MARKER

Get the Most Out of Your Fabric

Fabric use optimization via manual, and automated nesting and costing, compatible with a wide range of plotters and cutters

OPTITEX

MARKER

Optitex Marker enables optimized fabric use and reduces material waste via advanced nesting. Marker's sophisticated technology helps organizations save time, resources, and costs while significantly contributing to sustainable processes. Marker is compatible with standard plotters and cutters to ensure seamless interoperability.

4 Nesting Solutions	Algorithms for optimal material usage
Up to 4%	Increased efficiency with Nest++ PRO compared to Nest++
Over 8000	Active customers worldwide utilizing Optitex solutions across industries
100%	Global reach with Optitex's multi-language support

Marker's Versatility Across Every Sewing Industry

Fashion

Automotive

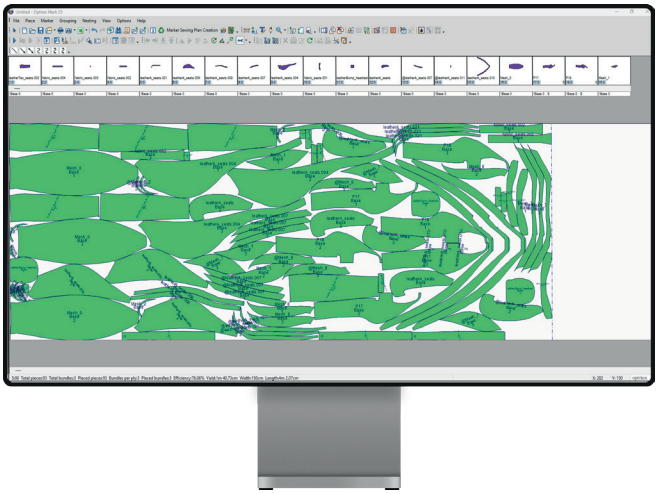
Furniture

In sectors like automotive and industrial textiles, where materials such as carbon fiber are both costly and susceptible to flaws, Marker stands out with its advanced automated nesting algorithms and features like the ability to mark fabric flaws on the marker before nesting.

Marker is a cornerstone tool across diverse industries, including automotive, fashion, furniture, and industrial materials, thanks to its unmatched efficiency.

These capabilities ensure high-cost materials are used optimally, helping manufacturers maximize resources, reduce waste, and achieve superior results.

Significantly Reduce Marker Making Complexity, Time, and Waste



The Complete Solution for Speed, Ease and Accuracy

- Work manually or leverage fully automated nesting.
- Set restrictions for production markers, including fabric types, buffers, and piece orientation.
- Control group placement by specific attributes.
- Freely place, select, rotate, and flip pieces—even along the fold!
- Automatically mark around unusable material sections, maximizing remaining areas.
- Support complex variation grading with new sizing setups.
- Set markers with advanced sizing from PDS pattern files.
- Optimize cutting sequences with automated start-point and piece order.
- Enhance quality control by applying specific cutting direction constraints.
- Reduce cutting time and extend cutting machine lifespan with automatic shared cutting lines.
- Automatically assign material flaws to maximize the use of remaining materials.
- Generate material usage and cost reports effortlessly.
- Calculate splices using the automated optimized Splicing tool.
- Print barcodes for piece descriptions and reports (optional add-on).

Cost Calculations

Efficiency: 83.65 %

Material	Mat.Cost (per sq.yd)	Cut.Cost (per inch)
Default (Empty)	5.85	0
A	5.85	0

