1. Record Nr. UNICASPUV0794917

Titolo 1.8: Biennium-byssus

Pubbl/distr/stampa Wroclaw [etc.!, : [s.n.!, 1958

Descrizione fisica Col. 1101-1214 ; 31 cm.

Lingua di pubblicazione Polacco

Latino

Formato Materiale a stampa

Livello bibliografico Monografia

Record Nr. UNINA9910337601103321

Autore Vukašinovi Nikola

Titolo Advanced CAD Modeling : Explicit, Parametric, Free-Form CAD and Re-

engineering / / by Nikola Vukašinovi, Jože Duhovnik

Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,,

2019

ISBN 3-030-02399-0

Descrizione fisica 1 online resource (259 pages)

Collana Springer Tracts in Mechanical Engineering, , 2195-9862

Disciplina 620.00420285

Soggetti Engineering design

Computer-aided design Computer simulation Engineering Design

Computer-Aided Engineering (CAD, CAE) and Design

Simulation and Modeling

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto Introduction to free-form surface modelling -- Creation of Freeform

Surfaces -- Creation of complex CAD models with freeform surfaces -- From complex CAD model to mould casts -- CAD curves with equation

- -- Introduction to reengineering -- Tactile 3D geometry measurements
- -- CAD application of captured 3D data obtained by mechanical arms
- -- Optical 3D geometry measurements based on laser triangulation -- CAD model creation from dense point clouts -- Creation of final details.

Sommario/riassunto

The book discusses the theoretical fundamentals of CAD graphics to enhance readers' understanding of surface modeling and free-form design by demonstrating how to use mathematical equations to define curves and surfaces in CAD modelers. Additionally, it explains and describes the main approaches to creating CAD models out of 3D scans of physical objects. All CAD approaches are demonstrated with guided examples and supported with comprehensive engineering explanations. Furthermore, each approach includes exercises for independent consolidation of advanced CAD skills. This book is intended for engineers and designers who are already familiar with the basics of modern CAD tools, e.g. feature based and solid based modeling in 3D space, and would like to improve and expand their knowledge and experience. It is also an easy-to use guide and excellent teaching and research aid for academics and practitioners alike.