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Altri autori (Persone)	SilvaFrancisco J. G TrojanowskaJustyna PintoArnaldo Manuel Guedes
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Nota di contenuto	Advancements in 3D Printing: Materials, Technologies, and Industrial Applications -- Theoretical Prerequisites for Increasing the Durability and Service Life of Working Bodies of Tillage Machines -- Development of a Novel Assembling Process for Small Automotive Mechanical Devices -- An Experimental and Multi-Objective Optimization Study of FFF-Printed PETG Parts Under Compressive Loads.
Sommario/riassunto	This book reports on advances in manufacturing, with a special emphasis on smart and sustainable systems and strategies. It covers advances in additive manufacturing, multi-pin ultrasonic peening, shot peening, and hot isostatic pressing; topics in stamping, injection moulding, assembly processes; strategies for improving the durability and service life of engineering products and machines; advances in

machining processes, particularly milling and vibro-abrasive methods; and industrial robotics. Chapters report on theoretical research, mathematical modeling, and experimental studies concerning the design engineering of robots and machine tools, alike. They also discuss key aspects of quality assurance of products for milling and moulding processes, as well as multiaxis machining in flexible fixtures. Based on the 8th International Conference on Design, Simulation, Manufacturing: The Innovation Exchange (DSMIE-2025), held on June 17-20, 2025, in Porto, Portugal, this first volume of a 4-volume set provides academics and professionals with extensive information on technologies, trends, challenges, and practice-oriented experience in all the above-mentioned areas.
