

New Touch Laser – a Lean journey

Having established itself as a market leader in Victoria's laser cutting and fabrication market, New Touch Laser was seeking further expansion both locally and interstate. In achieving that goal, the company embarked on a far-reaching program to implement Lean Manufacturing practices throughout its business.

The New Touch Group is based across three sites in Victoria, with New Touch Laser Cutting's facilities located in Bayswater and Clayton South, and its sister company New Touch Fabrications also situated in Bayswater. Between the three sites, the company employs about 60 staff and operates 24 hours a day. Specialising in 2D and rotary laser cutting, laser marking, folding, welding and fabrication, New Touch place a strong focus on delivering exceptional quality and service on time.

New Touch Laser's strategic plan called for expansion into non-traditional markets and sectors, as well as increasing the company's penetration into interstate markets. As part of the strategic plan, the executive and senior management team agreed that significant improvements could be realised across all departments, functions and hierarchy levels within the business in order to achieve its aggressive strategic and growth targets. Central to the plan was the implementation of Lean Manufacturing in a deep, thorough and integrated manner.

"Our goal was to begin our Lean journey and to become the benchmark laser cutting and fabrication supplier in Australia," says New Touch Laser Managing Director Brad Drury.

New Touch Laser's management recognised the company boasted a very loyal, hardworking, dedicated and intelligent team of people who had and who would continue to provide the drive and strength to grow the business into the future. The senior management team agreed that implementing Lean represented a golden opportunity for the business to try a different approach to business and operational management. However, external help and fresh ideas would be critical, and harnessing the energy and drive of the people within New Touch Laser was essential to capitalising on that opportunity. A number of important initiatives were identified before the company could formally embark upon its Lean journey.

External support

New Touch Laser approached the Enterprise Connect program to investigate what Government support was available to a business of its size and scope.

"At this point we commenced and completed an assessment with Enterprise Connect Business Adviser Bruno Bello who offered extremely helpful independent, well qualified advice, which we took," says Drury.

There were several recommendations made but arguably the most relevant was the decision to engage "benchmark" external industry experts in the form of Vative to facilitate the introduction and integration of Lean. New Touch Laser recognised that they would benefit from the support and drive of external experts to facilitate the education, application and implementation of Lean and Continuous Improvement throughout every area and function of the Business.

Furthermore, the thinking within the executive and senior management team was "if we are going to go Lean, we need to educate not only our people but ourselves as well". If education was going to be major element of the Lean initiative, government-funded training could be accessed to support and drive the implementation process. After investigating and interviewing several providers New Touch Laser Cutting decided to partner with Vative, which was recognised as the leader in Lean Consulting, Training and Project implementation.

"We were very much aware of the products and services that are available for manufacturing businesses to support Lean initiatives, but were unsure as to who were reputable partners, and how they could bring about value," says Drury. "Vative brought to the table



*New Touch Laser Cutting
Managing Director Brad Drury.*

a thorough understanding of our business needs, the capability to execute what we needed in line with our strategic plan plus strong and deep relationships with all Government agencies such as Enterprise Connect and Government-funded training offices".

Vative was able to bring all parties, funding opportunities and the capability required. This resulted in a formal 12-month training and project implementation program that enabled New Touch Laser to access Vative's capability through their Lean Masters for 8 days/month for a 12-month program. New Touch Laser's relationship with Vative continues to this day, well into its second year of ongoing training and project implementation.

Implementing the plan

One of the most important invisible benefits has been to the overall culture of the New Touch Laser team.

"Lean and our formal training program allowed us to engage our workforce in a deeper, more fundamental manner than we had ever experienced before," says Drury. "By giving all our team members a vehicle and forum to review, discuss and own ongoing improvement opportunities within their respective areas wasn't a totally new concept. However, we had never empowered each and every member of our team to contribute to the day to day running of our operations in such a fundamental manner."

The emphasis of the program was on facilitating every individual's involvement and empower them to have control over the direction of their respective work team, and have a direct impact on the business overall. The result was a collective group of team members taking the responsibility to chart the direction of their work areas in line with the overall business strategy. This resulted in "visible and invisible"



Shadow boards reduce time taken to find tools.



Quality problems are raised and tracked on a visual board.



Designated locations and status labelling reduce time checking gas bottle condition.



Using part trolleys has reduced trip and cutting safety hazards, and cut reliance on forklift use.

increases in empowerment, ownership, involvement and teamwork that enabled roles and responsibilities to evolve and free up human and intellectual capacity in other business areas, further increasing the value-add to the overall business operation.

The initiative has also delivered improved housekeeping and workplace organisation, through a 5S methodology. By making material flows more visual, with clearly defined WIP areas in between critical processes, this resulted in significant inventory management and control improvements. From raw material through to finished goods, WIP levels plummeted, freeing up valuable shop-floor and incoming goods space. Another major impact was in OHS: reduced inventory meant large amounts of sharp sheet-metal were no longer left lying around in random locations. As a result the potential for lost time injuries (LTIs) was essentially eliminated, by applying 5S in a logical and area-specific manner.

Another area of significant benefit was in machine utilisation improvements. Particular emphasis was placed on quick changeover, production planning/scheduling and delivery of incoming materials to key work cells. By further expanding on 5S and applying the theory at the machinery level, New Touch Laser could really zero in on its internal and external changeover times. Significant improvements were achieved in this area. On top of this, measuring actual process times and comparing these to the standard costs in the company's system allowed management to truly understand the machine time per job.

These combined initiatives saw New Touch Laser claw back significant machine capacity over its critical processes. This effectively eliminated a need that had been previously identified to invest in capital expenditure for a new laser-cutting machine. An additional gain in that respect was that there was no need to further increase the shop-floor's overall foot-print to incorporate the extra laser-cutting machine.

Delivery performance improvements were initially slow to realise, but as Lean started clicking into place, internal lead times started to fall drastically. According to Drury, it was interesting to see how a number of initiatives such as 5S, Visual Management and Quick Changeover come together to impact on overall lead times. By including all office functions (Sales, Programming and Planning) on the Lean program, everyone's energy was channelled into an integrated outcome of delivery performance, resulting in significant improvements. Tracking individual job orders became significantly easier through improved shop-floor visualisation, enhanced measurement, visualisation and tracking of actual costs per job vs standard, and using this important data to drive the Continuous Improvement discussion.

The end result has been a significant improvement in morale, housekeeping and delivery performance, along with the adoption of a continuous improvement mentality that has become ingrained into the culture at New Touch Laser. **AMT**

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