

Total Production Optimization (TPO) FabricOptimizer™ for the Composite Fabric Cutting Industries

A fully integrated solution for optimized composite fabric cutting, through dynamic nesting, roll-picking and cut-planning optimization.

Solution Overview

Plataine's Total Production Optimization (TPO) solution offers composite parts manufacturers an integrated solution for dynamic nesting, roll-picking and cut-planning optimization.

Seamlessly integrated to the manufacturer's ERP/MRP and CAD systems, TPO creates ready-to-cut production plans by optimally selecting the composite fabric rolls to use, and generating the optimal nests for each roll. TPO achieves this by matching the orders' due date and product quantities with actual fabric rolls inventory (material expiration date, width & length). TPO also considers the full order plan for additional optimization opportunities.

TPO supports multiple import and export formats, including: DXF, HPGL, NC Cut, Gerber, CATIA, Lectra (PLX, MDL), and many more.

TPO Software is offered as a Service (SaaS) - a fundamentally faster, less risky and more cost-effective alternative to 'traditional' (on premises) software installations.

The SaaS model offers minimal upfront costs, faster time to value and ongoing payments that are closely coupled with the value received.

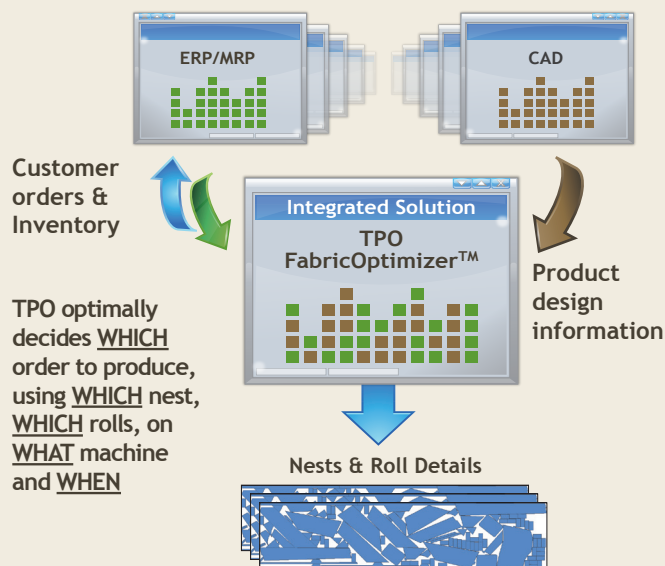
TPO drives significant cost savings and increased productivity through process automation and optimization:

- Higher material utilization - reaching double digit material savings.
- Better inventory management including minimization of material exposure time, utilization of soon-to-expire rolls, and methodical use of remnants.
- Faster & more flexible time to market of a wide range of products.
- Automating routine manual tasks and eliminating errors associated with them.




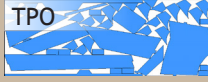


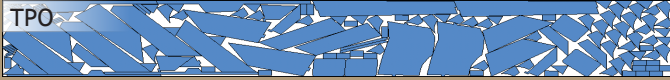
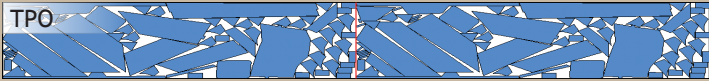
TPO FabricOptimizer™ vs. Nesting Software

| | Nesting Software | TPO FabricOptimizer™ |
|----------------------|-------------------------|--|
| Role in organization | Engineer-Level solution | Enterprise level solution |
| Input | Parts & Geometry | Parts & Geometry, Customer Orders, Available Materials, Machines capabilities & availability |
| Output | Nest only | Optimized Production plan |
| Automation | Nest only | End-to-end process automation |
| Optimization | Nest only | Integrated Optimization of multiple factors, while balancing all elements at once |
| Expected value | Nest efficiency | Production Efficiency |

TPO bridges the gap between the market and the production floor



A Real-Life Example of TPO Optimization

| Scenario | % Material Saving | Nest Preview |
|---|---|---|
| Single-Kit Nesting | 4.4% |  vs.  5.24y vs. 5.01y |
| Remnant Utilization | 2.7% + 1.65y Utilized Remnant |  vs.  +  5.24y vs. 3.45y+1.65y=5.10y |
| Order mixing (Quantity = 2) | 5.7% | 2x  2x5.24y=10.48y vs.  9.88y |
| Combine multiple orders Back-to-Back on the same roll | 4.4% + Reduced set-up time & increased roll shelf life |  2x5.01y |

TPO optimizes the production plan to match your business rules and meet production constraints, while considering actual customer orders and inventory levels.

TPO FabricOptimizer™ is part of Plataine's integrated Total Production Optimization (TPO) suite, targeted to specifically address the challenges of composite parts manufacturing. Other TPO applications include:

- **TPO MetalOptimizer™** - Plataine's metal cutting & planning tool that optimizes and automates both the planning and the nesting processes of sheet metal cutting operations.
- **TPO Production Scheduler & Shopfloor Terminals** - Automatically and optimally assigns work to the appropriate work centers and machines, provides manufacturing information to station operators and collects progress reports in real time.
- **Management Dashboards and Reports** - Provides both floor-supervisors and executives with a wide range of production metrics in real-time, including machine status, planned vs. actual progress, machine utilization and more.

ABOUT PLATAINE

Plataine is a leading provider of production optimization software solutions for manufacturers of composite material products, metal, wood and textile. Plataine's production optimization solutions enable manufacturers to be more competitive by increasing material utilization, improving productivity, and shortening manufacturing cycles to ensure on-time delivery of products to customers. Plataine's customers include Bassett Furniture, Boeing, Century Furniture, Drexel Heritage, Ethan Allen, Ford, General Motors, The Gap, Hagger, Nike, and Wrangler. For more information, please contact your local Plataine office or see www.plataine.com