1. Record Nr. UNINA9910583478903321 Autore Schmid Manfred <1958 August 31-> Titolo Laser sintering with plastics: technology, processes, and materials // Manfred Schmid Pubbl/distr/stampa Munich;; Cincinnati:,: Hanser Publishers:,: Hanser Publications,, [2018] ©2018 **ISBN** 1-5231-2020-7 1-56990-684-X Descrizione fisica 1 online resource (221 pages) 668.4 Disciplina Soggetti Laser sintering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Laser Sintering (LS) with plastics is one of the most promising additive Sommario/riassunto manufacturing technologies: it is currently regarded as the process most likely in the future to permanently cross the border between prototyping and the production of functional parts. This step is challenging because it means that the technology must meet certain requirements that are also valid for traditional and established production processes. Only by succeeding at this step can a wide industry acceptance of LS be expected in the future. In this context, this book covers all levels of the LS process chain, including: - Current state of the machine technology - Essential process steps, both before and during sintering - Specific demands of the materials, powder production methods, and evaluation of powder properties - Mechanical properties and density of the parts produced by LS Examples of LSproduced parts are given, including those with special design features, to illustrate the characteristics and also the limitations of the LS method. In particular, the distinct advantages of LS parts over parts produced with other plastics processing methods (e.g., injection

molding) are discussed--