BSG Développements APPLICATIONS FOR SAILMAKING Sail Design Software

SaiLPack sail design software is now used by more than 200 sail designers in 31 countries



SailPack is an innovative sail design software that is both more productive and more accurate than any other software on the market. It is flexible enough in its design to follow the constant demand and evolution of the sail making industry. Sail design with SailPack is basically a three layer process beginning with the configuration of a frame on to which the mould of the sail is attached, from here a panel layout is applied, adapted and the reinforcements and other finishings are added.

The frame can be basic or extremely sophisticated, your generic mould shapes and standard panel layouts can be applied as they are or modified to suit.

The high productivity level achieved rapidly with SaiLPack is due to the use of:

- Automatic Panel & Patch Layout Script: Create automatic panel and patch layout plans that can be applied to any sail.
- Parameterized layouts using variables
- Evolution Rules: The ability to create your own set of morphing rules to automatically customize existing moulds to specific customer needs means that every sail is an investment that refines your rules for the next one.
- **Compatibility:** Outputs to most formats used by plotters and cutters and stress analysis and VPP and CAD software.
- Personal online support via phone / Skype & TeamViewer.

With the starter pack and one on one training enabling you to set up your basic wardrobe its plain sailing from then on.

The high level of accuracy results from:

- Controlled Meshing Calculation Superb control and accuracy for the panelling process, 3D visualization.
 Sophisticated graphical tools Gives real time on screen visualization of any modification to 3D geometry.
 3D rig input
 - Ensures that the sails will fit the boat and that full sail plan interactions are good.
- A powerful measurement rules module
 Ensures that the sails are optimized to the rules
- Ensures that the sails are optimized to the rules. • String Sail interface
 - Real 3D yarn path interface, includes yarn database.
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Visit our website at <u>www.bsgdev.com</u> for more information.

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Sail Design Software

3D Rigging Geometry or Final sail measurements

- SaiLPack reflects the true position of deck fittings and rigging, including tracks, blocks, chain plates, and spreaders. With SailPack the user is able to create, a realistic simulation of any number of possible rigging configurations (mast, spinnaker pole, gaff, etc.).
- With SaiLPack the designer can input the existing detailed sail plan to visualize and solve any potential problems between sail placement and rigging setup. In addition the sail designer can view a complete sail inventory.
- The sail designer can also define the sail geometry using a more traditional and simple way inputting either rig measurements or final sail measurements.



Sail Shape

- SaiLPack will give the designer the ability to create a 3D surface with no restriction on geometry and sail shape. This includes symmetrical downwind sails, and traditional or classic configurations such as a gaff-rigs.
- With SaiLPack you can define the surface with an unlimited number of profiles at any position. The outline is defined in 3D terms allowing for both lateral and longitudinal curve and sag.
- 2D output information is shown in real time reflecting the mould changes to the outline curve (before and after broad seaming).





Evolution rules

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- SaiLPack takes into consideration and integrates both objective (aspect ratio, fabric type...) and subjective (client helming characteristics, sea-state...) parameters. Using these combinations the designer is able to customize, using a simple and automatic process, a unique design specific to the customer.
- Each designer has the ability to create or customize their own set of evolution rules and integrate them into SaiLPack.

Measurements

• The designer has the ability to customize and "memorize", within the SaiLPack software, any version of racing rules and measurement parameters. At any time during the sail design process the designer has the option of viewing the final measurement of the sail and if necessary interact, correct and modify any dimension with the modification visible in real time on the sail.

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APPLICATIONS FOR SAILMAKING



Sail Design Software





Panel Layout

- There is no limit to the styles of panel layout patch, finishings, thread layout using **SaiLPack** software. Controllable variables include *max width control*, curved seam, limitless creation and storage of layout script and panel zone divisions.
- The concept of layout script within the SaiLPack software is very important in that only SaiLPack allows the designer to customize and 'build on' the layout process, making this automatic.
- Combined with the use of variables, it makes the design process powerful and super fast.



• This interface enables you to create a thread path plan in 3D, as a result, you can expect to get perfect thread junctions along the horizontal seams. You can work in one or multiple layers. This function also includes a tool to help the designer to calculate the yarn density anywhere in your sail.





Reinforcements

- Infinite variations of reinforcements (radial, spider, multilayer, etc.) are possible using SalLPack including spreader patches. The reinforcement design procedure is similar to the panel layout process. With SalLPack any shape (elliptic, triangular, quadrangular or combination of), is possible.
- The designer can call up existing reinforcement layouts that will be perfectly scaled to fit the geometry of the new sail.
- Specific feature for UV protection patches calculation

Battens

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Battens can be drawn directly onto the sail (versus simply marked out at each end). The number, size, orientation and location of battens can be specified. In addition, SaiLPack gives the designer the ability to modify the outline of the sail and introduce hollow curve between battens.

Finishing Details & Outline Specifics

• Finishing details such as reef points, shape stripes, tell tales, slider placement, windows and sail number location can all be incorporated into the SaiLPack sail design and clearly defined in the final panel specs.

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Logo Design

• You can also integrate in your sail design any kind of DXF drawing such as a large logo for spinnakers. The outline of the design will be drawn on the panels.

Printout

• The designer can choose to print or save the final design as a production sheet, a design sheet and/or a panel layout sheet in many format (PDF, Word, Excel, Html,...).



Sail Design

SailPack

Panel export

• The output of the final design is a list of sail panels and reinforcement panels which are exported straight to your nesting software in DXF, NTV, PLT, PSXML, PlotMaker ASCII format, or through the use of specialized software,

MIB2000 (included in the SailPack full version).

MIB2000 is a panel management software and a nesting tool. The designer is able to modify (flip, rename, rotate, split) each individual panel as necessary. The nesting works in manual mode but we propose also an option for automatic nesting.

MIB2000 is able to export to all major plotters or exchange formats such as HPGL, DXF, UC, etc....

SailPack additional modules: two exclusive functionalities able to give SailPack real value as a marketing and sail analysis tool:

* SailPack 3D viewer

The 3D viewer gives the designer or sales person the capability to create and share with customers realistic 3D animation of their sails viewed with both the hull and rig.

* SailPack-Vision

With the SailPack-Vision interface you can import into SailPack the "flying shape" using digital images taken from either the deck or the top of the mast.

SailPack Lite Version

We have kept the core of SailPack "full version" to guarantee the same calculation quality which makes SailPack famous for its accuracy.

* You will always get a perfect result using SaiLPack-Lite.

* We have simplified the user interface to retain only the main functionalities to produce a sail.

Website: <u>www.bsgdev.com</u>

• Check out our website for more detailed information about the different products available, access to news, links and articles. SailPack users also have access here to a private area containing tutorials and upgrades.

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