Record Nr. UNINA9910439159403321 Structural integrity of additive manufactured parts / / ASTM **Titolo** International Pubbl/distr/stampa West Conshohocken, Pennsylvania:,: ASTM International,, [2020] ©2020 **ISBN** 1-5231-4273-1 0-8031-7687-2 Descrizione fisica 1 online resource Collana Selected technical papers Disciplina 621.988 Three-dimensional printing Soggetti Machine parts - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Sommario/riassunto Get the first book in this new additive manufacturing series supported by the ASTM International Additive Manufacturing Center of Excellence (AM CoE). This publication features 27 peer-reviewed papers authored by experts from private industry, governmental organizations and academia. Several of the papers delve deeply into additive manufactured parts and nondestructive testing, focusing on such topics as: nondestructive evaluation and in situ monitoring of AM parts: fatigue, fracture, tensile, and corrosion behavior of materials and parts fabricated using AM; effects of design, process, and post-process parameters on fatigue and fracture properties; process optimization to improve structural integrity of AM parts; applicability of existing mechanical test methods to AM parts and innovative approaches to standardization.