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Nota di contenuto	Current Collection Mode of High Speed Train-Pantograph Catenary System -- Electrical Contacts of Pantograph Catenary System -- Friction and Wear with Electric Current of Pantograph Catenary System, - Pantograph-catenary Arc -- Electrical contact materials of Pantograph Catenary System -- Diagnosis and detection Service Properties of Pantograph Catenary System.
Sommario/riassunto	This book covers the basic scientific theory and related application technologies of the pantograph–catenary system, including research findings on pantograph/catenary contact resistance, pantograph interface thermal effect, laws and characteristics of current-carrying friction and wear, the main research methods for pantograph arcs, the effects of arcs on pantograph systems and onboard equipment, and the materials used for pantographs and contact wires. Given its scope, it

offers a valuable resource for students, scholars, and development engineers alike. The relationship between pantograph and catenary is one of the three core aspects of the safe operation of high-speed electrified railways. The pantograph system provides electric power for the high-speed train through the sliding electric contact. As the train’s operating speed increases, the pantograph system enters a state of prolonged sliding/vibration, resulting in frequent arcs, electrode erosion, and increased wear. .