

What is a sigma?

The Greek letter "*sigma*" (shown above), defines a statistical standard deviation. The higher the *sigma* number, the better the quality. In manufacturing, **six sigma** is defined as 3.4 defects per million parts. The principles can be applied to documentation.

The quest for the perfect manual . . .

A quality manual has a 2% error rate, measured by an index quantified by readability, usability and translatability. Technical manuals written in **Controlled English** can achieve six sigma quality.

The 21 common errors in Documentation

Here is a list of 21 common errors in technical documentation that lower the quality.

- Spelling errors caused by the failure to use spell check.
- Foggy writing with confused gobbledygook and jargon.
- Long sentences that exceed 17-21 words.
- Key information is missed, confused or omitted.
- Wrong or non-existent page number references.
- Readability levels above the US 8th Grade level.
- Incorrect labels or setting references for instrumentation.
- Content is *nice to know*, not need to know.
- Wrong or multiple names for parts or nomenclature.
- Texts written by engineers in "engineering-ese".
- Measurements are vague, missed or wrong in the texts.
- Use of gerunds (-ing words) that cause English ambiguity.
- Wrong metric conversions or omitted dual dimensions.
- Obsolete telephone numbers, URLs, product names.
- Wrong or missing illustrations, graphics and callouts.
- Invention of terminology for writer convenience.
- Multiple meanings for the same abbreviation.
- Creation of acronyms that do not follow global standards.
- Tools and materials listed that are not available worldwide.
- Failure to edit or review texts for technical accuracy.
- Failure to provide translations when there is a clear market demand and business advantage.

These errors can cause problems for your customers, and increase your customer support costs.

A **MAXit** check costs less than a penny a word. A product liability claim can mean financial disaster.

Controlled English Text for Six Sigma

To apply six sigma to documentation, the first step is to develop a **Controlled English** program. The controlled vocabulary and reduced syntax rules enforce the standardization of documentation.

Documentation designed for Six Sigma

Successful companies like General Electric (GE) and Honeywell have trained thousands of engineers to design their products and services for six sigma quality. The results are increased profits.

The six sigma consultants at **SMART** have years of experience to help your company write global documentation for usability and readability.

Tools to write Six Sigma Documentation

SMART offers the **MAXit Checker** software, consulting services and training to help implement a **Controlled English** program.

Our consultants can teach your writers **Controlled English** and the six sigma principles for global documentation in three to four days.

The **SMART Text Miner** is a tool to create dictionaries for both the **MAXit Checker** and the **SMART Translator**. The text mining process is a low-cost method to mine product knowledge for six sigma programs.



MAXit Checker - with six sigma reporter



The **MAXit Checker** is a text critique tool that measures technical writing against 8,500 rules and a **Controlled English** vocabulary. **MAXit** creates six sigma quality metrics through the **40 MAXit Checker** messages. Publications managers, writers and technical authors now have a scientific and predictable tool to measure the usability of their documentation. Ideal for XML and content management systems.

The **SMART Translator** can accurately and automatically translate **Controlled English** texts into other languages. The six sigma quality is transferred to the translations.

The **SMART Translator** works in FrameMaker, WORD2000, Epic, XML and other tools.