

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing)

Rajendran Saravanan



Click here if your download doesn"t start automatically

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing)

Rajendran Saravanan

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) Rajendran Saravanan

Effective utilization of equipment is critical to any manufacturing operation, especially with today's sophisticated, high-cost equipment and increased global competition. To meet these challenges in the manufacturing industry, you must understand and implement the myriad conventional and intelligent techniques for different types of manufacturing problems. Manufacturing Optimization Through Intelligent Techniques covers design of machine elements, integrated product development, machining tolerance allocation, selection of operating parameters for CNC machine tools, scheduling, part family formation, selection of robot coordinates, robot trajectory planning and both conventional and intelligent techniques, providing the tools to design and implement a suitable optimization technique. The author explores how to model optimization problems, select suitable techniques, develop the optimization algorithm and software, and implement the program.

The book delineates five new techniques using examples taken from the literature for optimization problems in design, tolerance allocation; selection of machining parameters, integrated product development, scheduling, concurrent formation of machine groups and part families, selection of robot co-ordinates, robot trajectory planning and intelligent machining. All the manufacturing functions described have been successfully solved by Genetic Algorithm. Other intelligent techniques have been implemented only for solving certain types of problems: simulated annealing; design and scheduling, particle swarm optimization and ant colony optimization; tolerance allocation and tabu search; as well as machining parameters optimization.

After reading this book, you will understand the different types of manufacturing optimization problems as well as the conventional and intelligent techniques suitable for solving them. You will also be able to develop and implement effective optimization procedures and algorithms for a wide variety of problems in design manufacturing.

<u>Download</u> Manufacturing Optimization through Intelligent Tec ...pdf

Read Online Manufacturing Optimization through Intelligent T ... pdf

From reader reviews:

John Tillery:

Why don't make it to be your habit? Right now, try to prepare your time to do the important action, like looking for your favorite book and reading a book. Beside you can solve your short lived problem; you can add your knowledge by the publication entitled Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing). Try to stumble through book Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) as your buddy. It means that it can for being your friend when you sense alone and beside that course make you smarter than before. Yeah, it is very fortuned in your case. The book makes you a lot more confidence because you can know every little thing by the book. So , let us make new experience and knowledge with this book.

Bertha Underwood:

Have you spare time for the day? What do you do when you have considerably more or little spare time? Yep, you can choose the suitable activity with regard to spend your time. Any person spent all their spare time to take a wander, shopping, or went to typically the Mall. How about open as well as read a book entitled Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing)? Maybe it is to be best activity for you. You already know beside you can spend your time along with your favorite's book, you can cleverer than before. Do you agree with it is opinion or you have various other opinion?

Stephanie Sellers:

This Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) book is simply not ordinary book, you have it then the world is in your hands. The benefit you have by reading this book is information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This particular Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) without we realize teach the one who examining it become critical in thinking and analyzing. Don't end up being worry Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) can bring once you are and not make your case space or bookshelves' grow to be full because you can have it inside your lovely laptop even cellphone. This Manufacturing Optimization through Intelligent Techniques (Manufacturing Processing) having fine arrangement in word and layout, so you will not truly feel uninterested in reading.

Rhonda Joiner:

This Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) is completely new way for you who has curiosity to look for some information since it relief

your hunger info. Getting deeper you in it getting knowledge more you know otherwise you who still having small amount of digest in reading this Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) can be the light food for you personally because the information inside this book is easy to get simply by anyone. These books build itself in the form which can be reachable by anyone, sure I mean in the e-book type. People who think that in publication form make them feel sleepy even dizzy this publication is the answer. So there is not any in reading a publication especially this one. You can find what you are looking for. It should be here for an individual. So , don't miss the idea! Just read this e-book style for your better life along with knowledge.

Download and Read Online Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) Rajendran Saravanan #OPFX2AUGL8M

Read Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan for online ebook

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan books to read online.

Online Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan ebook PDF download

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan Doc

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan Mobipocket

Manufacturing Optimization through Intelligent Techniques (Manufacturing Engineering and Materials Processing) by Rajendran Saravanan EPub