

ExpressMarine Release Details – List of Fixes and Enhancements

Version	Enhancement/Fixes
3.1.0	<p>Extensive GUI improvements to stiffener and cutouts. No longer overlapping.</p> <p>Hiding links to functionality not yet developed.</p> <p>ShipConstructor Import:</p> <ul style="list-style-type: none"> Adding throw direction of planar group. Setting proper drawing type according to normal vector of parts.
3.0.10	Using different method of creating PlanarGroupDrawing where I don't specify throw direction and instead let Genesis/ShipConstructor specify this.
3.0.9	<p>Implemented SSI logging (NLog).</p> <p>Each part exported to ShipConstructor now have unique names.</p>
3.0.8	<p>Added option to include/exclude objects in ShipConstructor export.</p> <p>Shorter names for exported stiffeners.</p> <p>Updated to use GenesisConnector 2020R2.0</p> <p>ShipConstructor unit can now be chosen freely by user (default "EM").</p>
3.0.7	<p>Fixed whitespace trim of object names.</p> <p>Method for proper placement of piece marks for ShipConstructor export.</p> <p>Improved method for parametric cutouts for 'x objects' (floors, trans. bulkheads).</p> <p>Ignoring stiffeners on plates when calculating center of gravity for name giving purposes in ShipConstructor export.</p>
3.0.5	Reinstated generation of 'Shell', was commented out for testing purposes.
3.0.4	<p>Project backup:</p> <p>Whenever Rhino saves a 3dm file and ExpressMarine is running we save a backup file of the 3dm file with the extension .embk.</p> <p>The user can restore their ExpressMarine project by copying the .embk backup file to a .3dm file.</p>
3.0.3	<p>Improved parametric cutout in longitudinal direction with fallback.</p> <p>We have added 3 more radiuses, so now we have one radius for each 'corner' of the cut out.</p>
3.0.2	No longer crashes when not finding Rhino geometry of stiffener in tree.

	A list of stiffeners EM don't find the corresponding geometry for will be listed in Rhino commando log window. These should be regenerated by user.
3.0.1	Profiles for stiffeners now working when exporting to ShipConstructor. Notes: Stiffener attachment to plates doesn't working properly. One-time export at the moment, must delete items in ShipConstructor unit before exporting again.
3.0.0	Export to ShipConstructor using Genesis 2020R1.1. Including stiffeners (profiles not working).
2.2.2	Fixed switching between automatically generated layers and user defined layers / EM colors.
2.2.1	Faster renaming of objects. Removed flicker during renaming.
2.1.10	Rudimentary ShipConstructor and NAPA export.
2.1.9	Fixed GUIs that hid cutout and stiffeners inputs.
2.1.8	Seams are now propagated correctly. Groups like 'Tiers' will not have seams copied from their parent to avoid seams being copied from 'Shell'.
2.1.7	Automatically generated plate thickness and stiffener profile layers. Users can toggle between using automated layers or colors from tree and user defined layers. Total weight and global COG always visible. User can choose to highlight plate and stiffeners, only plates or nothing when selecting node in tree.
2.1.6	Right click menu on stiffener folder nodes to enable fast deletion of stiffeners in a folder. Old stiffeners are now removed before new ones are generated. (An empty extra folder is still present after first generation on existing model). Old seams definitions are now longer producing a scroll bar which partially obscures edge of seams table. Inclusion/exclusion of limits, seams, cutouts, stiffeners should now work properly.
2.1.5	Fixed disappearance of surfaces after highlighting in limits.
2.1.4	Traces are now loaded into tables. Right-clicking on node and selecting only plates or stiffeners now works. Both plates and stiffeners were selected for each option previously.
2.1.3	Can now use traces from GA as seams. Bulwarks are not put into limits in ShellPS and ShellSB until bulwarks are created. Stiffener generation is now working again for multiple definitions. Minor GUI fixes.

<p>2.1.2</p>	<p>Numerical limits are illustrated with planes when hovering over 'limit' boxes.</p> <p>Project is now not abandoned until user clicks 'Apply'. If user cancels creation of new project old project is brought back</p> <p>Reverting back to selecting elements one by one when selecting node in tree. Individual selection method is overwritten by elements to e.g. also highlight curves in GA. Group selection now also displays all associated curves in GA.</p> <p>Frame numbers are now also displayed correctly for length units other than m.</p> <p>I've changed the order in a GUI is set up when a node is clicked in tree to prevent values of deck heights changing to value in previously selected deck GUI.</p> <p>Stiffeners no longer disappearing in sub decks when adding stiffeners to parent deck group.</p> <p>Fixed reflection of locked objects.</p>
<p>2.1.1</p>	<p>When symmetry is selected, starboard elements are now mirrored from resulting portside geometry. Originally we generated symmetric element geometry by applying mirrored limits, cutouts, and seams on starboard definitions.</p> <p>Added stiffener definition prefix for stiffener names.</p> <p>Displaying hidden and locked surface limits when entering limit boxes.</p> <p>Generating missing stiffeners by improving stiffener generation algorithm.</p> <p>Reduced discrepancy in weights between portside and starboard shell, by applying new method for symmetric elements (see new features). Remaining difference is due to accumulated rounding errors over a large amount of parts making up the shells.</p>
<p>2.1.0</p>	<p>Flipping of stiffeners is implemented.</p> <p>On/Off setting of parts and groups: Elements can now be hidden and locked by clicking appropriate icon in the tree and without selecting a node in tree.</p> <p>Running 'ExpressMarineProject' now longer closes tree or terminate current project until clicking 'Apply'.</p> <p>Every graphical object under selected node are selected and highlighted: Workaround for Rhino's updating of object properties means that we now get back old select functionality but much faster when properties window is displayed.</p> <p>Added option in menu to select only stiffeners for a group.</p>