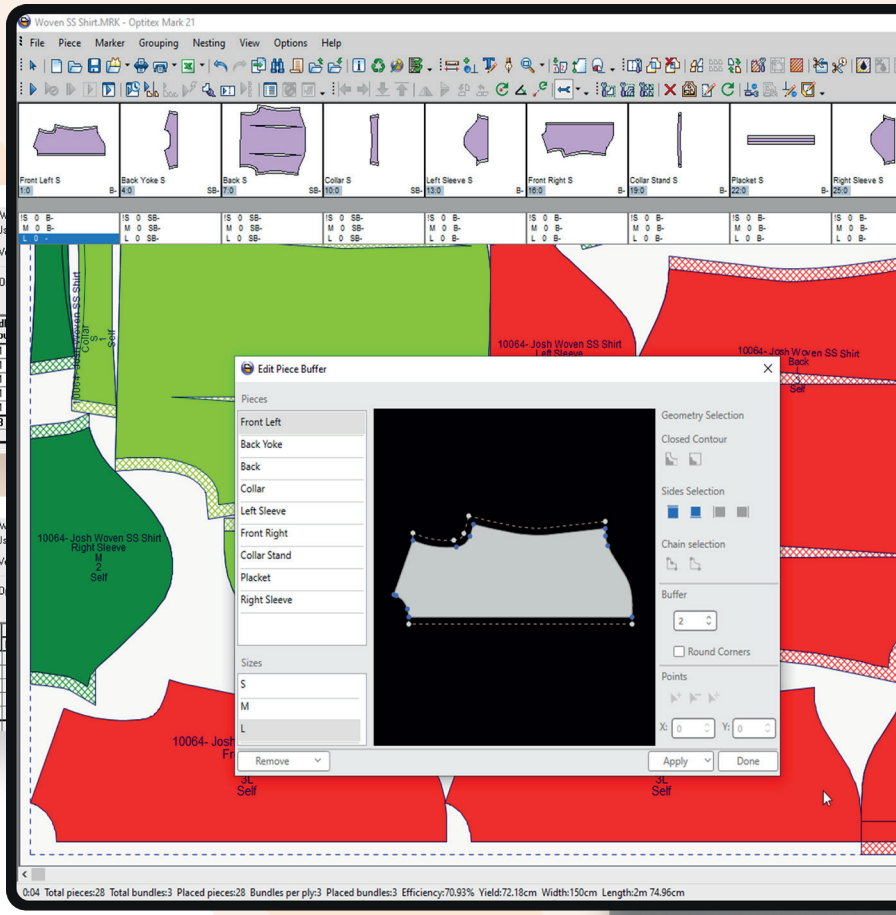
	Style Name	Size	Single Bundle				Bundl Amou
			Net Area	Gross Area	Cut.Length	Cost	
4	Shop\4469	10	1.56	1.87	821.36	10.93	1
5	0D_AlexFin	12	1.64	1.96	836.24	11.48	1
6	al-JOSH.PD	14	1.72	2.06	851.24	12.05	1
7	S	16	1.81	2.16	866.35	12.62	1
8		18	1.92	2.30	887.64	13.45	1
	Total						8
	Average		1.62	1.94	832.61	11.36	

Cost Calculations

Efficiency: 78.09 %

Material	Mat.Cost (per sq.yd)	Cut.Cost (per inch)
Default (Empty)	5.8529	0
A	5.8529	0

	Style Name	Size	Single Bundle				Bundles Amount
			Net Area	Gross Area	Cut.Length	Cost	
4	Shop\4469	10	1.87	2.39	893.97	14.01	1
5	0D_AlexFir	12	1.96	2.51	909.43	14.70	1
6	al-JOSH-LC	14	2.06	2.63	925.03	15.41	1
7	NG.PDS	16	2.15	2.76	940.74	16.13	1
8		18	2.29	2.93	962.88	17.16	1
	Total						8



Automatic Nesting Solutions

- Maximize material efficiency in minutes.
- Control runtime for faster nesting processes.
- Schedule and manage “nesting queues” for multiple markers.
- Generate precise cost proposals to support effective client price negotiations.
- View data in spreadsheets to compare efficiency, marker dimensions, and process times.

