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Sommario/riassunto

This book presents select proceedings of the 3rd International and 15th National Conference on Industrial Problems on Machines and Mechanisms (IPRoMM 2024). It covers recent significant advances in all areas of machines and mechanism used in industries. It presents a comprehensive coverage of the recent developments in analysis, design and manufacturing of a range of modern and next-generation industrial machines, and solutions to mitigate common and emerging problems in their maintenance and operation. The topics covered include design, manufacturing and performance analysis of mechanical and mechatronic machine components and assemblies, machine dynamics including rotor dynamics, vehicle dynamics, and multi-body dynamics, robotics and automation, hydraulic and pneumatic systems and control, vibration engineering, tribology, condition monitoring, failure analysis, manufacturing systems and processes, reliability and quality engineering, thermo-fluid and combustion systems, aerospace systems, acoustics, automotive engineering, etc. The book will highly useful for researchers and professionals working in the area of industrial and production engineering, especially machines and mechanisms.