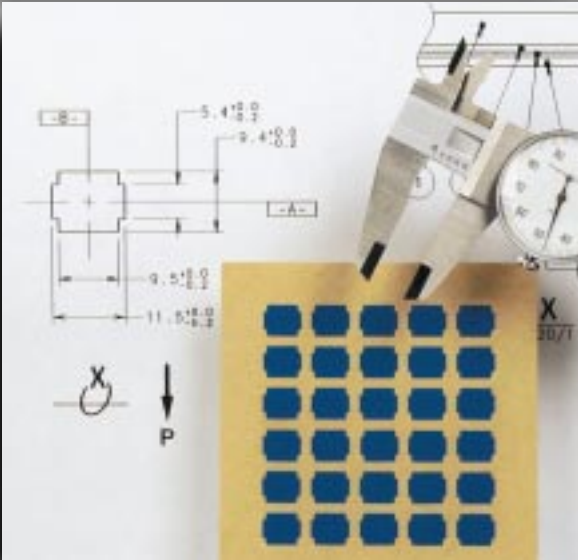


# Label Engineering Principles and Guidelines



STEVEN  
LABEL





## Quality Control

*Breakthrough in Label Quality & Engineering*..... 1

## Engineering

*Guidelines for Adequate Documentation* ..... 2  
*Engineering Checklist*..... 3 - 4  
*Press Capabilities*..... 5  
*Basic Material Selection* .....6  
*Selecting Laminating Adhesives*..... 7  
*Glossary of Terms*..... 8 - 9

## Artwork Issues

*Guidelines for Supplied Art*  
*Art Creation* ..... 10  
*Sending Digital Art* ..... 10 - 11  
*Sending Reflective Art*..... 11  
*Supported & Preferred Art Creation Programs*..... 12  
*How to Approve a Proof*..... 13



Visit our website at:

[www.stevenlabel.com](http://www.stevenlabel.com)

You can find all the documentation in this brochure **and more** on our website. Check it out for the most up to date information on our products, specifications, and services.



**We made a remarkable discovery one day.** After years of experience and endless soul searching, we realized that the majority of defective labels result not from manufacturing errors (process control) but from engineering errors made prior to manufacturing. Because the engineering of custom labels is a joint effort between Steven Label and its customers, the responsibility for the failure of a label (to serve its intended purpose) falls somewhere between us and our customers.

It's no fun to make labels that the customer can't or don't want to use. Once this happens everyone pays a price in lost time and emotional hassle. The key to reducing these distasteful and expensive (lose/lose) situations is to improve the quality of the joint engineering process.

Once we began focusing on ways to do this, we quickly discovered principles that when applied, reduced errors and (by-the-way) happened to reduce costs too. That's what this guide is all about -- to share the insights that have proven so effective in reducing errors. We look forward to working with you to apply these principles in the nitty-gritty world of engineering labels to do their job!

*Steve Stong*

Steve Stong  
President

## Reducing Engineering Errors is the Key

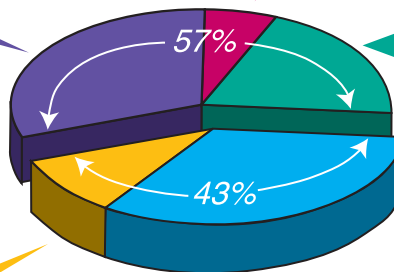
**Over 50% of defects in the studied time period resulted from errors made during the engineering of a label, not during manufacture.**

### Quality System 31%

Something went wrong in the up-front proofing and ordering process. Procedures were followed, but they failed to produce a defect-free product. For instance, a verbal order was taken for the wrong revision level, or a misspelling in the proofing process was not detected by Steven Label or the Customer.

### Supplier 10%

An error by the supplier went undetected.



### Design 6%

The requirements were clear, but the design failed to perform as intended. The label failed to adhere, even though it should have adhered to the given substrate.

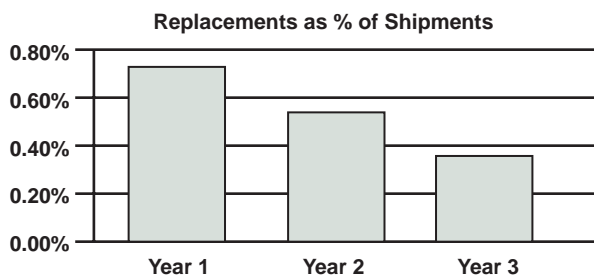
### Documentation 20%

An important requirement was not incorporated into the specification. These "unknown requirements" represent a full 20% of the errors made! For instance, the label needed to resist 409, but no one knew it!

### Process Control 33%

These are the typical "manufacturing errors" that are normally thought of as being the largest contributor to rejects. The correct color is properly documented, but the wrong color is printed.

## These Principles Work!



During the development and application of these principles, we were able to consistently reduce our year-to-year defect rate. This is a never ending process. Although dropping below .5% in a custom business is well below the industry average, it is 10 times our long term target of 500 defects per million (.05%) -- or Motorola's fabled 6 Sigma target levels. We look forward to working with our customers to continue to drive this process forward!

