3 Levels of Automated Nesting Solutions

Basic (Nest ++)

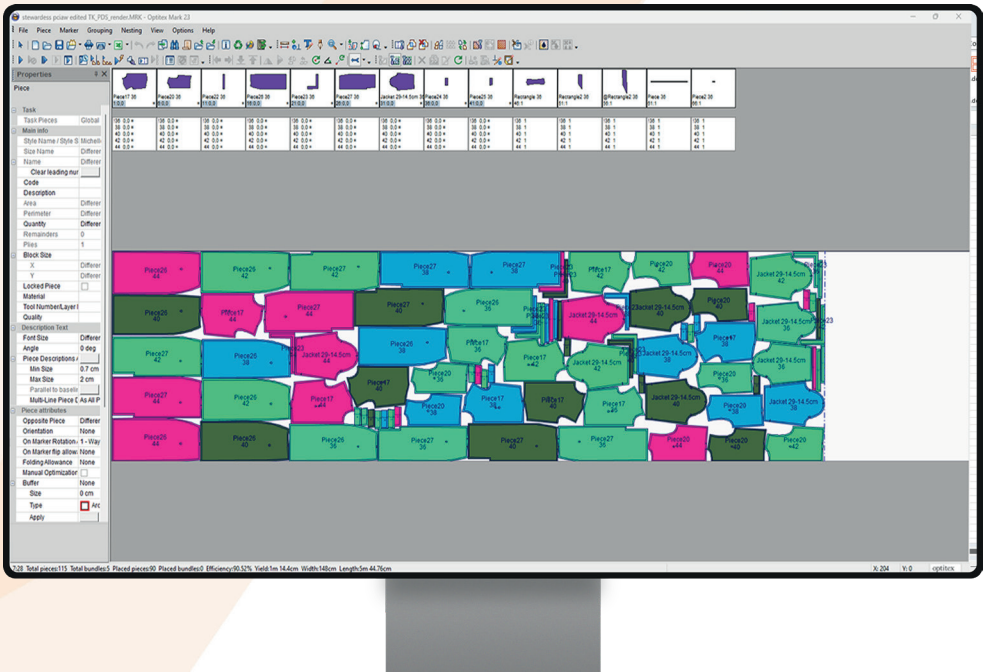
- Offers foundational efficiency, saving time compared to manual nesting.
- Includes tubular nesting and nest-to-block features.

Advanced (Nest ++2)

- Increase efficiency by up to 2.5% compared to Nest ++.
- Features tilt-angle rotation, nest shading, and an optional auto-compaction add-on.

Professional (Nest ++Pro)

- Best-in-class nesting algorithm.
- Enhances efficiency by up to 4% higher than with Nest ++.
- Includes Auto-Compaction and Multicore modules for improved performance.



Powerful
Report Capabilities

Calculation Reports

Various calculation reports provide insights into marker efficiency, cost, and layout optimization:

- Check Current Solution – Evaluates piece placement for completeness, identifying missing or overlapping pieces within sets or bundles.
- Splicing Report – Defines and controls splicing line calculations.
- Layout Calculations – Determines optimal fabric usage based on real or estimated material, waste, and nesting values.
- Cost Calculation Report – Dynamically calculates marker costs based on efficiency, material cost, or weight. Users can adjust efficiency values to see real-time cost impacts.
- Time Calculation – Generates a cut file for defined cutting operations, allowing modification of cutting speed parameters.
- Solution Report – Displays the last three nesting results, summarizing marker properties such as length, width, efficiency, and ply count.

