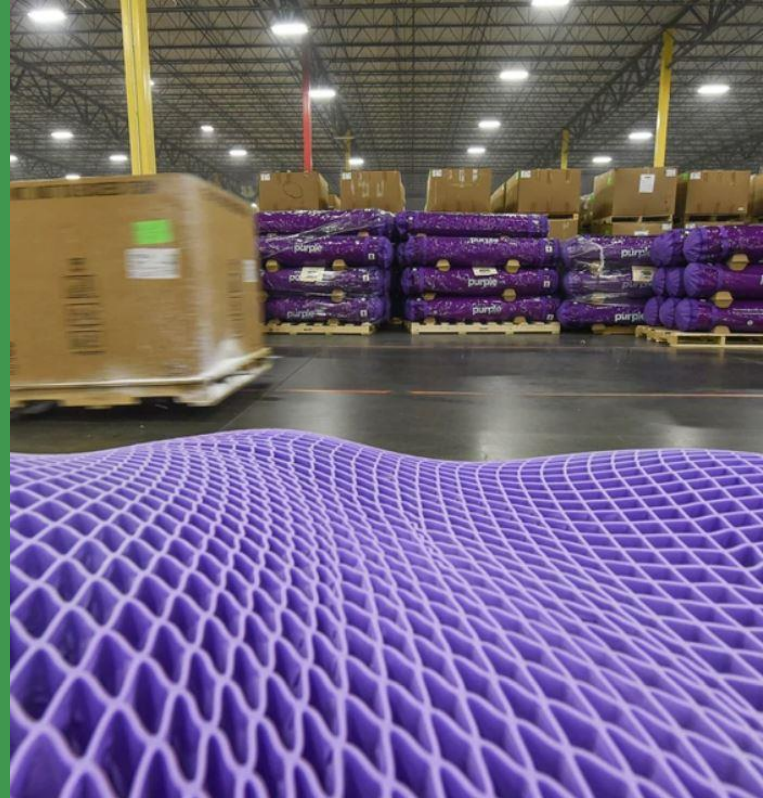
## Can't Settle for the Same Old, Same Old

Tony and Terry knew that Purple needed to have its own manufacturing plant. The Pearce brothers, along with their new leadership staff, started with what they didn't want their plant to be. For example, they didn't want to go through all the cycles that many other companies typically go through, such as implementing homegrown processes. They wanted to leverage best practices while also having their production facilities be as innovative as their products. The company was growing fast, they needed their plant floor to match that speed.

The most important factor in the success of any manufacturing enterprise is production. Downtime is an ever-present danger, and Purple needed an operations partner that could keep the production lines moving.

Purple hired L2L to deploy their Lean Execution System (LES) platform that could scale with Purple's growth and not take large amounts of time, or much effort, to update. They elected to start with L2L Maintenance. Not long after seeing the results L2L helped capture in maintenance, Purple deployed L2L's LES Production Module.

# Head Hits the Pillow - Phase One

The first phase of the Purple L2L deployment focused on providing real-time data to improve maintenance and reliability processes in Purple's new plant located in Grantsville, UT. L2L's web-based software allowed the maintenance team to quickly launch the planning and scheduling of preventative maintenance functions. L2L's LES Maintenance suite also provided real-time performance data that Purple used to spot and respond to reactive issues.

## Results of Purple's LES Maintenance deployment included:

- Development of an asset numbering protocol for all the equipment in the facility
- Each machine or asset within the plant was physically labeled
- All facility assets were incorporated, including items like urinals and fire extinguishers
- Sourced, purchased, and assigned laptops for a Purple maintenance staff of fourteen to access and use the L2L Maintenance module
- Six to seven day training for the maintenance and production staff on use of L2L software
- Training was timed during shifts and the plant was not shut down during training
- Purple started capturing data immediately upon completion
- Maintenance staff began creating and executing preventive maintenance tasks, starting with critical equipment first
- Purple identified and quickly repaired any equipment problems
- Data collected drove continuous cycles of improvement

"The implementation here at Purple was extremely fast. L2L has every step of the process itemized and the installers have industry knowledge. Helping our team understand why and what it means for them in practical sense is part of what sets L2L apart from the rest."

Phil Galata, Director of Maintenance, Purple

The L2L deployment happened fast. Purple took note of the speed of the deployment, which was far faster than other Computerized Maintenance Management Systems (CMMS) maintenance leadership the company had worked with prior to this event.

Most of Purple's production equipment was new, proprietary technology that didn't exist in the manufacturing industry. This required more information collection to continuously validate and improve performance for each machine. It was important that Purple choose a software tool that would expand in purpose and scope as it was adapted to manage formal processes and procedures for collecting data and information. L2L was just the right fit for Purple.

