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# Improvement in impact strength of composite joints for the automotive industry

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## Abstract

The use of composite structures in the automotive industry aims to produce vehicles able to meet both fuel economy and safety standards. This work focused on the improvement of static and impact strength of composite adhesive joints, avoiding early delamination of the composite. The techniques applied are mixed adhesive combinations (use of two adhesives in one overlap) and the use of crash resistant adhesives. Experimental results demonstrated that a crash resistant adhesive provides the best mechanical performance under quasi-static and impact loads. A mixed adhesive configuration provided good results and improvements over single adhesives.

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