Designing Engineers (Inside Technology Series)

By Louis L. Bucciarelli

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The products of engineering design are everywhere, but who or what determines their form and function? Their surfaces are usually cold, seemingly objective, as if they existed outside of history of the technologies that are so much a part of our lives. Written by a practising engineer, "Designing Engineers" yields clues to this mystery by probing deeply into the everyday world of engineering. In doing so, it reveals significant discrepancies between our ideal image of design as an instrumental process and the reality of design as a historically-situated social process that is full of uncertainty and ambiguity. This text describes the evolution of three disparate projects: an x-ray inspection system for airports, a photoprint machine, and a residential photovoltaic energy system. In each case, we are taken through the hallways and into the meeting rooms of the company to watch over the shoulders of engineers as they engage in the manifold individual and collective work that goes into designing a new product. Louis Bucciarelli was a consultant to one project and participated in the design process for the other two. In all three projects he examines both object - the way participants understood how things work - and process - the way they go about designing. What he learns is that engineering design is a social process that involves constant negotiation among many parties, not just engineers but marketing people, research scientists, accountants, and customers as well.

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Designing Engineers (Inside Technology Series) By Louis L. Bucciarelli Bibliography

- Rank: #1741468 in Books
- Brand: Brand: MIT Press
- Published on: 2000-07
- Original language: English
- Number of items: 1
- Dimensions: .75" h x 6.28" w x 9.34" l, .0 pounds
- Binding: Hardcover
- 232 pages

Editorial Review

Review

This is a book that I believe will furnish new and fresh insights to every engineer reader--teacher, student, or designer--and to readers such as ethnologists and others who observe engineering as a social process. It has, I know, given me important insights into subjects I thought I knew quite a lot about. I wish I had had this book when I was teaching undergraduate courses in the engineering sciences.

(Eugene S. Ferguson, Professor of History Emeritus at the Univeristy of Delaware and author of *Engineering and The Mind's Eye*)

Bucciarelli's vigorous, humane intelligence sheds new light on theinner dynamics of technological choice. No other writer has such a marvelous ability to make the ideas of projects of working engineers come alive.

(Langdon Winner, Author of *The Whale and the Reactor*)

From the Back Cover
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About the Author
Louis L. Bucciarelli is Professor in the School of Engineering at the Massachusetts Institute of Technology.

Users Review

From reader reviews:

Christina Epp:

As people who live in the particular modest era should be update about what going on or info even knowledge to make these people keep up with the era that is certainly always change and advance. Some of you maybe will certainly update themselves by reading through books. It is a good choice in your case but the problems coming to anyone is you don't know which you should start with. This Designing Engineers (Inside Technology Series) is our recommendation to make you keep up with the world. Why, as this book serves what you want and wish in this era.

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