Customized Reports

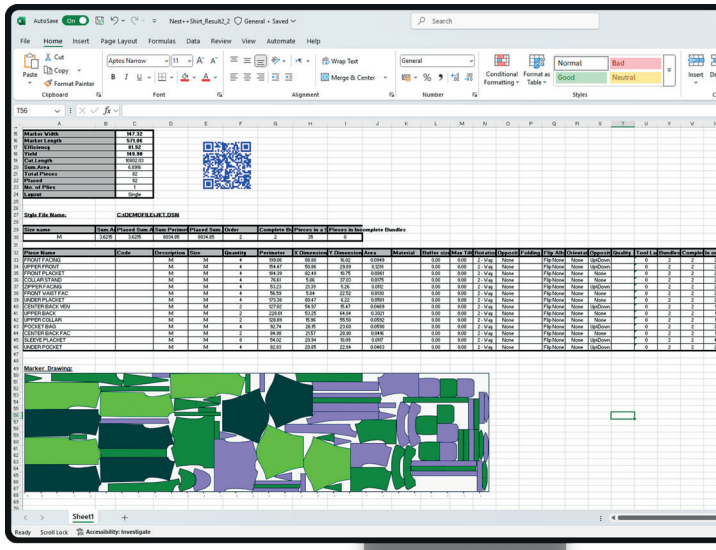
The Report Writer allows users to create and view customized reports based on default or personalized templates. Unlike other marker reports, it does not require Excel, making customization easier. Users can choose from three default templates or design their own using the Report Designer. Once generated, reports can be previewed with tools for printing, zooming, page setup, and color adjustments, ensuring clear and tailored documentation of marker data.

Excel Reports

Optitex Marker enables users to generate detailed reports using Excel, reports can be customized by modifying displayed columns, header titles, and formatting to meet specific production needs. Excel reports offer a familiar and flexible way to analyze marker efficiency, fabric consumption, and other key details.

Real-Time Nesting Progress Monitoring

This report logs real-time nesting improvements, tracking every optimization step with a serial number, timestamp, efficiency percentage, and marker length. Users can manage log file, and reduce unnecessary marker generation early in the nesting process. can fine-tune nesting strategies for optimal fabric utilization.



Marker Modules

Optitex offers a modular approach, enabling you to customize Marker with features and tools tailored to your specific needs. Build a flexible suite that adapts with your workflow, ensuring scalability for any project.

Parallel Nesting (for Nest++Pro)
Run multiple nesting processes simultaneously to save time and maximize material efficiency.

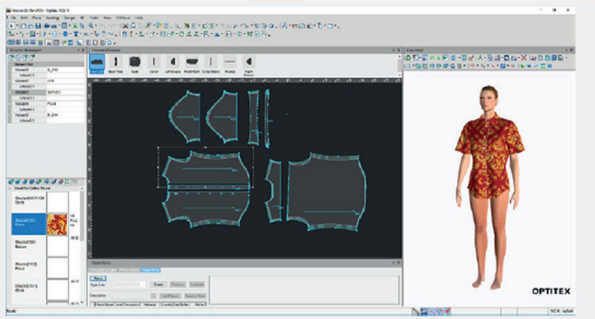
Spacing Optimizer (for Nest++Pro)
Centralizes smaller pieces among larger ones to simplify cutting and reducing material/fabric waste.

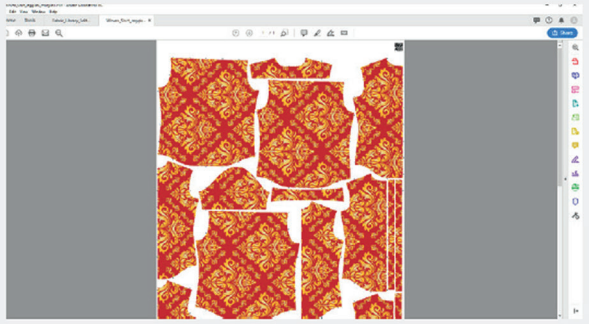
Auto-Compaction (for Nest++2)
Improve efficiency and minimize raw material waste with advanced Auto-Compaction functionality.

Match++
Achieve precise alignment of striped, plaid, and flow-matched fabrics for flawless finishes.

Leather Nesting
Evaluate and optimize leather material consumption for accurate cost planning.

Lace Marker
Perfect for precise lace fabric alignment, reducing waste while ensuring quality finishes.





