

PDS

Master Pattern Excellence with Effortless Precision

A smart, flexible 2D/3D
solution for creating and validating
digital patterns.

OPTITEX

PDS

Pattern Design Software The Future of Digital Pattern Creation

PDS is an advanced solution for creating, modifying, and optimizing digital patterns. PDS is designed for pattern makers, technical designers, and engineers—streamlining workflows, reducing development time, and ensuring precision. With a powerful suite of 2D tools and integrated 3D capabilities, PDS enables accurate pattern development with visualized fit, significantly minimizing the need for physical samples.



Tailored for Every Sewing Industry

Optitex Pattern Design Software supports manufacturers across all sewn-product industries, including automotive, furniture, apparel, and industrial materials. Whether it's darts, seam allowances, special corners, advanced measurement techniques, pleats, complex curves, or dimension adjustments, PDS is equipped to meet the specialized demands of your trade.

50%+

Reduction in product development time with Optitex compared to traditional methods.

80%+

Reduction in the need for physical samples.

3X+

Increase in productivity for pattern makers, improving workflow efficiency.

70%+

Shorter lead time from product development to production, accelerating time to market.

8,000+

Active customers rely on Optitex solutions across various industries worldwide.

100%

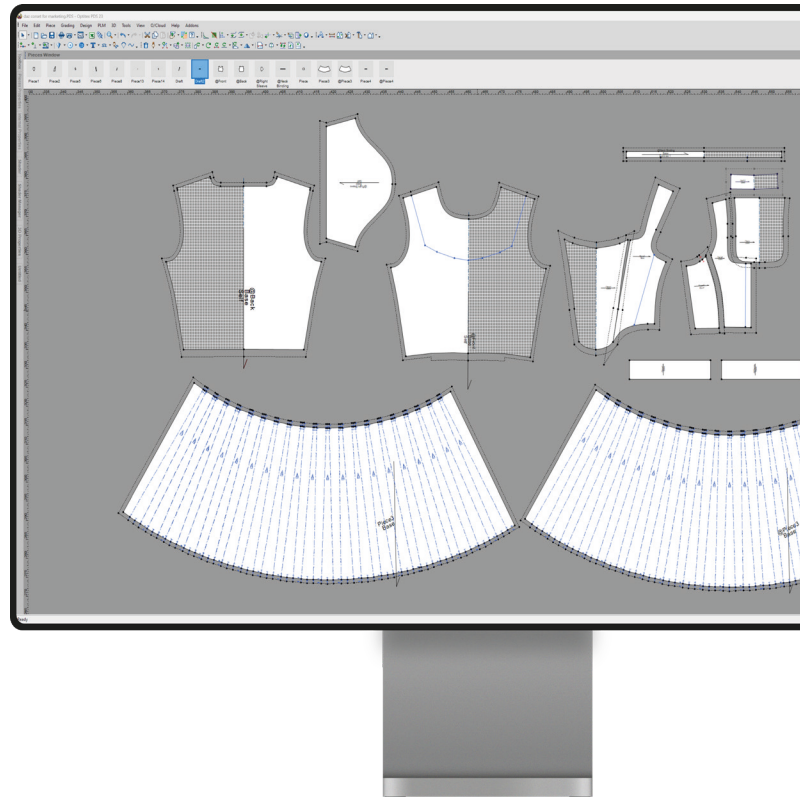
Global reach with multi-language support for seamless international collaboration.

90%+

Fewer errors and revisions during pattern development, ensuring greater accuracy.

Intuitive, Easy-to-Learn, and Fully Customizable Interface

PDS features a user-friendly interface that adapts to your workflow. Movable toolbars and dialog boxes let users personalize their digital workspace, while tools are grouped by function for efficient access. Drafting, editing, and measuring tools are logically organized, and hotkeys offer instant access to frequently used functions—no need to dig through complex menus.



PDS 2D Modules

Optitex takes a modular approach, enabling you to add features and tools tailored to your specific needs. Build a customized suite that evolves with your workflow—delivering the flexibility and scalability required for any project.