	<p>Cutouts now work for individual elements again. Fixed drop down menus for 'Portside Limit' in some stiffener definitions.</p> <p>Settings are now also applied for reflected elements (starboard) when settings are changed in symmetric portside elements.</p> <p>Changing thickness, material or color will result in automatic update of element and its reflected element. You still have to click 'Apply' for other changes to take effect (limits, cutouts, etc.)</p> <p>We no longer get duplicate bulkheads when defining bulkheads in a group when we also have defined bulkheads in a sub group of that group.</p> <p>'ShellPS' and 'ShellSB' are no longer allowed to be removed or renamed.</p> <p>Bulkheads now preserve settings when this option is selected.</p> <p>Bulkheads now inherit thickness from parent properly.</p> <p>Fixed minor GUI issues (overlapping elements).</p>
2.0.12	<p>Fixed changing of 'ShellPS' to 'ShellSB' when selecting surface from list. Fixed wrong frame number conversion (only visible when not using meter as length unit). Fixed missing rounding of coordinates and frame numbers.</p> <p>Implemented cancel and resume options for element generation.</p> <p>Improved user feedback during variable height cutouts generation by using scroll bar and more frequent update of status window.</p> <p>Improved right click selection for groups. You can now choose to select only plates or plates and stiffeners (selecting stiffeners can take a long time when there are many of them).</p> <p>Implemented limit highlighting. A limit surface is now selected and highlighted in the model when user hovers over a limit definition containing a surface element.</p> <p>Preservation of settings on object regeneration. Thickness, material and color can be retained from an element (deck, floor, web, etc.) by selecting the 'Preserve settings' checkbox.</p>
2.0.11	<p>Implemented new limit algorithm to address failure for some elements Fixing symmetrical cutouts. Reflect PS now also reflects cutouts properly and we now also replace ShellPS with ShellSB in reflected objects (in limits, cutouts, etc.).</p> <p>Reflected SB elements can now be changed individually to use another modelling method from its GUI.</p>

	<p>Marginally improved speed for variable height cutouts by applying all cutouts at once for a plate instead of one by one and by caching some data.</p> <p>Improved user feedback during element generation by adding scroll bar and more frequent update of status window.</p> <p>Fixed minor issues: Error messages while loading file. Dictionary key renamed due to Rhino limitations while saving/loading data. Synchronization issues between coordinate in length unit and frame number in GUI. Right click selection for decks.</p>
2.0.10	<p>Fixed cutouts (webs). Fixed reflection of (Y) borders of cutouts when symmetry is selected (webs).</p>
2.0.9	<p>Fixed generating structural objects from multiple imported objects. Implemented right click menu for rhino object selection for groups.</p>
2.0.8	<p>Implemented excel export (to ShipWeight). Fixed issues with export: Now exporting numbers with local decimal point. (So user can process these in Excel; import through ShipWeight data import would work regardless). Fixed calculation of values of max cogs.</p>
2.0.7	<p>Default stiffener definitions for decks and all bulkheads on deck. Fixed some missing thickness units on some stiffener definition input forms.</p>
2.0.6	<p>Fixed problem with stiffeners when frame spacing is not constant. Possible to use frame system as spacing Unit system is saved and loaded</p>
2.0.5	<p>Ignoring "NULL" items when calculating weights and CG for user-defined weight groups. Implemented BOM-list function For the user defined weight groups, users can now sort and change order of columns, copy content and paste to external software.</p>
2.0.4	<p>In Weight Group definitions, error of not completely including stiffeners in the calculation of user defined groups have been fixed for "limited groups" defined by users.</p>
2.0.3	<p>Saving and loading: Saving empty strings as 'space' to avoid error messages when loading 'empty' strings. New settings to make Rhino 6 recognize the plugin from the Rhino 5 installer as a valid Rhino 6 plugin.</p>
2.0.2	<p>Export: Included LCG/TCG/VCG_MAX Exporting metric tons as kg Exporting short- and long tons as pounds Option to export at item- or plate level Progress window</p> <p>Weight groups: Fixed shell assigned weight groups Fixed loading of weight groups into calculated weight group table Fixed loading and saving of weight group filters Exporting calculated weight groups on weight groups level. Divide plates into (virtual) parts and put into group</p>

	<p>Units: Fixed density unit display Updated weight units in trees when changing</p> <p>Loading: Progress window</p> <p>Limits: Regenerating surface names for use in limits from tree in old projects. Is now also standard method for all projects. (Used explicit saving and loading of these names earlier).</p>
2.0.1	Changed file ID so same file can be read in Rhino 5 and in Rhino 6