

IMPRESSIVE EFFICIENCY ENHANCEMENTS AT MASSEY FERGUSON, AN AGCO SUBSIDIARY

Lineback principles and patience pays off



As part of an efficiency enhancement initiative at the AGCO subsidiary Massey Ferguson, in Beauvais, France, the “Lineback Principle” was used by Ingenics experts. Here, central logistics functions were included from the very start in a lean transformation project, which proved to be a key success factor. Analysis of the more minor logistics functions was postponed, in favor of achieving “Quick Wins” at a later date during follow-on improvement cycles.



With a comprehensive efficiency enhancement program, the international AGCO Corporation intended to improve its overall productivity – especially at its European plants. AGCO is a global player in agricultural equipment and its brands include: Massey Ferguson (MF), Fendt and Challenger. The main pillar of AGCO’s efficiency enhancement program was a lean transformation initiative for its production facility at the Massey Ferguson plant in Beauvais, just north of Paris, which is the largest AGCO production facility in Europe as well as the largest tractor plant in France.

In 2009, after AGCO Beauvais saw a fall-off in orders similar to many other manufacturers that year, two strategic consulting projects were conducted by its European management to create a foundation for the planned lean transformation initiative. Then in March 2010, Ingenics was selected to streamline the production in Beauvais. Here, an extensive team of experts from AGCO and Ingenics worked jointly on the project – in close cooperation with Beauvais’ plant manager Boussad Bouaouli, who had come from Toyota France and was very familiar with lean-management concepts.

The lean initiative targets value-added operations, first

The overall goals of this lean initiative were ambitious: The productivity needed to be increased by 20 % and the working space requirements were to be reduced by 25 %. Plus, there were tight time factors for the “Cabin Preparation” pilot production line and for the initial phase of the initiative: Here, the goals needed to be achieved in only five months - due to a planned transfer of the main production lines during the upcoming summer holidays.

Correctly, AGCO’s management decided to focus their lean initiative on value-added operations, first. Primarily this was done to realize “Quick Wins” and thereby gain acceptance of lean projects →



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→ among company employees. In addition, at an early stage AGCO managers decided to integrate their production-related logistics into the lean initiative - to ensure the initiative's effectiveness.

Initially, a long-term strategy to secure the initiative's achievements and promote sustainability was not finalized. But naturally, the project team headed by Bousad Bouaouli recognized its importance and began planning follow-on measures which could be implemented later, after the initiative's start phase. Because they knew that the production operations couldn't be treated as an isolated function.

Multiple optimization cycles

In the first optimization cycle, the production-related logistics was targeted using so-called "lineback principles" to identify inefficiencies between the assembly operations and its supply chain. Here,



i About AGCO

The AGCO Corporation is headquartered in Duluth, Georgia, USA and is the parent company of well-known brands such as Massey Ferguson (MF), Fendt and Challenger. The company is also a major global player and manufacturer of agricultural vehicles and equipment, such as tractors, combines, feed harvesters, drilling equipment, fertilizer spreaders and plowing equipment. AGCO also maintains one of the strongest sales networks in the industry – with more than 3,150 dealers in over 140 countries. The Massey Ferguson plant in Beauvais, north of Paris, is ARCO's largest European production facility and the largest tractor assembly plant in France.

the cabin roof assembly as well as the cabin preparation operations were carefully examined using a just-in-sequence (JIS) supply chain analysis, due to their relatively high but variable working space requirements. However the results and improvements from this JIS analysis, which included collocated suppliers, were postponed as well as potential optimizations of the unitized assemblies. Following additional lean analyses of the assembly operations, the next optimization cycle was begun concentrating primarily on operations which were examined earlier, but only tentatively addressed. Here too, lineback principles paid off once again.

Reducing waste, raising productivity

By using proven lineback principles, which included the simplification of assembly worker duties and a concentration on value-added operations (including the outsourcing of minor operations), as well as the use of all available improvement options – the company's operational waste was quickly reduced and its overall productivity was consequently increased. These options also included:

- › Starting additional corporate lean initiatives
- › Inclusion of production support activities
- › Coordination of efficiency enhancement initiatives with other internal projects
- › Prevention of ineffective processes caused by organizational resistance

Reaching goals faster – with patience

"The systematic use of lineback principles requires both patience and a strategic perspective from business managers," explains Matthias Frahm, who participated in the AGCO project as an Ingenics Logistics Expert. "And at AGCO's Massey Ferguson plant in Beauvais, their ambitious improvement goals – such as a 20% increase in productivity and a 25% reduction of their working space requirements - were even exceeded." Plus there are strong indications that these successes will be maintained over the long-term. In the end, the AGCO decision to concentrate on their key logistics functions first, and postpone other improvements for follow-on initiatives, turned out to be the right choice at the right time. ■