

The following are selected resources for superalloy repair and rejuvenation.



PAPER TITLE	AUTHOR(S)	SOURCE	LINK
"Joining of nickel base superalloy single crystals"	S. S. Babu, S. A. David, J. W. Park, Vitek J.M.	Science and Technology of Welding & Joining, Volume 9, Number 1, February 2004, pp. 1-12(12)	Acquire the Article
"Liquation Phenomena in the Simulated HAZ of Alloy 718 after Multiple Postweld Heat Treatment Cycles"	M. Qian and J.C. Lippold	<i>Welding Journal</i> 82(6) (2003):145s-150s.	Read Full Article
"Welding and Weld Repair of Single Crystal Gas Turbine Alloys"	J. M. Vitek, S. A. David, S. S. Babu, and J.-W. Park	Oak Ridge National Laboratory, Materials Research and Development, Fossil Energy Program. <u>Welding and Weld Repair of Single Crystal Gas Turbine Alloys</u> . Oak Ridge, TN: Department of Energy, 2003.	Read Report
"Nickel-Based Superalloy Welding Practices for Industrial Gas Turbine Applications"	M.B. Henderson, D. Arrell, M. Heobel, R. Larsson, and G. Marchant	International Conference on Microstructure and Performance of Joints in High-Temperature Alloys." Institute of Materials, Mining and Materials. London. 20 November 2002.	Read the Full Article
"Overview of Hot Section Component Repair Methods"	D. W. Gandy, G. Frederick, J. T. Stover, and R. Viswanathan	ASM International Materials Solutions Conference 2000 Gas Turbine Materials Technology Session. St. Louis, MO. October 2000	Read the Full Article
"Improving Repair Quality of Turbine Nozzles Using SA650 Braze Alloy"	W.A. Demo, S. Ferrigno, D. Budinger and E. Huron	Superalloys 2000, Warrendale, PA: TMS, 2000, p. 713-720	Read the Full Article
"Low Cycle Fatigue Properties of LPM™ Wide-Gap Repairs in Inconel 738"	K. A. Ellison, J. Liburdi, and J. T. Stover	Superalloys 1996, Warrendale, PA: TMS, 2000, p. 763-772	Read the Full Article
"Effect of δ-phase Precipitation on the Repair Weldability of Alloy 718"	M. E. Mehl and J. C. Lippold	Superalloys 718, 625, 706, and Various Derivatives (1997), TMS, 1997, p. 731-741	Read the Full Article
"Evaluation of Service Induced Damage and Restoration of Cast Turbine Blades"	C. Persson and P. O. Persson	Superalloys 1992, Warrendale, PA: TMS, 1992, p. 867-876	Read the Full Article
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"Aircraft Gas Turbine Blade and Vane Repair"	K.C. Antony and G.W. Goward	Superalloys 1988, Warrendale, PA: TMS, 1988, p. 745-755	Read the Full Article
"Rejuvenation of Service-Exposed in 738 Turbine Blades"	A.K. Koul, J.P. Immarigeon, R. Castillo, P. Lowden and J. Liburdi	Superalloys 1988, Warrendale, PA: TMS, 1988, p. 755-764	Read the Full Article
"Repair Weldability Studies of Alloy 718 Using Versatile Vastrestraint Test"	C.P. Chou and C.H. Chao	Superalloys 1988, Warrendale, PA: TMS, 1988, p. 785-794	Read the Full Article