Shared Cut Lines

Streamline your cutting operations by identifying shared lines between two pieces, saving time and reducing equipment wear and material waste.

Nesting to Separate Blocks

Nest pieces from the same sets or bundles into separate blocks for organized layouts and more efficient cutting.

Asian Fonts for Plotter

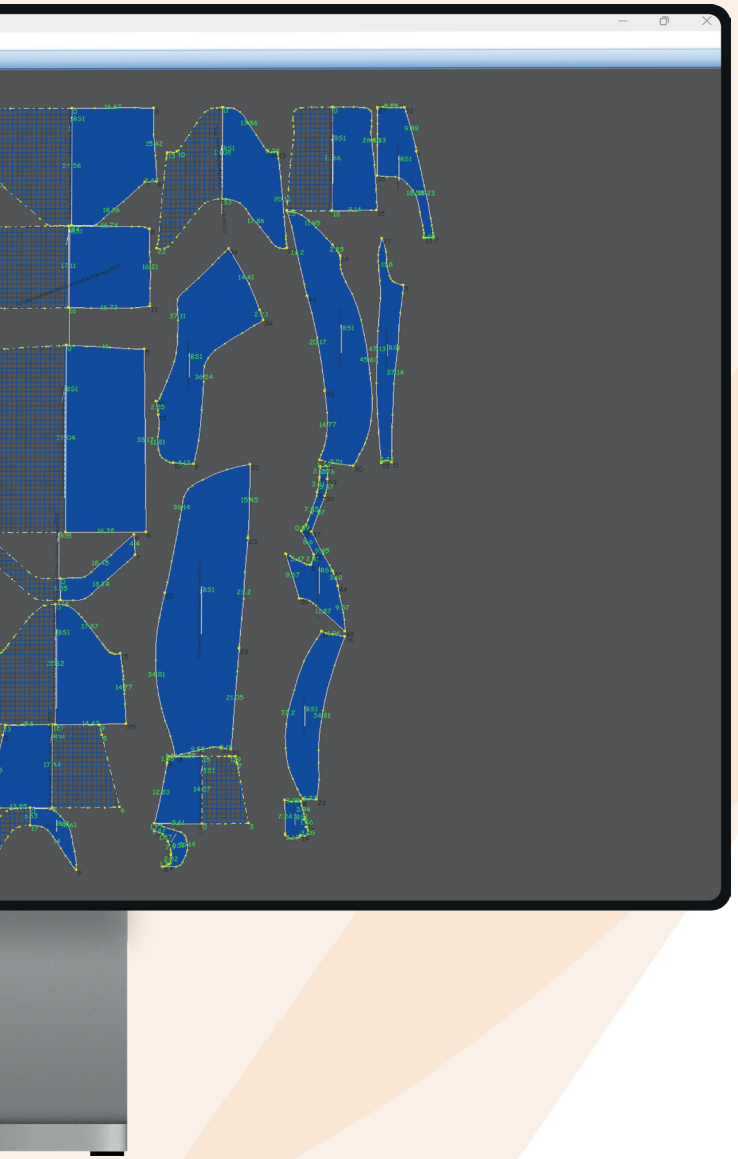
The Special Asian Plotter Fonts module supports Chinese Simplified, Chinese Traditional, and Korean fonts, ensuring clear and accurate marking on plotted patterns.

Bar Codes

The Bar Code functionality streamlines production processes, facilitates style assembly and prevents miscommunication in manufacturing workflows. By using barcodes, teams can quickly and accurately identify pattern pieces, reducing mistakes and improving efficiency on the production floor.

Print and Cut

The Optitex Print and Cut module allows users to print and cut garment pieces directly from blank rolls, eliminating the need for pre-printed materials. This reduces fabric inventory, optimizes material usage, minimizes waste, and saves on fabric and ink costs—streamlining the entire production process. Requires PDS and Marker licenses.



