

Lean Manufacturing Self Assessment

Manufacturing Flow

1. Does material flow "one way" throughout your plant?
2. Is your mfg. process designed to have operators touch material only one time?
3. Do you have production areas aligned to end customer products?
4. Are work stations designed to meet customer demand?
5. Is product passed between operators the precise time?

Organization

1. Are cell/product line leaders held accountable for end product performance?
2. Do you utilize cross-functional teams on the shop floor?
3. Are resources utilized to their full capacity?
4. Do operators have the authority to stop the line when defects are discovered?
5. Do you have a philosophy "everything has a place and everything in its place"?

Logistics

1. Do production areas build to customer demand?
2. Is material pulled between stations?
3. Does the shop floor respond to daily production schedule?
4. Is material replenished to an MRP/ERP segregation?
5. Are shop floor operations rules documented and understood?

Metrics

1. Are performance measures visible and posted on the shop floor?
2. Is your schedule adherence on-time?
3. Is your manufacturing leadtime less than 1 day?
4. Is your shop floor targeted performance continually improving?
5. Do your shop floor operators own and report performance data?

Process Control

1. Are changeover times on your bottleneck resources less than 10 minutes?
2. Do you have a formal continuous improvement program?
3. Is the response time, to defects found in the production process, less than 1 day?
4. Do operators have the authority to "stop the line" when defects are discovered?
5. Do you have a philosophy "everything has a place and everything in its place"?

WILLIAM M. FELD



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Dedication

This book is dedicated to my four sons —
Benjamin, Nathan, Jacob, and Samuel.

Thank you for never letting me forget that I am your dad.

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Preface

This book was written in order to give the general manufacturing practitioner a reference guide by which to lead the successful design and deployment of a lean manufacturing program. It is for those individuals who have either tried a lean manufacturing implementation and received undesirable results or have been working at it a while and do not really know what to do next. Over the years, I have become more and more pragmatic in my approach to lean manufacturing. I am not a purist when it comes to methodology. In fact, in this book I am sharing with you information based on my own personal research, true-life experiences, and lessons learned through the implementation of lean principles within a number of companies. It is this broad-based experience that has allowed me to develop such a pragmatic approach. My experience has taught me that, although a specific philosophy may work well with one particular project or company, it may not work as well universally across other operations.

The information, time frames, and methodologies contained within this book are geared primarily for operations that have 300 to 500 employees. The content was written for an audience operating at the level of plant manager, project manager, or manufacturing manager within a business, although most certainly schedulers, planners, industrial engineers, and first-line supervisors can also benefit from this material. The book provides tools and techniques that can be used for both high-volume/low-mix and low-volume/high-mix product environments. Although many of the techniques are designed for discrete unit manufacturing operations, those in the process industries could utilize many of the principles presented here, as well.

I realize that there are some of you who operate within an environment that does not require you to justify your position on lean manufacturing every step of the way and that such an environment will accept the need for