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Sommario/riassunto	"Using steel and concrete together utilizes the beneficial material properties of both elements. Concrete filled steel tubes represent a good example of a concrete steel composite structure, and are particularly useful as columns in high rise buildings and bridge piers. They can be used in a range of fields, from civil and industrial construction through to the mining industry. Several aspects of concrete filled tubes have received little coverage in existing design standards, design guides or relevant books, but are addressed here: construction methods or quality and their effect on performance,

confinement, creep effects, pre-load effects, size effects, seismic behaviour and post-fire behaviour, worked examples under practical conditions, numerical simulations, mechanics models, concrete-filled double skin tubes, SCC(self-consolidating concrete)-filled tubes, HPHSC (high performance high strength concrete)-filled tubes, high strength steel and thin-walled tubes filled with concrete, and fiber reinforced polymer strengthening of concrete filled tubes.This book not only summarizes the research performed to date on concrete-filled tubular members and connections but also compares the design rules in various standards (Eurocode 4, AISI-LRFD, ACI, AIJ and Chinese Standard), and provides design examples.Aninvaluable guide for professionals and a detailed source of information for graduate students and beyond."--Provided by publisher.