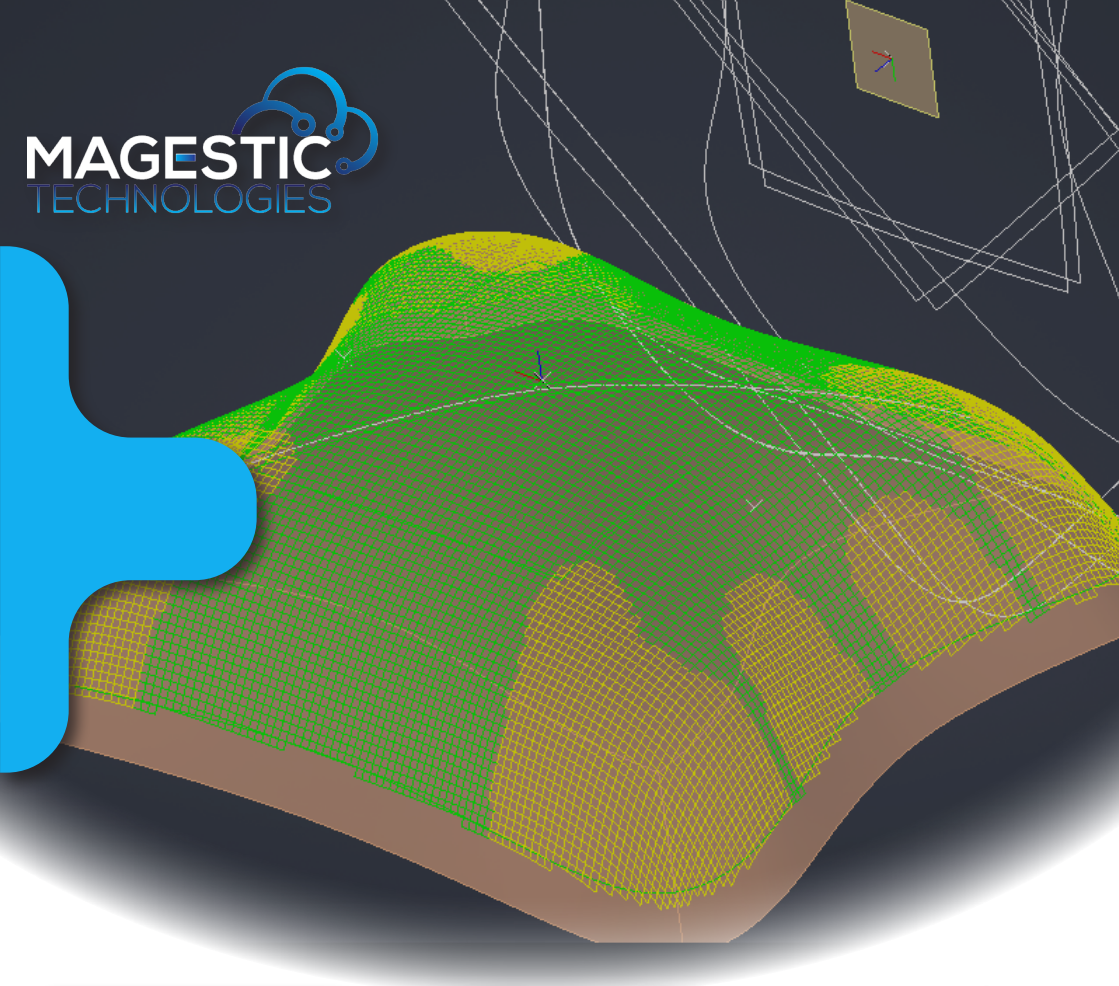
MAGESTIC TECHNOLOGIES

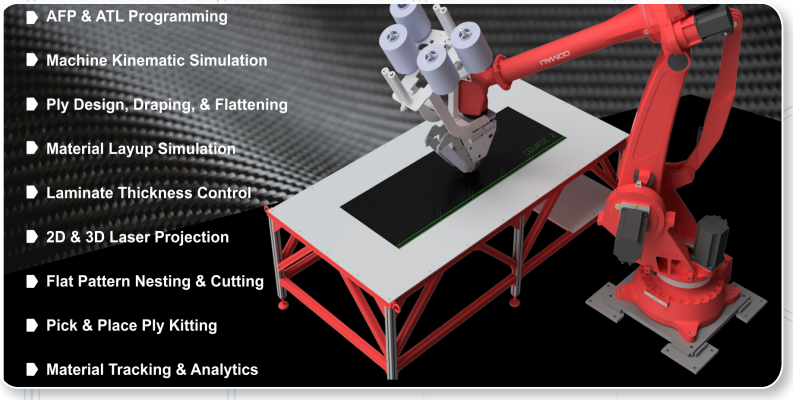


TRU Composites Ply Comp Laser Fiber Plan

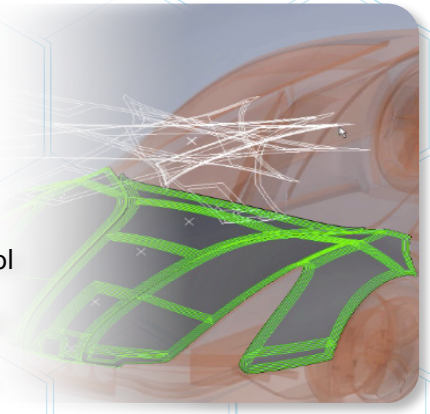
THE CUSTOMIZABLE, ALL-PURPOSE MANUFACTURING SOLUTION FOR COMPOSITES AND ADVANCED MATERIALS!

TRUComposites

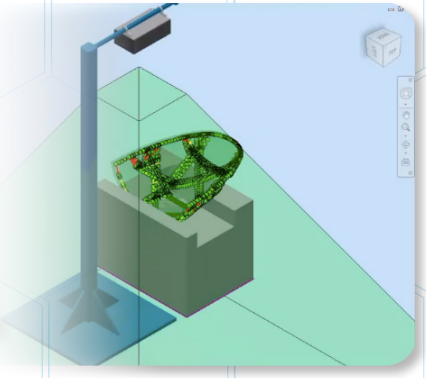
The All-In-One Composites Platform—Made Easy.



TruComposites is the cutting-edge solution for both hand layup and automated layup processes; addressing critical issues while streamlining operations. For automated layup, the TruPlan workbench allows manufacturers to evaluate part manufacturability, simulate material deposition, and identify potential problems like fiber angle deviation, gaps, overlaps, and material wrinkling—ensuring precise, defect-free layups from the start. TruFiber enhances this process by enabling tool path programming, NC code output, and full machine kinematics simulation for robotic and gantry-style equipment.



