

Fundamentals and Applications





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variables that interact with one another. This obspice also includes an everall review of the forging operations. The fundamentals of plastic fundamention, i.e., metal flow, flow euross of materials, testing methods to strict rate traditiats properties, and flow rules are discussed in Chapters 3, 4, and 5. Chapters 6 and 8 cover the significant variables of the forging process such as theritor, inferior, and temperatures. Chapters 9 is devoted to approximate methods for analysing simple forging operatures. Chapters 10 devoted to approximate methods for analysing simple forging operatures. Chapters 10 through 13 discuss forging machines, including the functions and pre-forming or materials distribution. Process and cale descript, one hads for estimating forging loads, and the application of FEA-based process modeling in hot forging are discussed in Chapters 14, 15, and 16.

Chaptars 17 and 18 cover cold and wrate deging, including the application of FEA estimulation in these processes. Microstructure are bring, using forging of high temperature alloys as example, is covered in Chapter 19, while Chapter 20 is devoted to ita-