Optitex Viewer

The Optitex Viewer allows users to seamlessly view all patterns with detailed piece properties, including names, stitches, and colors, on a large screen—eliminating the need for physical mylar templates. Additional features such as printing and layout preparation for plotting streamline quality control, enhance collaboration, and support precise cost management.

Purpose-built for the automotive industry, The Tolerance Check tool and Validation Mode ensure pattern accuracy and uphold quality standards, minimizing reliance on physical samples and

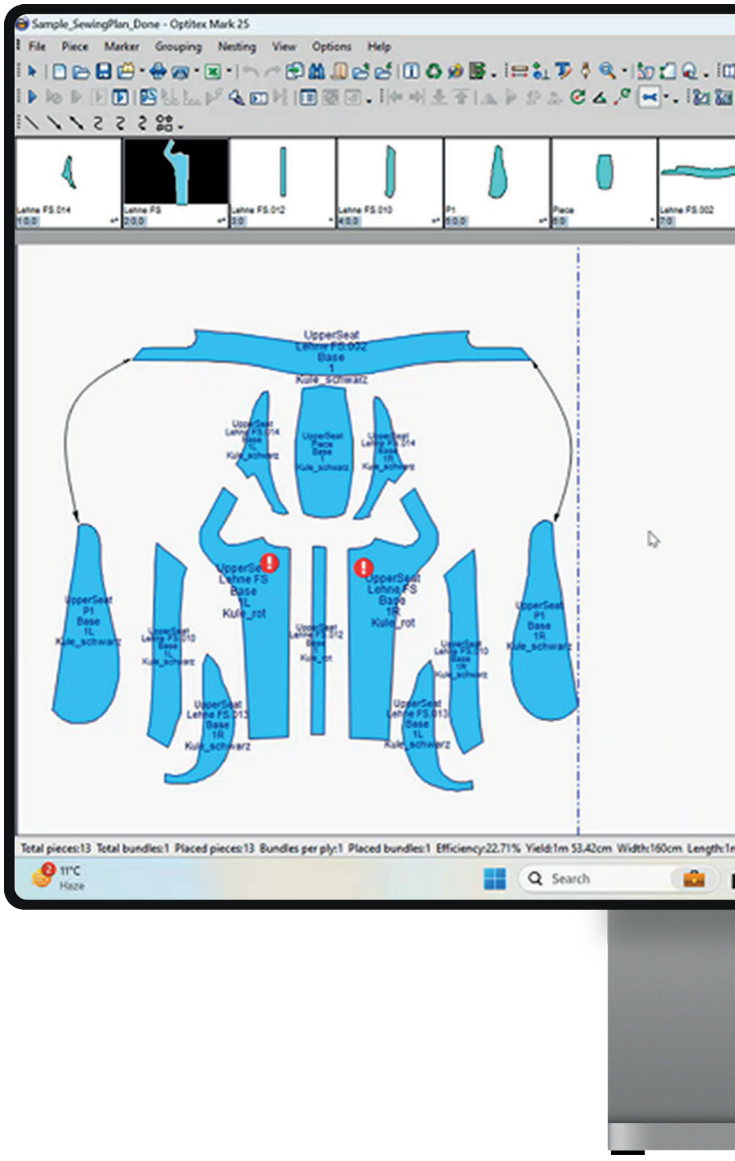
Production Diagram

The Production Diagram tool is a new module within the Marker application, designed to help users create detailed production diagrams for car sets, furniture, transportation interiors, and the broader sewn-products industry. It enables users to load and filter pieces for various production processes (e.g., cutting, sewing, assembly), arrange and annotate them on the marker board with symbols and arrows for improved clarity.

- Streamlines Workflows
  Provides a clear, visual guide for each production step, ensuring all team members follow the same process and reducing unnecessary back-and-forth communication.

- Minimizes Errors
  Automatic updates keep diagrams aligned with any changes made to pattern pieces in PDS, eliminating the need for manual adjustments and preventing miscommunication.

