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## COMPARATIVE ASSESSMENT OF DELAMINATION CONTROL TECHNIQUES IN CONVENTIONAL DRILLING OF CFRP

## Kamlesh Phapale<sup>1</sup>, Panchakshari Hiremath<sup>1</sup>, Ramesh Singh<sup>2</sup> and RKP Singh<sup>1</sup>

<sup>1</sup>KCTI-Bharat Forge Ltd, India <sup>2</sup>Institute of Technology Bombay, India

**C**omposite laminates are used in many applications due to their extremely high strength to low weight ratio and corrosion **C**resistance properties. Comparing to other materials composites laminates have different properties throughout their thickness due to the layered structure. When drilling such structures, internal defects like delamination occur, caused by the drilling loads and their uneven distribution among the plies. The composite laminates are difficult to machine due to the composite's anisotropic and non-homogeneous nature. Thus it is important to develop an innovative advanced drilling process to overcome the difficulties related in machining of composite materials. The focus of present work is comprehensive study involving experimental characterization and development of different techniques for controlling the delamination in conventional drilling process, such as back up plate and helical milling has also been conducted. The analysis shows that the helical milling yields lower delamination extent, thrust force, hole size variation and hole surface roughness.

kamleshphapale@bharatforge.com