

Introduction

Drawing up a comprehensive list of lean terms is not an easy task. Many members of the lean community have gained their knowledge from different sources and use terms in slightly different ways. And many companies have developed their own “lean lingo” in an effort to customize usage to their needs and to make their production system unique. We therefore have devised two simple principles for selecting terms. These are:

1. **The term is important.**

You really need it to successfully operate a lean system.

2. **The term is in widespread use.**

It’s not just “company speak,” but lives in the broader community.

We also have needed to develop a common approach to definitions. As shown on the sample page below, for each term we provide: A simple **definition**. An **example**, often showing different types of applications. **Cross-references** to related terms. An **illustration**, whenever possible (see sample page layout on page vi). Of course, many terms, like *chief engineer* and *greenfield*, would be impossible to illustrate beyond photos of specific individuals and facilities!

As editors, we are acutely aware that there will be some differences within the lean community on definitions, and we have tried to provide the most common usage. We are even more aware that some important terms may have been left out. We therefore hope to hear suggestions for additions and improvements (which should be sent to: cmarchwinski@lean.org). We will issue revisions of the *Lean Lexicon* as appropriate.

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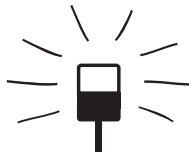
Term → **Andon**

A visual management tool that highlights the status of the operations in an area at a single glance and that signals whenever an abnormality occurs.

Definition → An andon can indicate production status (for example, which machines are operating), an abnormality (for example, machine downtime, a quality problem, tooling faults, operator delays, and materials shortages), and needed actions, such as changeovers. An andon also can be used to display the status of production in terms of the number of units planned versus actual output.

Example → A typical andon, which is the Japanese term for “lamp,” is an overhead signboard with rows of numbers corresponding to workstations or machines. A number lights when a problem is detected by a machine sensor, which automatically trips the appropriate light, or by an operator who pulls a cord or pushes a button. The illuminated number summons a quick response from the team leader. Colored lighting on top of machines to signal problems (red) or normal operations (green) is another type of andon.

Cross-reference → See: Jidoka, Visual Management.

Illustration →

Simple andon.

Product A	1	2	3	4
Product B	1	2	3	4
Planned Production 110		Actual Production 98		

Complex andon.

Fifth Edition Highlights

- Basic Stability
- Coaching
- Gemba Walk
- Huddle
- Kamishibai Board
- Kata
- Leader Standard Work
- Lean Management
- Lean Management Accounting
- Lean Startup
- Problem Solving
- Service Level Agreement
- Training Within Industry (TWI)
- Value-stream Improvement

Treatment of Foreign Terms

Our editorial North Star, *The Chicago Manual of Style*, states that foreign words usually are set in italics if they are likely to be unfamiliar to readers. And in many works on lean production and lean thinking terms such as *kaizen* and *muda* are italicized. However, in preparing this lexicon, our objective is to bring all of these terms into common usage. Plus, we have no way to know which terms are now familiar and which are still novel across the lean community.

We therefore have decided to welcome the entire list of terms into the English language and have set all of them in plain type. To avoid any confusion, we have included a list of all foreign words in Appendix C so readers may be sure of each term's point of origin.