Digitize

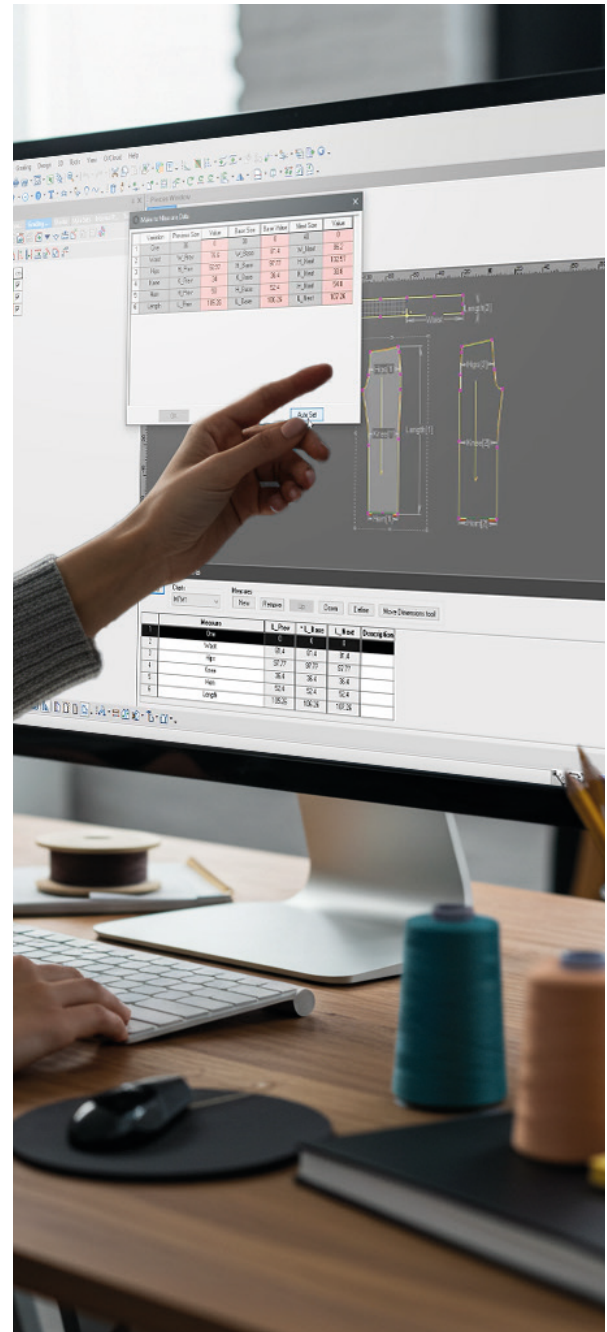
Easily convert physical patterns into digital formats with the Digitize module. Whether digitizing paper patterns or creating new ones from draped forms such as mannequins, furniture, or car seats, this tool ensures precise contour capture for accurate pattern creation. Save time while enhancing accuracy in your workflow.

Grading

Simplify grading with automatic and manual methods, enabling quick and accurate adjustments for darts, pleats, buttons, lines, and internal contours. Grade multiple pattern elements in just a few steps—saving time and enhancing precision.

Dynamic Measurement Chart (DMC)

Achieve unmatched precision with the DMC. Create customizable measurement tables for clients or size ranges to ensure consistent sizing across various body types. Measurements appear directly on the pattern, with real-time synchronization for any adjustments. Integrated with the Grading module, DMC streamlines workflows and delivers consistently tailored, high-precision patterns.

