The industry standard for the representation of hull forms are tensor-product B-spline surfaces. However, tensor-product B-splines are limited to four-sided surfaces. Aside of the necessity to compose hull surfaces of several patches, it makes hull form modeling and fairing inefficient. An alternative are generalized B-spline surfaces. They originate from the field of subdivision surfaces, whereas the term subdivision refers to a method that enables B-spline surfaces of arbitrary complexity.

Hull form representation based on generalized B-splines improves hull form modeling. To be employed for ship design in practice, it is essential to provide an integration with other design tools. Naturally, this is a matter of data exchange. This article describes a method to convert a generalized B-spline surface to a collection of conventional Bézier patches. These patches may be shared with other design tools using a general purpose file format such as IGES.