For hand layup processes, TruLaser generates precise laser projection data, optimizing the setup of targets and calibration files for increased efficiency. TruPlan also excels in flattening and draping, creating accurate flat plies and cut pieces, improving layup quality, and reducing defects. Together, these workbenches solve critical slowdowns in both hand and automated layup, driving efficiency and superior outcomes.

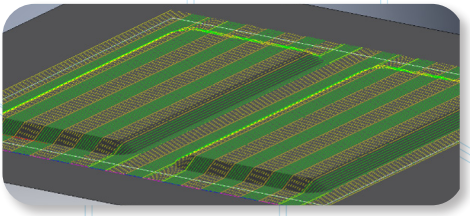


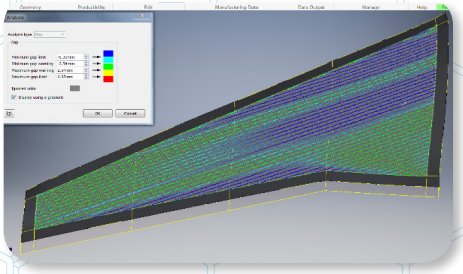
TruPly Comp is a standalone product that compares as-made to as-designed composite parts and automatically creates manufacturing data to build parts back into tolerance.

TRUPlan

From Design to Manufacturing
Automatically Managing Costs

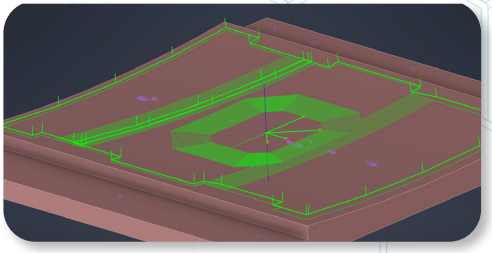
Objectively compare and determine the cost-impact of using different processes for composite part manufacturing (like AFP, ATL, & Hand lay-up).