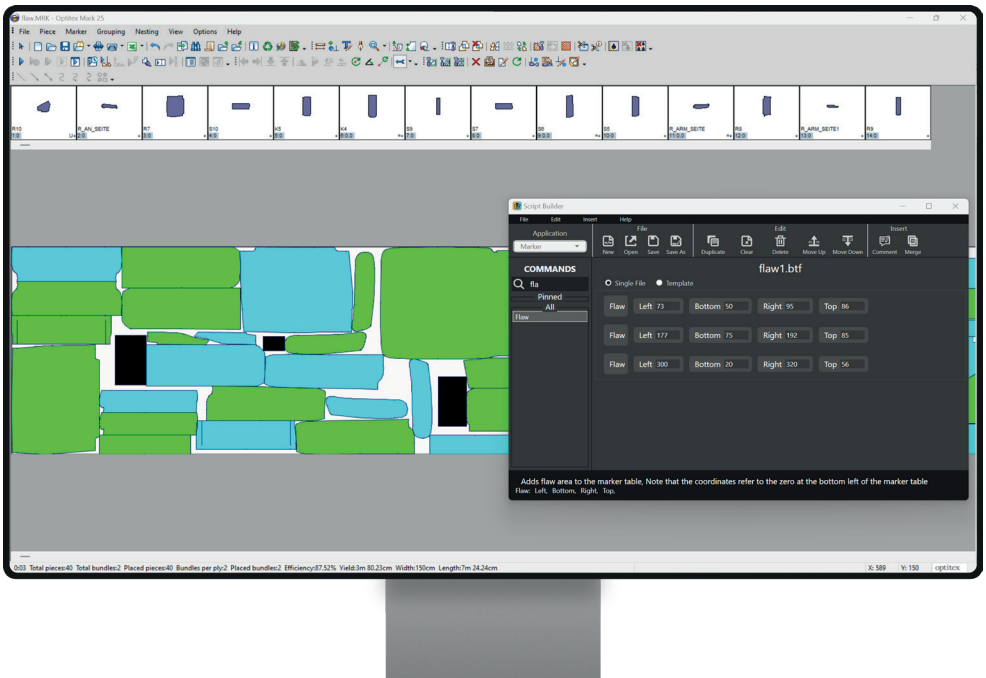
- Saves Time
  Built-in annotation tools allow users to highlight key points with symbols and arrows, removing the need for external software.



Automation and Compatibility Tools

Script Builder
Automate repetitive tasks in Marker by creating custom scripts in just a few clicks. Streamline workflows, reduce manual intervention, and increase efficiency by automating complex or time-consuming operations such as creating a Marker order based on the PDS file, setting the marker table size and properties, or adding flaw areas to the marker layout. Save time, reduce human error, and focus on high-value tasks while the system handles routine operations.

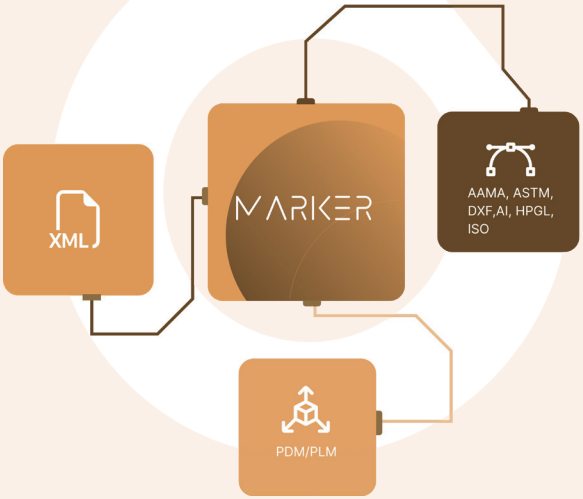
2D Software Development Kit (SDK)
The SDK connects Marker with various business applications, ensuring smooth data exchange and workflow synchronization. By leveraging the SDK, you can automate processes, eliminate manual data entry, and maintain consistency across platforms from end-to-end.

