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Altri autori (Persone)	BonamiGregory J
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Nota di contenuto	<p>""HEAT TREATMENT: THEORY, TECHNIQUES AND APPLICATIONS"";</p> <p>""CONTENTS""; ""PREFACE""; ""HEAT TREATMENT OF VITRIFIED GRINDING WHEELS""; ""ABSTRACT""; ""1. INTRODUCTION""; ""2. GRINDING WHEEL STRUCTURE FORMATION DURING HEAT TREATMENT""; ""2.1. Physico-Chemical Processes That Occur during Firing""; ""2.2. Ceramic Bond Minerals That Form during Firing""; ""3. CASE STUDY I: INTERFACIAL COMPOUNDS AND THEIR EFFECT ON GRINDING WHEEL WEAR""; ""3.1. Wear Mechanisms""; ""3.2. Microstructure of Abrasive Grains""; ""3.3. Experimental Procedure""; ""3.4. Experimental Results""</p> <p>""3.5. Discussion of Interfacial Compounds on Grinding Wheel Wear""</p> <p>4. CASE STUDY II: DISSOLUTION OF QUARTZ AND ITS EFFECT ON GRINDING WHEEL WEAR""; ""4.1. Dissolution Models for Vitrified Grinding Wheel Bonds""; ""4.2. Experimental Procedures""; ""4.3. Experimental Results""; ""5. DISCUSSION""; ""6. CONCLUSIONS""; ""ACKNOWLEDGMENTS""; ""REFERENCES""; ""THE POTENTIAL FOR COST AND WEIGHT REDUCTION IN TRANSPORT APPLICATIONS THROUGH THE USE OF HEAT TREATED ALUMINUM HIGH PRESSURE DIECASTINGS""; ""ABSTRACT""; ""INTRODUCTION""; ""Component Design""; ""APPLICATION TO INDUSTRIALLY PRODUCED COMPONENTS""</p> <p>""Development of Heat Treatment Procedures""</p> <p>""Reject Rates due to Heat Treatment""; ""Experiments Using an Industrial Heat Treatment Facility""; ""COST BASIS""; ""Examples of Cost and Weight Reduction:</p>

Materials Replacement Strategy"; "Case 1. Replacement of a Small HPDC with a Heat Treated HPDC"; "Case 2. Replacement of a Large HPDC with a Heat Treated HPDC"; "Case 3. Replacement of a Large Sand cast Component with a Heat Treated HPDC Component"; "Other Considerations in Replacing Permanent Mold Castings with Heat Treated HPDC"; "FRACTURE RESISTANCE"; "New HPDC Alloy Developments"; "SUMMARY AND CONCLUSIONS"; "REFERENCES"; "QUENCHING UNDER FOG CONDITIONS: THEORY, TECHNIQUE AND APPLICATION ON ROLLING MILLS"; "ABSTRACT"; "1. THEORY ON QUENCHING UNDER FOG CONDITIONS"; "1.1. Chemistry and Phase Diagrams"; "1.2. Quenching"; "1.3. Quenchants"; "2. TECHNIQUE FOR OBTAINING FOG"; "2.1. Spray Characteristics"; "2.2. Spray Performances"; "2.3. Atomization"; "2.4. Heat Transfer Tests"; "2.5. Results and Discussion"; "3. APPLICATION FOR 70VMC R28 ROLLING MILL"; "3.1. Experimental"; "3.2. Results and Discussion"; "4. CONCLUSION"; "REFERENCES"; "ALCU2,5MG ALLUMINUM ALLOY HEAT TREATMENT: THEORY, TECHNIQUES AND APPLICATIONS"; "ABSTRACT"; "1. INTRODUCTION"; "Aluminum Heat Treatment"; "Heat Treatment Processes"; "Aging"; "Annealing"; "Homogenization (Ingot Preheating Treatments)"; "Quenching"; "Tempering"; "Batch Installations"; "Continuous Installations"; "Integration with Lean and Agile Manufacturing"; "2. ESTABLISHING THE EXPERIMENTAL TECHNOLOGICAL CONDITIONS. PROGRAMMING THE EXPERIMENT"; "2.1. Establishing the Preliminary Experimental Conditions"; "2.2. Programming the Experiment"