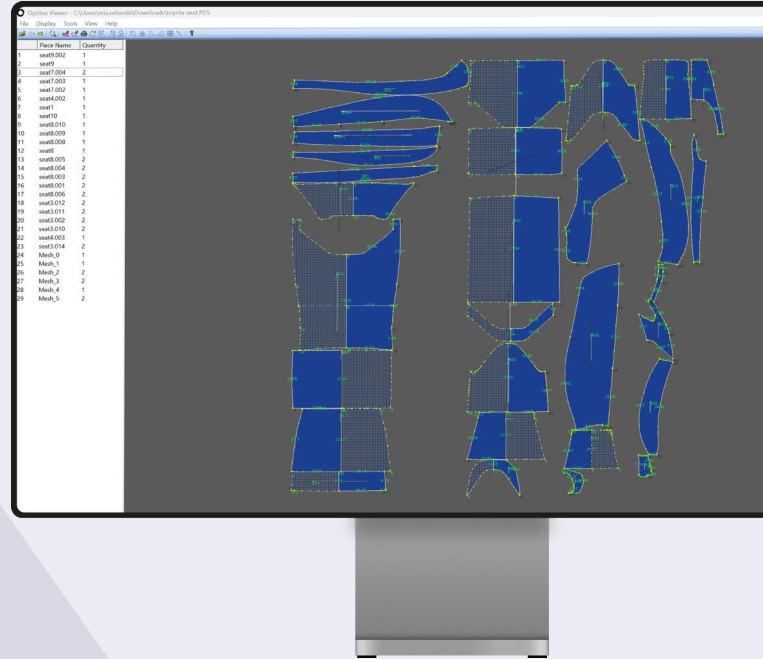


Optitex Viewer

The Optitex Viewer allows users to seamlessly view all pattern pieces with detailed piece properties—including names, stitches, and colors—on a large screen, eliminating the need for mylars.

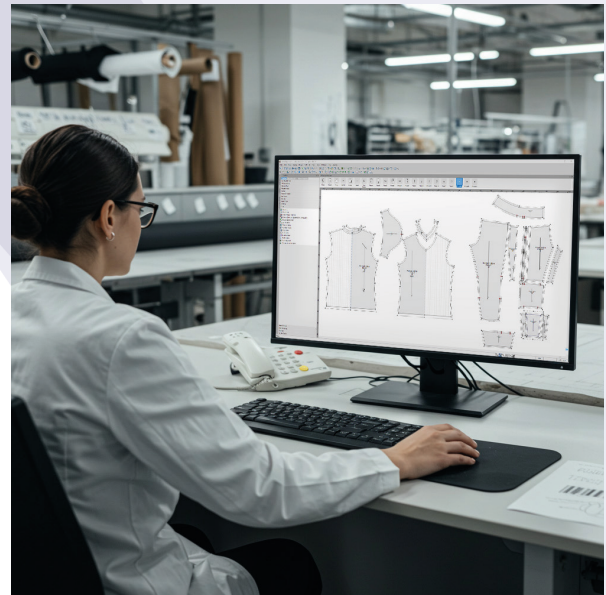
It also includes features for printing, plotting, and arranging pattern layouts to streamline quality control, improve collaboration, and support accurate cost management.

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 while reducing both time and material waste.



