



# MACHINERY MANUFACTURERS CAN MAXIMIZE PROFITS BY ADOPTING LEAN ENTERPRISE INITIATIVES

**IFS helps machinery manufacturers link activities in the bid to deliver lifecycle and analyze and eradicate waste.**

Machinery manufacturers are constantly faced with making smaller quantities of each model, increasing complexity of function, and demands to cut delivery lead times and unit prices. To remain competitive, seamless systems integration from design through manufacture to service maintenance, and an effective integrated value chain, differentiates the winners from the losers.

It is often easy to see how waste can be removed from high volume repetitive processes, but more difficult to envisage how lean concepts can be applied to a complex engineer-to order-business, like machinery manufacturers who make small quantities of each specification and one-offs.

## **EXTEND LEAN ACROSS YOUR ENTERPRISE**

With 20 years experience in developing applications for complex engineered products, IFS has created a business solution for machinery manufacturers that supports lean thinking across the enterprise to give you a complete real-time overview of your operations.

If you use project management and project planning for prototype or new build, then this fully integrates with design, engineering, procurement, resources planning, cost estimating, finance, human resources, and product make and assembly activities.

Customer requirements can be compared with quotations, contracts, engineering specifications and actual costs. These can be re-used for new opportunities to ensure consistency and repeatability.

Or, if you use standard engineering specifications and configure some products to order, then IFS supports this too. Functionality covers in service maintenance repair and overhaul, which is fully integrated with the original equipment design and build to provide a seamless and accurate transfer of data, drawings and information. These powerful integrated solutions provide machinery manufacturers with the tools and techniques to reduce risk, improve delivery performance and manage costs.

## **REVIEW BUSINESS PROCESSES**

For many companies, a lean enterprise initiative begins by conducting value stream analysis -- a systematic method of analyzing your business processes to determine which steps add customer value and which should be improved or eliminated.

IFS Business Modeler™ is a process-modeling tool for creating value stream maps. Regardless of your experience level you can quickly and easily create process models showing all actions currently required to bring a new machine from the design phase through customer delivery.

This gives you a clearer picture of both the locations and sources of waste within your organization. You can then map the desired future state of your business eliminating inefficiencies to create more effective smoother-flowing processes.

Rather than change a process that has yet to be proven, IFS Business Modeler lets you continue to run part of your business using the existing methods and run the new process in parallel to test its feasibility. Once you are satisfied that waste has been removed, the new process can be adopted universally.

## **PLANNING AND EXECUTION**

With a lean enterprise initiative underway the IFS solution provides functionality to help you improve your lean operations, from planning to execution:



**Quotation Management.** Reduce the time and effort put into the quotation, improve the accuracy of the information used, and convert more quotations to wins while retaining or improving operating profit or margin. Previous designs, actual times, actual costs, contract terms, and conditions can all be recycled to minimize work and improve consistency. This minimizes effort and reduces waste.

**Engineering Design.** IFS Applications integrates with your CAD software so that you can convert engineering design data into specification data for materials planning and manufacture. Often when designing a complex machine, there is a need to order some materials before the design is complete. This can be accommodated along with customer changes to ensure what is built meets your contractual obligations so that you reduce risk through the complete delivery cycle.

**Document Management.** In a complex machinery manufacturing company, it is an essential part of day-to-day operations that everyone is working to the correct instructions to the appropriate revision levels. IFS offers document management functionality that gives you a secure and integrated environment accessible online to ensure mistakes are minimized and waste eliminated.

**Project Management.** A fully integrated project management solution synchronizes activities with all resource and material requirements. Change implications can be reviewed and any cost or delivery implications calculated and reported to the customer. It also ensures that everyone is working on the correct priority of activities to deliver customer value and reduce waste.

**Collaboration.** Web portals make it easier to collaborate with suppliers and partners. Instead of sending information back and forth, customers and suppliers can view requirements through a convenient web interface. Suppliers can use the web interface to download engineering design data, drawings and parts lists. Since no mistakes are made in rekeying, the data for future in-service repairs and spare part ordering are always accurate.

## **KEEP SCORE OF YOUR LEAN INITIATIVE**

It lets you set performance baselines, track and measure continuous improvements, and communicate progress throughout your organization. You can examine your current practices and overall level of maturity in lean enterprise implementation, and then compare them with best practices. This way, you can easily put together a step-by-step lean implementation plan that is cost effective and does not disrupt business operations.

## **CONTINUOUSLY IMPROVE QUALITY**

Apart from eliminating waste, re-engineering business processes is an excellent opportunity to improve product quality. IFS provides integrated quality management component to help you monitor and control quality in all areas of your operations. Support for failure modes and effects analysis (FMEA) enables you to record and analyze actual and potential problems with a product design or process together with the effectiveness of related solutions.

This allows you to improve accountability, avoid repeated mistakes, and improve the quality of the end product. Part of IFS' total lean solution, the quality management software supports and transforms your business into a lean, high-performance company that consistently outperforms the competition by continuously improving.

IFS' productive maintenance solution uses proactive and progressive maintenance methodologies and calls on the knowledge and cooperation of operators, equipment vendors, and engineering and support personnel to optimize machine performance. The result is fewer breakdowns, better quality and less waste.

## **LEARN MORE**

To find out more about how IFS and IFS Applications™ can help your organization maintain your competitive edge, call (888) 437-4968, or visit [www.ifsworld.com](http://www.ifsworld.com).