

# Implementation of Lean Manufacturing

Niftylift, a Milton Keynes based hydraulic access platform manufacturer had introduced a lean manufacturing programme in 2003.

Steve Beckwith, Production Manager takes up the story &ldquo;Because our products are physically very large, (Trailer mounted, self propelled, track mounted and vehicle mounted hydraulic access equipment) prior to lean implementation, space was at a premium. Even the outside yard where we completed final inspection and customer acceptance testing was cramped &ndash; we urgently needed to do something different and manufacture our products in a different way.

We used to typically take between 40-50 hours to manufacture each of our main machines. At that time each production operator was responsible for building the complete product and the operators were unaware of the importance of TAKT time.

We started the lean journey in 2003 and by the latter part of 2004 were about 70% complete on our main 120T manufacturing line. We had introduced cellular manufacturing to the factory with some significant benefits but felt we needed a fresh impetus to help increase the pace of implementation and to gain an insight into to how other companies approached the cultural change necessary to gain the full benefit from the lean model.

As a result, we sent our Assistant Production Manager and two team leaders on one of Aster Training&rsquo;s Lean Manufacturing Courses in 2004.

Beckwith recounts, &ldquo;I knew the benefits we could achieve if we could get everyone on board. Sometimes using a third party to put across the same message can have a bigger impact. Our guys gained immensely from the course as they were able to listen to the ideas of other delegates from different sectors as well as have the theory reinforced by the course tutor.

We selected Aster Training to provide the lean training because of their &lsquo;hands on&rsquo; experience in the manufacturing sector and we were so impressed with the course content and delivery that we subsequently used Aster to train all of our cell leaders, engineers and senior managers. In fact, our Chairman and Managing Director even attended one of the courses. In total, we used Aster to train about 40 staff across the business.

The courses greatly assisted in the education and understanding of lean manufacturing by key members of our workforce, assisting in increasing the pace of introduction.

Following the training courses we introduced a further number of changes. We focussed on re-introducing 5S to the manufacturing areas. Because the team leaders had been re-energised and had a greater appreciation of the 7 Wastes we also made a number of more subtle work flow changes including the setting up product cells, marking out areas on the shop floor for the storage of raw materials and creating shadow boards and tool kits per manufacturing work station.

We introduced cellular manufacturing principles to the rest of our shop floor by breaking down the types of products we manufactured into runners, repeaters, strangers and loners. Each Team Leader was allocated a set of products and they were set a number of objectives including the multi-skilling of their team. Summary

24 months on the results have been impressive, we have increased turnover by close to 40% and the build times of our main machines have come down from around 44 hours to 24 hours per machine.

Our manufacturing lines now all use cellular manufacturing techniques and we are focussed on satisfying customer demand by measuring performance against TAKT time.

We have also freed up space despite the huge increase in turnover by controlling the flow of materials in and out of our factory by &lsquo;pull&rsquo; scheduling techniques and further plan to improve this area of our business later in the year by outsourcing of some of the larger, bulkier component parts.

We are now about to embark on a &lsquo;refresher&rsquo; set of courses with Aster Training and would thoroughly recommend them to other manufacturing businesses&rdquo;.

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