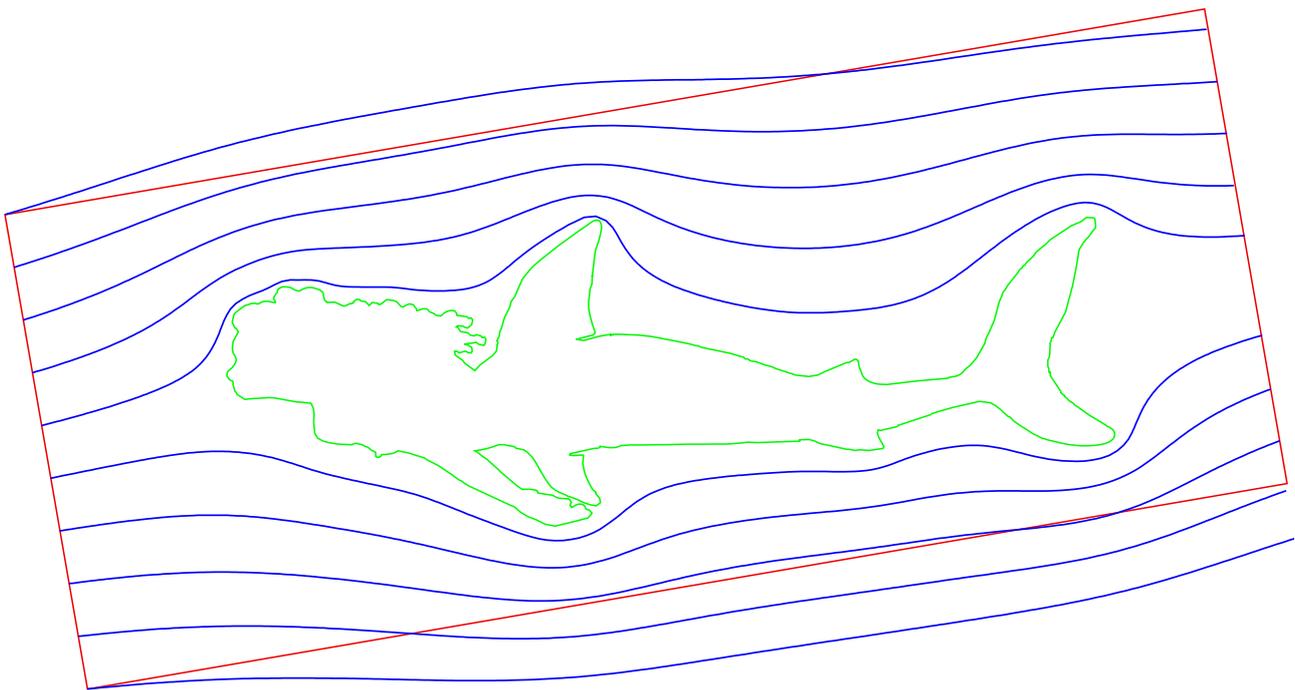


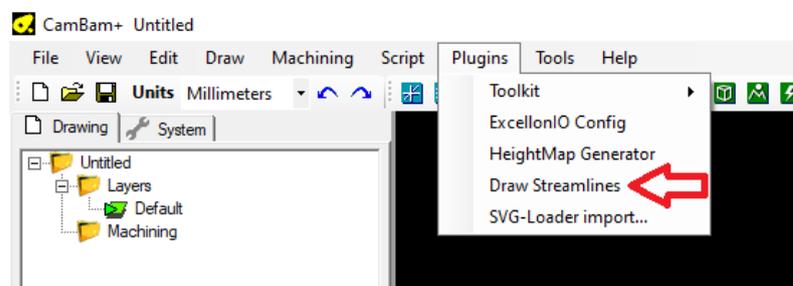
This plugin works within Cambam (www.cambam.com) CAM software, it draws streamlines around shapes (closed polylines). Their initial purpose is generate pretty and smothies curves around arbitrary shapes that mimics current flows.



10 streamlines. Green: imerse shape. Red: streamline-box. Drawing time 1s.

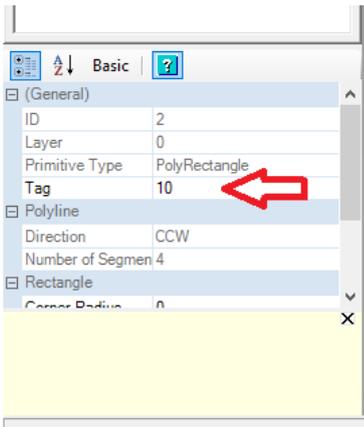
To use it just copy the 'streamlines.dll' file on 'cambam/plugins/ directory', as usually.

