

Modcomp in Manufacturing

APPLICATION STORY

KONI



BACKGROUND

Koni is one of the world's leading automotive parts manufacturers. The company began business in Oud Beijerland in South Holland in 1857. Today Koni is still based in Oud Beijerland, but is very different. Now part of ITT Industries, Koni is known throughout the world as a manufacturer of high quality shock absorbers and related products for cars, trucks, buses, trailers and railway stock. In the automotive industry it is known especially for supplying very high quality shock absorbers for high performance cars - in fact Grand Prix racing cars with Koni 'shocks' have won over 225 Grand Prix victories and thirteen Formula 1 world championships.

THE CHALLENGE

It is not just in Formula 1 that Koni finds itself against strong competition. Like all manufacturers Koni is in a constant race to keep costs down and drive out waste and inefficiency in the manufacturing process. To survive and prosper, Koni's production managers are always looking for ways to keep costs down, drive up customer service and still maintain high product quality.

As part of this constant drive for efficiency, Koni has embraced Lean Manufacturing principles. The concept of Lean revolves around the need to eliminate unnecessary cost and processes wherever possible. Koni identified that there was an opportunity for cost saving if the amount of material in work in progress in the factory could be reduced.

To reduce material in work in progress Koni decided to introduce a system called Kanban. Kanban is a Japanese word meaning signal. A Kanban system means that when stock is low in the manufacturing process a signal is sent to 'pull' more stock from either a store, another manufacturing process or perhaps from a supplier. Because Kanban is a Just in Time (JIT) process, the amount of unnecessary stock in work in progress is reduced. Parts are only manufactured when there is a demand for them.

The key issue for Koni was how to introduce a mechanism for signalling demand for stock in the most effective way.

THE SOLUTION

Koni approached Modcomp to help design an IT system that could support the Kanban process. As a long time supplier to ITT Industries, Modcomp was very familiar with the manufacturing support system used by Koni. Modcomp therefore designed a system which could integrate with the manufacturing system. The key issue now was how to provide the workers on the factory floor with access to the computer system especially as the factory was particularly large and often workers are a long way from a desktop PC system. Modcomp, a Mobility Solutions Competency partner of Microsoft, proposed using hand held Personal Digital Terminals (PDTs) from Motorola (formerly Symbol) running the Microsoft Windows Mobile 5.0 operating system.

Windows Mobile 5.0 is based on Microsoft .Net and allowed Modcomp to build a powerful browser based interface for the users on the shop floor. The PDTs also provide bar code reading capability. The primary advantage of mobile devices is that workers can use them wherever they are on the shop floor and because Modcomp has designed the system using a browser interface, minimum operator training is required.

Now in operation, the Modcomp Kanban application works out short term replenishment processes and because it is connected to the back-office system it can also initiate a reordering process. Once the base Kanban application was designed, Modcomp added further functionality to perform material handling checks. This enabled Koni to track materials across the shop floor providing useful management and operational data.

CONCLUSION

The Modcomp designed electronic Kanban solution has allowed Koni to significantly reduce the amount of material in work in progress in the factory. In turn this has resulted in considerable cost savings and improvements in customer service.

ABOUT MODCOMP

Founded in 1970, Modcomp has been providing data acquisition and system integration solutions for over thirty years, to a wide variety of markets as diverse as retail, financial, government, aerospace, energy, utilities, factory automation, broadcast and communications. Modcomp is an international company with a world-class reputation for bringing quality, high-performance innovations to its customers.

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