Increased visibility to abnormalities and showed opportunities for waste reduction throughout the entire production process.

## Enjoying the Rest - Phase Two

L2L's success at improving performance in the maintenance department was noticed by Purple's leadership. They decided to deploy L2L's LES Production Module.

This decision was the right one. Purple's production processes demanded additional clarity of systemic issues. A lack of performance on the plant floor was slowing down production of the company's most popular products – Purple needed real-time data in order to take action and improve performance.

This second phase of the project started with clear needs on the part of Purple. The decision was made to use the L2L Production Module to track and display real-time production metrics. This brought **increased visibility to abnormalities and showed opportunities for waste reduction throughout the entire production process.** More importantly, it improved Purple's system of measuring hourly equipment and manufacturing status in real time. Later, L2L's LES was used to absorb Purple's older safety and quality systems, which the software accomplished with ease. Resistance to L2L's capabilities was indeed futile.

# Soft Landing

Just short of two years after adopting L2L, Purple has seen improvement across the board in regard to production on the plant floor. The L2L LES is currently utilized by Purple's maintenance staff of sixteen mechanics, two MRO clerks, and a maintenance planner. In addition to the maintenance department, Purples' safety, quality, and production teams all utilize L2L's system to capture events on the factory floor as part of the hourly production cadence.

"The system has given our employees the tools to see the highest impact opportunities for improvement and a way to visually see the impact of actions taken to address them."

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Andrew Clarke,

VP Engineering & Manufacturing, Purple

Each production line utilizing the L2L production module sees their schedule displayed on a large TV monitor. This monitor displays the success of the line in real time and allows for complete transparency. Each member of the 400-person production team at the Grantsville site, including temporary employees, logs in to the line they're working on to properly track key performance indicators. This alone has provided data that was previously unavailable, yet vitally important, and which led to double digit improvements in target KPIs.

The production lines use all hourly and daily checklists to maintain a high level of quality, ensure the following of standard operating procedures, and help manage and collect daily checks on the machines.

# Soft Landing

# Waking Up to a New Reality

The success of any venture must be quantified in numbers. Purple's use of L2L's Lean Execution System has racked up an impressive array of achievements.

First and foremost, L2L has driven change, in both Purple's bottom line business performance and its cultural development. Simple proof is that **L2L has taken Purple from spreadsheet data collection to digital real-time data collection.** This is the key innovation. Spreadsheet data is an archive of events that have happened; L2L's digital data demonstrates what is happening and, in many cases, what is likely to happen.

Purple needed a solution for communicating between four shifts. The use of L2L's LES is standardizing procedures and training between all shifts, providing the platform to be Purple's system of record on the manufacturing floor.

Most compellingly, under the Purple L2L deployment scoreboard, everyone knows how to find the goals that have been set for them and track where along the continuum they stand in relation to completion. This has given the employees a tool to help them change and improve. These positive developments allow Purple to improve manufacturing performance, ensuring their products are made in the most cost-effective manner. This is always important, but in a market as crowded and competitive as the sleep and comfort market, it is essential.

The 22-month improvement metrics from Purple's L2L Maintenance rollout are astonishing:

## 52%
reduction in equipment failures

## 54%
reduction in equipment downtime

## 1400%
increase in completed preventive maintenance events

## 42%
increase in on-time completion of preventive maintenance events

Purple will continue to use L2L to improve its plant floor performance. Machines have increased production because they are running better and longer. Communication across the company has improved, and Purple now has a platform that helps escalate key problems and allows the company to fix them immediately. There is a new feeling at Purple, and it's the feeling of success.

In the here and now, use of both the Maintenance and Production Modules continues. This is largely due to the buy-in of each production employee and Purple's ability to continuously improve the system. The greatest sign of success is that it has now become common at Purple to end a developmental conversation with, "Let's do that in L2L too!"

# At the End of the Day

Purple's innovation in injection molding technology revolutionized the sleep comfort industry. The company has been smart in its choices, and the result is separation from a crowded category. Better, it means more comfortable sleep for many, many people.

One of Purple's partners in that success has been L2L, a company that shares Purple's passion for innovation, speed, and bottom-line success — for the company and the people who depend on their products.

## Discover the Better Way to Optimize Operations

Schedule a Demo

You could be experiencing a more efficient plant in as little as thirty days--that's how long it takes to deploy Cloud DISPATCH. See how it's all possible when you schedule a demo with us today!

L2L®    L2L.com  |  877 225-5201  |  sales@l2l.com