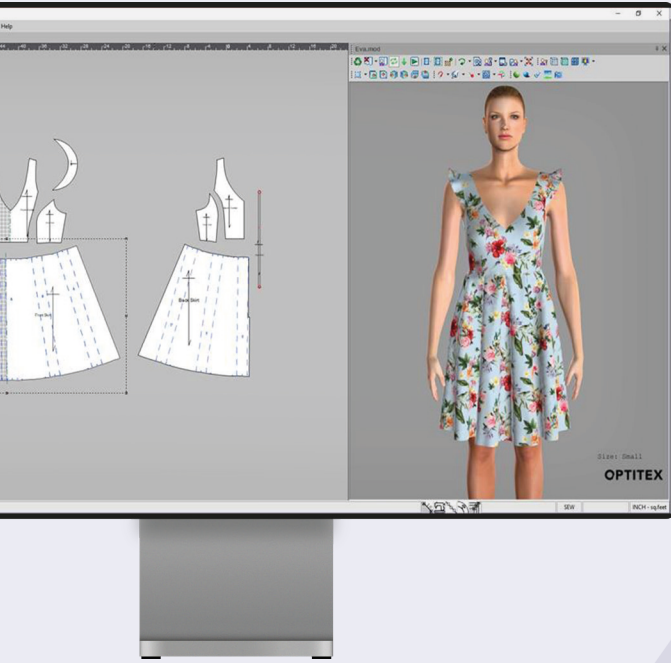
Bar Codes

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



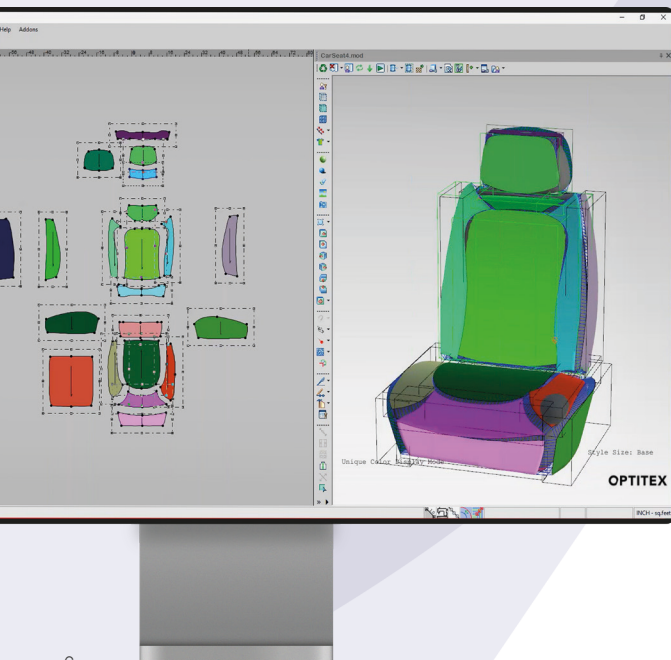
Asian Fonts for Plotter

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



PDS 3D

Simulate your 2D patterns in a 3D environment. Visualize and fit patterns using fully customizable avatars to ensure accurate representation and optimal fit before production. Identify and resolve design or fit issues early in the development process to boost efficiency and reduce costly errors.



PDS 3D Modules

3D Flattening

Convert 3D models into precise 2D patterns using the 3D Flattening tool. Ideal for industries like automotive, fashion, furniture, and industrial materials, this tool supports importing 3D models from CAD systems such as AutoCAD or CATIA and flattening them for production-ready use. Apply fabric properties and shape adjustments to ensure the best possible fit and performance.

Tech Pack Essentials

Generate complete and professional tech packs with ease. Include colorway images, measurement charts, stitching details, trim information, and more. Ensure all specifications are accurately captured for production, streamlining communication and ensuring a smooth transition from design to manufacturing.

Avatar Editor

The Avatar Editor allows advanced users to prepare avatars for company-wide use. With the Avatar Editor, you can easily load an MOD or FBX file containing either a scanned/sculpted avatar or an Optitex avatar. You can customize the avatar to meet your own needs by creating sizes, adjusting morphs/accessories, editing shaders, etc., and then save the file as an MOD file for use in the PDS.

3D Photo Realistic Rendering

Generate highly detailed 3D samples with realistic fabric textures, colors, and material properties. This tool applies advanced lighting and shading techniques to enhance visual depth and accuracy, providing a true-to-life representation of materials. Ideal for reviewing design details and evaluating fabric appearance before production.



