







# A new hybrid material for increased impact tolerance

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**MBDA**  
MISSILE SYSTEMS





## LCA – Literature

- Zero car LCA papers found that use variable values
- 11 other car LCA papers reviewed

Assumed type of value	Number of papers	
	Single car (constant based)	Car fleet (variable based)
Constant values	6 papers	2 papers (market)
Fixed trajectory	1 paper (distance driven)	2 papers (market)
Variable values	0 papers	6 papers (oil)

- ISO LCA standard does not prescribe a calculation procedure to quantify input/output











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# **Volume-Displacing Detanders**

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- Shape optimization based on parameterized CAD models
- Process chain with line-model based design
- Process chain with integration of processing of material parameters
- Conclusion