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Autore	Saanouni Khemais <1955->
Titolo	Damage mechanics in metal forming [[electronic resource]] : advanced modeling and numerical simulation // Khemais Saanouni ; series editor Pierre Devalan
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ISBN	1-118-56219-4 1-118-60087-8 1-118-60144-0 1-299-18747-1
Descrizione fisica	1 online resource (545 p.)
Collana	ISTE
Altri autori (Persone)	DevalanPierre
Disciplina	620.1/6
Soggetti	Metals - Plastic properties Metal-work - Mathematical models Metal-work - Quality control Deformations (Mechanics) - Mathematical models Boundary value problems
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Elements of continuum mechanics and thermodynamics -- Modeling of the thermomechanical behavior with ductile damage of metals -- Numerical methods for solving metal forming problems -- Applying metal forming processes to numerical -- Simulation.
Sommario/riassunto	The aim of this book is to summarize the current most effective methods for modeling, simulating, and optimizing metal forming processes, and to present the main features of new, innovative methods currently being developed which will no doubt be the industrial tools of tomorrow. It discusses damage (or defect) prediction in virtual metal forming, using advanced multiphysical and multiscale fully coupled constitutive equations. Theoretical formulation, numerical aspects as well as application to various sheet and bulk metal forming are presented in detail.Virtual metal forming is nowa