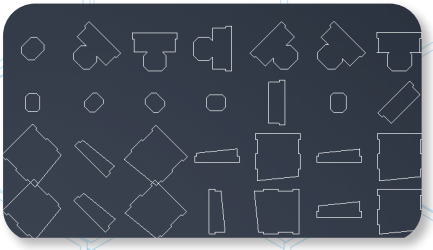




TruPlan reveals to users the impact of designs on downstream processes by analyzing “what-if” scenarios, and layup strategies at the conceptual design phase.

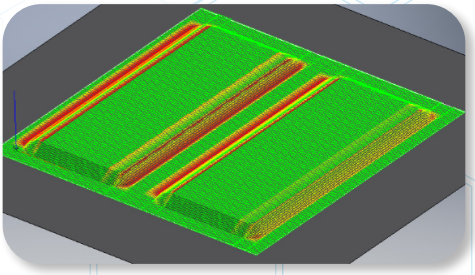
TruPlan supports all laser projector brands and controls the number of projection points along curves, straight segments, and sharp angles through customizable parameters.





Manually edit flat patterns to meet unique specifications on a per-project basis & automatically diagnose problematic geometry without needing to outsource to another application.

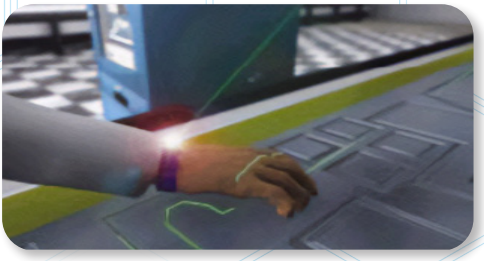
Test the manufacturability of composite parts during both the conceptual design and detailed design phases and determine ROI before going to production.

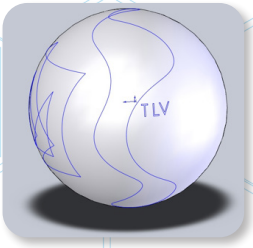


TRULaser

Streamlined Laser Projection For Precision Manufacturing.

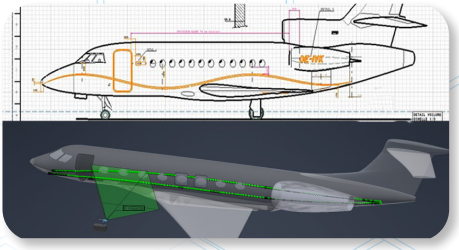
Simplify the kitting process when nesting multiple kits by removing cut plies and miscellanious parts from the cutting table—either via laser-assisted manual process or by robotic command.

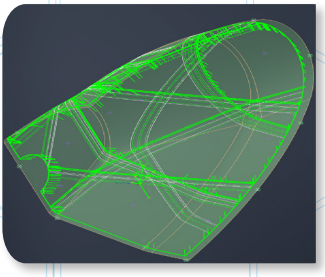




Optimize data for laser-assisted assembly, import CAD design data, and quickly processes model revisions. Ensure organized, repeatable assemblies by projecting geometry details and any CAD feature.

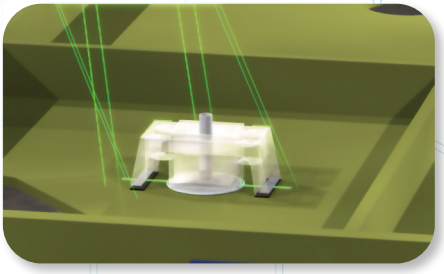
2D data can be instantly re-sized— fitting the 2D image exactly onto 3D surfaces while 2D data is simultaneously merged with the 3D surfaces from the user's pre-existing CAD models.





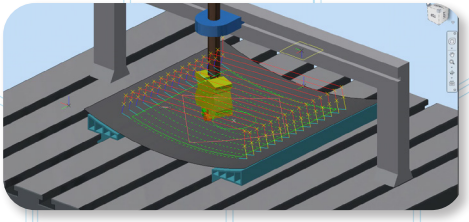
Supports single/multi-head laser configurations to meet user specifications. Users can also locate and drill mold-line holes *without* hard tooling.

User definable laser projection sequencing for accurate positioning of brackets, clip bonds, fasteners,and wire harness or fluid line paths.



