Common Automotive and Aerospace Requirements for Commercial Structural Optimization Software

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Abstract

To widen the scope of structural optimization applications at the enterprise level in the automotive and aerospace industries, and to increase the community of engineers using integrated structural optimization software effectively, certain industrial needs have to be met by such software a priori. These needs, which are yet to be met, are discussed in this paper. Satisfying these needs includes establishing a new form of collaboration between software developers and industry and will bring applications of the integrated structural optimization software in the automotive and aerospace industries to new heights. The subject needs are not limited to commercial structural optimization software, but should be viewed as desired features in any integrated structural optimization software.

Keywords: structural optimization; commercial software; integrated software; intelligent software; industrial application; computer aided engineering CAE; collaboration.