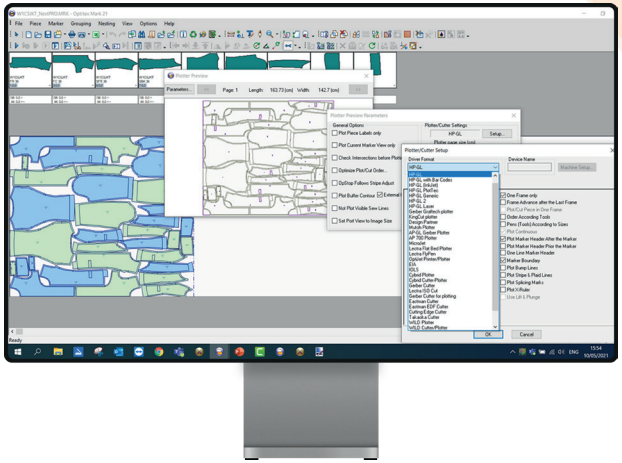


Seamless Connection with Third-Party Solutions

Effortlessly connect Marker to third-party systems for smooth data exchange and seamless interoperability throughout your production process. This flexibility ensures seamless integration with external tools, enhancing operational efficiency.

- Compatible with a wide variety of plotters, cutters, and digitizers.
- Export marker data in ASTM XML format for streamlined integration.
- Easily connect to PDM/PLM for optimized operations.





Import Standard Formats
Ensure seamless compatibility across platforms by importing standard industry formats, including AAMA, ASTM, DXF, AI, HPGL, and ISO. This feature improves data transfer efficiency and fosters smooth collaboration with external teams and systems.

XML Export
Easily export data in XML format for effortless integration with other systems and workflows. This widely accepted data format simplifies collaboration with teams and suppliers, streamlining production processes.

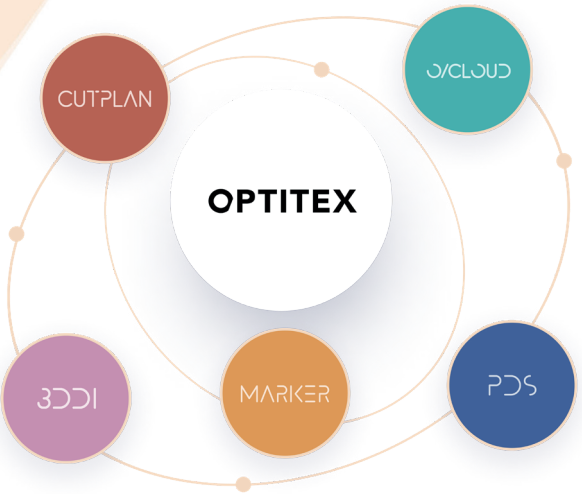
MRKML Import/Export
Seamlessly exchange data with the MRKML Import/Export module, supporting the creation, editing, aand sharing files in the MRKML (Marker XML) format. This ensures consistent data flow between Optitex and other systems, improving collaboration and minimizing errors.

DXF Export
DXF output now supports cutter machines with Projector, highlighting pieces in different colors based on bundles, making sorting more intuitive. Additionally, the new output includes piece names, ensuring better identification and organization.

Why Optitex?

Maximize Efficiency with the Optitex Ecosystem

Enhance your workflow by integrating Optitex solutions such as PDS, CutPlan, 3DDI, and O/Cloud. These tools streamline processes from digital product development to production, fostering seamless collaboration across teams, optimizing fabric usage, shortening production cycles, and improving accuracy in cutting and printing. By adopting these solutions, you can automate tasks, improve communication, and gain greater control over every phase of production—from pattern design to production optimization—while boosting sustainability and reducing costs.



Because Efficiency & Precision Matter

- 30+ Years of Experience
- Global Presence
- Multilingual Support
- Comprehensive Product Suite
- Robust Customer Support
- Sustainability Focus