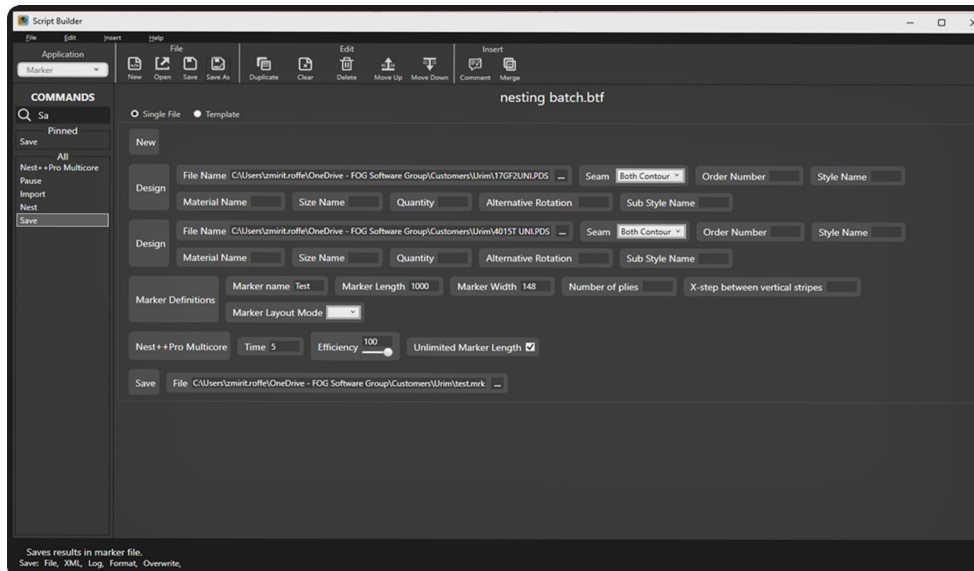
Automation and Compatibility Tools

Script Builder

Automate repetitive tasks in PDS 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 batch processing patterns, automated grading tasks, or file exports. This saves time, reduces human error, and allows you to focus on high-value tasks while the system handles routine operations.

2D Software Development Kit (SDK)

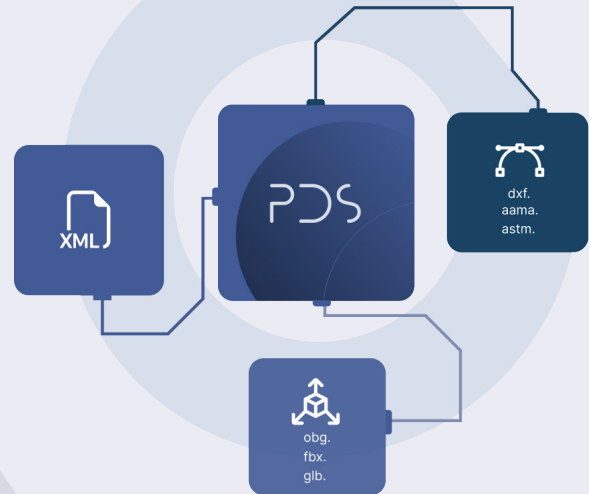
The SDK provides the tools and frameworks needed to connect pattern design software with various business applications, ensuring smooth data exchange and workflow synchronization. By leveraging the SDK, you can automate processes, eliminate manual data entry, and maintain consistency across platforms, from end-to-end.



Seamless Connection with Third-Party Solutions

Effortlessly connect PDS to a wide range of third-party systems to ensure smooth data exchange and interoperability across your production process. This flexibility supports seamless communication with external tools and optimizes operations.

- Compatible with a variety of plotters, cutters, and digitizers.
- Interoperability with other CAD systems using standard formats like DXF, AAMA, and ASTM.
- Offers multiple 3D export options, including OBJ, FBX, GLB, and glTF.
- Connect to PLM via plugin integration or XML.



Import of 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.

PDML Data Exchange

Seamlessly exchange data within the PDML (PDS-XML format). This ensures consistent data flow between Optitex and other systems.

3D Import of IGES

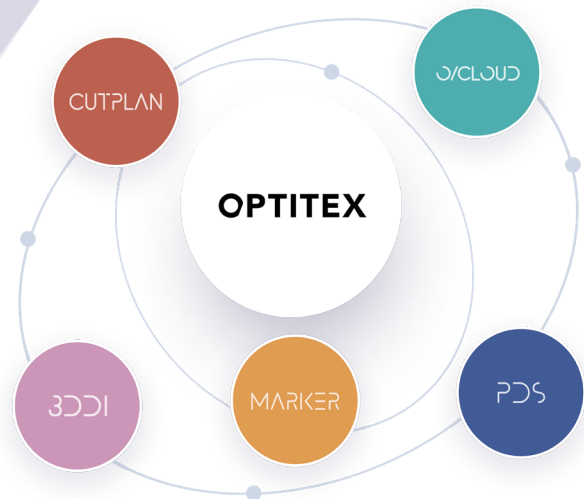
Integrate 3D data into your Optitex workflow with the 3D Import of IGES format. Import 3D models from CAD systems directly into PDS, ensuring smooth data transfer and eliminating the need for complex conversions.

Why Optitex?



Maximize Efficiency with the Optitex Ecosystem

Enhance your workflow by integrating Optitex solutions such as Marker, 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—all 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

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