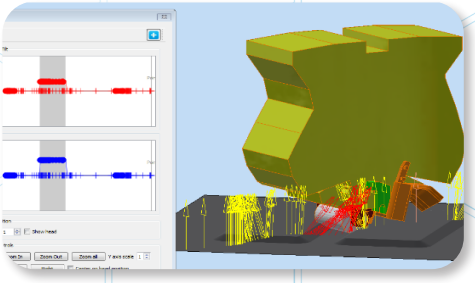
TRUFiber

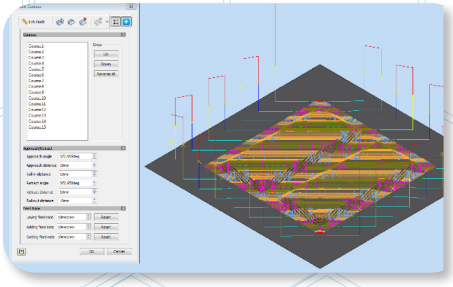
Automated Placement, Done Right the First Time.



Generate statistical reports for material deposition and process time. Process zones empower the end user to easily tailor different layup parameters based on geometric zones.

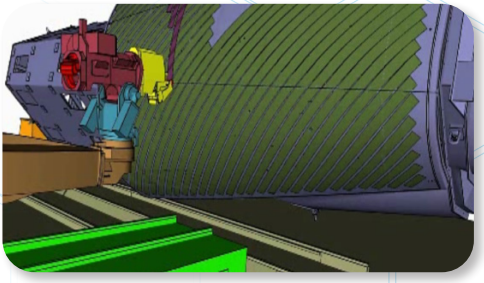
Automated collision checking and NC code validation lets **TruFiber** automatically compensate—avoiding areas where the machine head may collide with the part or mold.





Develop part programs right the first time for AFP or ATL equipment. Optimize tool paths and eliminate defects like angle deviation, material bridging, steering, wrinkling, & roller compaction.

Simulate AFP and ATL work cells using actual machine kinematics to validate part programs and ensure proper material deposition strategies.

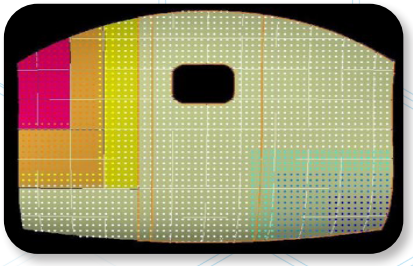


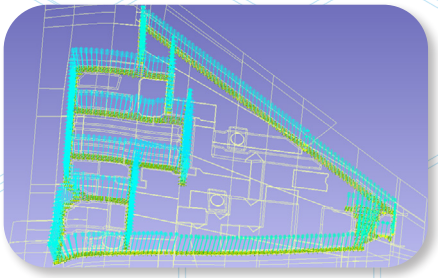
Lay material on simple or complex molds using ***any*** brand of AFP or ATL machine on the market with custom post processors that take advantage of new machine capabilities.

TRUPly Comp

Bringing As-Made to As-Designed—
Simply and Automatically.

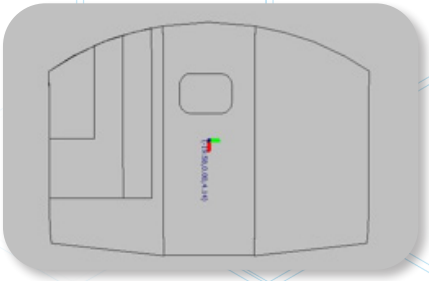
Compare as-made to as-designed composite parts and automatically creates manufacturing data to build parts back into tolerance with **TruPly Comp**.

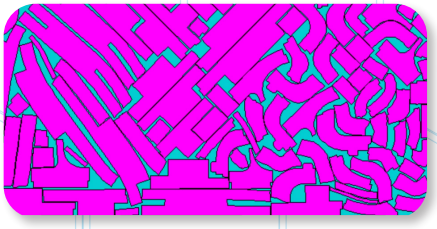




Automatically Generate the Laser Projection Files to Position Compensation Plies Accurately

Minimize waste and maximize accuracy during production by avoiding processess like milling & overbuilding plies.





Automated flat pattern creation, nesting, and generate machine NC for compensation plies.

Use metrology data to ensure the accuracy of the placement, location, and necessity of compensation.

MAGESTIC TECHNOLOGIES

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