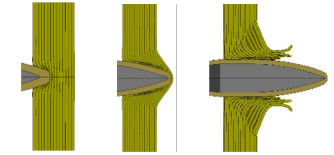


Structural integrity under extreme load

Topic: In-depth investigations on composite materials



•**TITLE:** Long term durability of woven fabric composites subjected to impact loads

•**RESEARCH BACKGROUND:**

• The durability of composites subjected to repeated impacts has been an ongoing issue that can affect the service life and limit their usage in many engineering applications. This adds to the complex material behaviour and different failure modes expected during the repeated low-velocity impact which necessitate more in-depth experimental and numerical studies.

•**RESEARCH ACTIVITIES:**

1. Doing experimental impact tests on different composite laminates
2. In-dept analyses of experimental data to characterize the long term durability of composites
3. Developing models to better understand the physics with a focus on failure models

•**METHODOLOGY:** Experimental-Numerical

•**DURATION:** 6 months

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