

1. Record Nr.	UNINA9910810223303321
Titolo	Drilling of composite materials [[electronic resource] /] / J. Paulo Davim, editor
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2009
ISBN	1-60876-584-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (192 p.)
Collana	Materials and manufacturing technology series
Altri autori (Persone)	DavimJ. Paulo
Disciplina	620.1/186
Soggetti	Composite materials - Delamination - Prevention Drilling and boring machinery Drilling and boring
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Drilling of Composite Materials -- Contents -- Preface -- A Treatment of Drilling-Induced Delamination of Composite Materials -- Abstract -- Introduction -- Fundamental Thrust Force-Based Delamination Model -- Effects of Various Geometry of Drill Bits -- Effects of Pilot Hole -- Effects of Drill Eccentricity -- Effects of Drill Wear -- Effects of Back-Up Materials -- Effects of Material Anisotropy -- Measurement of Delamination -- Conclusion -- Acknowledgment -- References -- Damage Reduction Methods in Drilling Polymeric Matrix Composites -- Abstract -- Introduction -- Special Drills -- Drilling Conditions -- Process Parameters -- Conclusion -- References -- Delamination in Drilling Polymeric Composites: A Review -- Abstract -- Introduction -- Delamination Mechanisms -- Thrust Force -- Analytical Damage Models -- Delamination Measurement and Assessment -- Factors Affecting the Delamination Onset -- Delamination-Free Techniques -- Concluding Remarks -- Acknowledgments -- References -- Influence of Machining Quality on Composite Part Manufacturing -- Abstract -- Introduction -- Experimental Set-Up -- Results -- Conclusion -- References -- Delamination Phenomenon During Drilling of Carbon Fibre Composites -- Abstract -- Introduction -- Experimental Optimization of Composite Drilling -- Monitoring of Delamination Phenomenon During Carbon Fibre Drilling -- Conclusion -- References -- Modeling Tool Wear and Specific Cutting Force in

Drilling of Aluminum Matrix Composites Using Artificial Neural Networks -- Abstract -- Introduction -- Algorithm and Architecture of Neural Network Model -- Training and Verifying -- Prediction and Discussion -- Conclusions -- References -- Analysis of Delamination in Drilling Wood Composite Medium Density Fibreboards -- Abstract -- Introduction -- Experimental Work -- Results and Discussions -- Conclusion.

References -- Studies on Composites Drilling - The State of the Art -- Abstract -- Introduction of Composites -- Drilling of Composites -- Methodologies -- Conclusion -- Acknowledgments -- References -- Index.

---