Book Review: *Manufacturing Handbook of Best Practices*

By Ellen Domb, editor@triz-journal.com

Title: *Manufacturing Handbook of Best Practices: An Innovation, Productivity, and Quality Focus*
Edited by Jack B. ReVelle. TRIZ chapter by Steve Ungvari
Publisher: St. Lucie Press/APICS Series on Resource Management. 2002.
www.crcpress.com
Hard cover, 433 pages. ISBN 1-57444-300-3 $67.00

I first met Dr. Jack Revelle a dozen years ago when he was the corporate manager for statistical and process improvement methods for Hughes Electronics, and a member of the Board of Examiners for the Malcolm Baldrige National Quality Award. Since then he has been one of the founders of the Arizona Governor's Award, developed the Six Sigma and Organizational Excellence systems for GenCorp Aerojet, and published series of books on TQM and QFD. I took Jack's class when we first met, and was so impressed that I got involved in the Baldrige process and signed up for all his books!

Jack helped publicize TRIZ when it was first becoming widely known in the US through his television show for the National Technological University. His guest speaker on TRIZ was Steve Ungvari, who was president of the American Supplier Institute at the time. Steve has since become a strategic planning consultant and a TRIZ practioner, consultant and teacher. It is a great treat to have these two educators reunited in this book, to present TRIZ in context with many other systems and methods that are now being incorporated into manufacturing. A sample (just a sample!) of chapter headings:

- Six Sigma
- The Agile Enterprise
- Theory of Constraints
- Supply Chain Management
- Statistical Process Control
- Lean Manufacturing
- Robust Engineering
- Design of Experiments
- Quality Function Deployment

The book is aimed at "manufacturing vice presidents, directors, managers, engineers, specialists, and technicians around the world. This is your book; let it help you focus on innovation, productivity, and quality in manufacturing." The readers of the TRIZ Journal will probably be interested in this book for two reasons:

1. Those who know TRIZ, but not some of the other techniques of manufacturing improvement may be seeking a resource to help them understand how to integrate TRIZ with other systems.
2. Those at companies where new initiatives are being embraced (Six Sigma, or Lean , or Agile, etc.) may need a way to explain to their colleagues and their

managers, and the advocates of the new initiatives, what TRIZ is and how it fits into whatever system is being developed.

Each of the chapters is a self-contained essay on one technique, methodology, or system. There is no overall attempt to integrate the topics. The reader gets an excellent introduction, usually with practical examples as well as theoretical discussion, of the specific topic, but the authors vary widely in how much they refer to each other's systems.

The TRIZ chapter is a very good 24-page introduction to TRIZ. My only (very minor) objection is that Ungvari refers to one "brand name" software-related TRIZ system, which might create a problem for people who want to use this as a general introduction to TRIZ for those who have no previous exposure.

I asked Steve Ungvari if he had a message for our readers, and he sent this:

My only message to any reader is that the chapter on TRIZ is an introduction to the subject at a fairly high level and doesn't do total justice to the depth and power of TRIZ. I would hope any spark of interest due to anything I have written would spur individuals to continue their personal pursuit of this very powerful methodology.

TRIZ beginners will find this a useful introduction, which will help them understand the relationships between the various tools and techniques of TRIZ.

TRIZ practioners will not learn new from this chapter, but will be able to use it to explain TRIZ to other people, and will be able to use the other chapters to find opportunities for the application of both the strategic and tactical elements of TRIZ in a variety of manufacturing improvement systems.