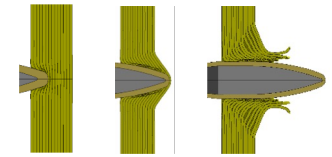


Structural integrity under extreme load

Topic: In-depth investigations on composite materials



•TITLE: Performance evaluation of thermoplastic and thermoset woven fabric composites under impact loadings

•RESEARCH BACKGROUND:

• Low-velocity impacts introduce internal damage in several forms such as delamination, matrix cracking, and fibre failure while leaving a small or no indentation on the surface. What is the role of resin type in initiation and propagation of these failure modes?

•RESEARCH ACTIVITIES:

1. Working on the experimental data from low-velocity impact tests of different composite materials.
1. Microscopic characterization of different failure modes.
2. Developing models sensitive to resin type (optional).

•METHODOLOGY: Experimental-Numerical

•DURATION: 6 months

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