MAXit for PTC Arbortext Editor

Simplified Engllish
Controlled English
Plain English
XML
dita
SMART Software

SMART Communications, Inc., New York City, is a developer of *Artificial Intelligence* (AI) software. The SMART software assists technical writers to write clear, concise and simple English instructions.

The **MAXit Checker** is a plug-in for PTC Arbortext Editor, see next page. The program uses AI rules and a controlled vocabulary to create clear instructions that prevent human error during maintenance.

The *Simplified Technical English (STE)* version includes rules for aviation S1000D, ATA2200 and ASD-STE100 Simplified Technical English, Issue 8, April 2021.

Another version for *Controlled English (CE)* is ideal for non-aerospace industries, training and instruction manuals. For example, heavy machinery, software documentation, medical device manuals, telecommunications procedures and automotive engineering.

A Citizen Services version uses rules for *Plain English (PE)* to simplify public information. Plain English is ideal for government agencies who must write Plain English for citizen communications. This version also helps readers who have Limited English Proficiency (LEP), or who use English as a second language.

What is the size of a controlled vocabulary?
The English language has more than one million words. A controlled vocabulary ranges from 5,000 to 8,500 terms, or 1% of the English language. A domain-specific vocabulary removes ambiguity and increases readability for readers in 149 countries.

The MAXit Checker software with AI/NLP
The software uses a controlled vocabulary linked to 19,000 Artificial Intelligence and Natural Language Processing (NLP) rules. These rules with GenAI give intuitive contextual suggestions and corrections.

See example on next page.

How to contact us
Tel: +1(212) 486-1894
Email: info@smartny.com

www.smartny.com

SMART COMMUNICATIONS, INC.
641 Lexington Ave., 13th Flr.,
New York, NY 10022 USA

Arbortext Versions: 7.x to 8.x (64-bit).

Partial list of MAXit Checker Features

- Software is fully integrated in PTC Arbortext Editor menus and folders.
- Software is digitally signed and cybersafe with no external connections.
- Software inserts an Audit Tag that shows timestamp and author.
- Checks abbreviations for format, ambiguity and correct capitalization.
- Makes full-sentence grammatical and syntactical text analysis.
- Processes text by element, text selection, table or document.
- Marks words not in the custom dictionaries.
- Pop-up menu (Context menu) explains the errors and offers corrections.
- Suggests verbs that are easier to translate and understand.
- Temporary Dictionary allows writers to submit possible new terms.
- Checks style settings for capitalization and missing articles.
- Controls sentence length to US Navy, Airbus and other standards.
- Shows a list of words that are NOT FOUND in the **MAXit** dictionaries.
- Shows synonyms and suggestions in context with click to change.
- Marks wrong punctuation, comma, semi-colon, colon and question mark.
- Navigates tags, hypertext links, cross-references, indexes and graphics.
- Navigates to Next Error for faster identification of errors.
- Marks adverbs that do not modify verbs, or can be deleted.
- Software processes 80-character phrases and single words.
- Marks *nice-to-know* versus *need-to-know* phrases.
- Marks awkward or idiomatic English that is not globally understood.
- Quality Control Traffic Light scores and audit timestamp.
- Displays errors in 40 MAXit messages from 19,000 NLP rules.
- Lexicon Manager software can change rules and update dictionaries.
- Software has a logic tracer to find and adjust the NLP engine.
- Software includes a profiler to adjust dictionaries for product lines.
- Full Six Sigma metrics for QA/QC checks and Administrator reports.
- Validates product terminology, service marks and trademarks.
- Checks sentences for noun-to-verb agreement and missing references.
- Marks present participles, gerunds (*-ing*), that cause most problems.
- Ignores text inside selected tags, example <comment>, <warning>.
- Navigates .xml, .sgml, .html, plain text and .dita formats.
- Uses in-memory dictionary lookup for fast processing.
- Complies to Boeing, Airbus, FAA, NATO and other language standards.
- Marks phrases that can cause a risk for product liability (might, fail safe).
- Matches and marks preferred spelling, including British and American.
- Validates instrument labels for type style, example, OFF switch.
- Identifies phrasal verbs, for example, lit up, carrying out, opt in.
- Marks wrong suffixes (-ize, -ness) and wrong prefixes (non- and un-).
- Marks and suggests the use of hyphens. Example 64-bit system.
- Marks apostrophes and possessives that cause translation problems.
- Identifies complex technical jargon, including engineeringese.
- Marks missing references and antecedents, for example, "it," "they."
- Marks missing commas and shows where commas must be inserted.
- Marks all gender pronouns and references, for example, "he" and "she."
- Marks passive voice and suggests active voice for better sentences.
- Marks noun clusters and phrases to delete without loss of meaning.
- Suggests where to insert articles (a, an, the) to increase readability.
- Shows a list of synonyms with a *click-to-insert* function.
- Includes a Metric Conversion tool to add dual dimensions.
- Includes a Word Finder and Verb Finder to search the dictionaries.

A companion Lexicon Manager adds terms to dictionaries

MAXit
for PTC Arbortext Editor

SMART Software

Replacing the Cross Shaft

. Position the machine in an approved area to conduct maintenance with the power OFF.
. Apply the parking brake.
. Lower the conveyor boom.
. Supports the machine off the ground.
. Turn the pump OFF.
. Control access to the machine.
. Disconnect this machine before you do maintenance.
. Obey all safety rules and regulations.

WARNING: DON'T go under the machine to do maintenance.

ORIGINAL

How to Replace the Cross Shaft
. Before you do maintenance, move the machine to an approved area. Put the power switch in the OFF position.
. Apply the parking brake.
. Lower the conveyor boom.
. Use four supports to hold the machine above the ground.
. Put the pump switch in the OFF position.
. Control access to the machine.
. Disconnect all electrical power from all power sources.
. Obey all safety rules and regulations.

WARNING: DO NOT do maintenance below the machine.

STE

PTC Arbortext Editor - Replacing the Cross Shaft.dita :: MAXit - Active

File   Edit   Find   View   Insert   Object   Table   MAXit   Tools   Styler   Format   Window   Help

pi MAXXIT STE=amber:FOUR SIGMA#30:5:2021-11:21-K122

title ▶ **Replacing** the Cross Shaft ◀ title

taskbody

context

ul

Point and Click   **Quality Score**

li ▶ ◀ ▶Position◀ the machine in an approved area to ▶conduct◀ t

li ▶ ◀ Apply the park brake. ◀ li

li ▶ ◀ Lower the conveyor boom. ◀ li

li ▶ ◀ ▶Support◀ machine ▶off◀ the ground. ◀ li

li ▶ ◀ Turn the pump ▶off◀. ◀ li

li ▶ ◀ ▶Limit access◀ to the machine. ◀ li

li ▶ ◀ Isolat ... to the machine

Refer to Loc

Limit access : WRONG VERB

Show Suggestions ▶   Control access

Remove Messages ▶   t of this machine that ▶is only supported◀ by a hyd

✓ Next MAXit Message   to this machine before you ▶perform◀ any adjustm

Close ...   heck◀ the alignment of pin bores. ◀ note

ul

note type='

note type='

procedure.

note type='

context

Corrections

MAXit - Quality Traffic Light

AMBER LIGHT (Average): MAXit found 40 errors in 392 words. Average sentence length: 8 words. Edit for grammar and vocabulary.

Date: 30:5:2021 Time: 11:31

By: Tester Joe (K122)

(A QA tag added to this document.)

Print Report   Close ...

Command: **40 MAXit Messages - 19,000 AI/NLP rules**

MAXit Message: Press F2 on the color to see each MAXit message.   TRK