The plugin must be called on plugins menu bar as 'Draw Streamlines':



To runs it properly we need at least one arbitrary closed polyline to be the imerse shape(s) and necessarily one rectangular polyline to be the 'streamlines-box', this denomination is due the streamlines start at their left side and stop immediately after the right side. This 'streamlines-box' also defines the direction of freestream so it can be rotated conveniently at any direction (as can be seeing on figures). Without one 'streamlines-box' the plugin don't runs.

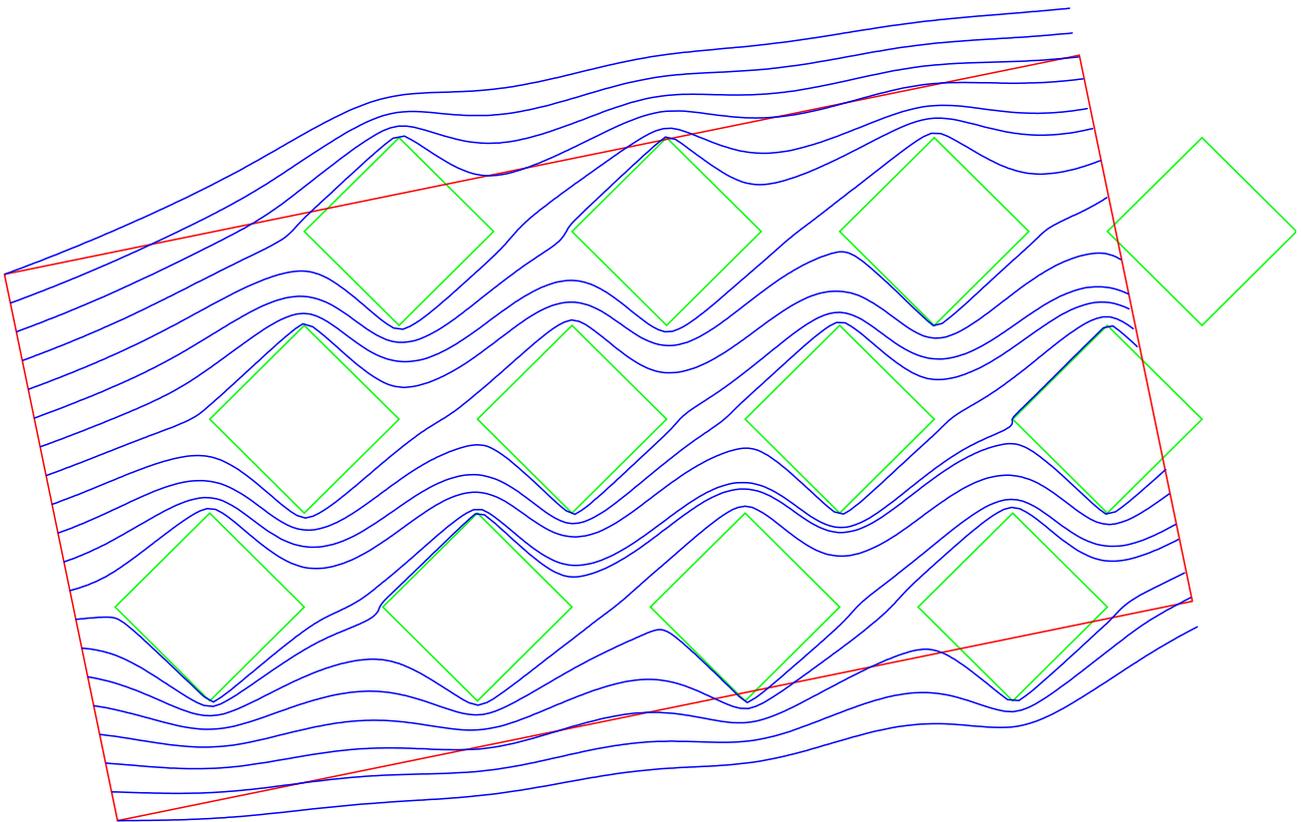
What differentiate the 'streamline-box' from others polyrectagles it's the necessity to fill the "tag" property:



The value in "tag" field specify the number streamlines to be generated. In the example the "tag" value is 10, so 10 streamlines will be generated.

The entire process is CPU intensive, so it's highly recomended to do the first try with few polylines and few streamlines to be aware of how long the process can spend on your system.

The streamlines polylines are created in new layer called 'StreamlinesNNNN' where "NNNN" are randomic number between 0 and 9999. The elapsed times spended in the two major internals processes are displayed on message window.



20 streamlines. Green: imerse shape. Red: streamline-box. Drawing time 55s, i5 8th generation. (1min37s, i3 2nd generation).

Constructive criticism are welcome:
Ricardo Maeda - rymaeda AT yahoo.com