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Sommario/riassunto	Corrosion failures of industrial components are commonly associated with welding. The reasons are many and varied. For example, welding may reduce the resistance to corrosion and environmentally assisted cracking by altering composition and microstructure, modifying mechanical properties, introducing residual stress, and creating physical defects. This book details the many forms of weld corrosion and the methods used to minimize weld corrosion. Chapters on specific alloys groups-carbon and alloy steels, stainless steels, high-nickel alloys, and nonferrous alloys-describe both general welding characteristics and the metallurgical factors that influence corrosion behavior. Corrosion problems associated with dissimilar metal weldments are also examined. Case histories document corrosion

problems unique to specific industries including oil and gas, chemical processing, pulp and paper, and electric power. Special challenges caused by high-temperature environments are discussed. Commonly used methods to monitor weld corrosion and test methods for evaluation of intergranular, pitting, crevice, stress-corrosion cracking, and other forms of corrosion are also reviewed.

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