

Technical documentation made easy

Software solutions improve efficiency – but many companies are still improvising

It's not especially popular, but it is indispensable – and generally prescribed by law: technical documentation, from operating manuals to declarations of conformity. Managing the contents of what is often multiple document files full of copious amounts of mixed papers means a great deal of effort for plant and machinery engineering companies. But with the right software solutions, this effort can be severely reduced without having to cut corners on quality. Despite this, many companies are still using text processing programs like Word.

“It's definitely a time crunch.” The response comes like a shot. Around ten years ago, the head of the Documentation department at Kubota Brabender Technologie GmbH faced a decision. “Either I hire two new employees for technical documentation or I find an alternative solution.” All documents were still being created using Microsoft Word back then, without any databases or other software tools.



Image: Kubota Brabender Technologie GmbH

For a long time, this solution worked perfectly well for the Duisburg manufacturer of machines for handling bulk goods and liquids. Operating and

assembly manuals for a wide variety of products, from loss-in-weight feeders to bulk bag unloaders, were only written in German, English, and French. “In those days, that was still easily manageable”, he remembers. This even applied to the documentation of complete systems, which was able to include several folders together with all external descriptions.



Image: Brabender Technologie GmbH & Co. KG

But the wind changed, no later than when the EU Machinery Directive was drafted. Now, the internationally active company's documentation had to cover all 24 EU languages, plus Turkish and Chinese today. “I wouldn't have had a chance with Word alone,” says the head of the Documentation department at Kubota Brabender Technologie., raising his hands. Because of the directive, requirements and documentation intensified and grew more extensive.

Kubota Brabender Technologie came to realize that it would have to forge new paths.

Thousands of Word files

The company is far from an isolated case. It also took a long time before URACA GmbH & Co. KG, a manufacturer of high-pressure plunger pumps and water jet technology from Bad Urach in Swabia, started relying on special tools.



Image: URACA GmbH & Co. KG

The technical documentation department was working with large directory systems in the company network. This was where all of the documentation for products, the respective variants, and the up to 18 languages covered were stored in file folders, on the separate hard drives every Windows user is familiar with. There were also the specific descriptions and initial operations for special machine construction, which could well take up two to three document files. The actual documentation took up thousands of Word documents. "That's how we ended up with this massive range of documents," says Claudiu Theil, Technical Writer at URACA. "It was a challenge to

keep track of it all." Automated master indexes or structured search functions were not even on the radar.

Kubota Brabender Technologie and URACA are far from exceptions, because when it comes to business, changes in thinking come tentatively, if at all. According to a study by the German Technical Communication Association (tekomp), 20 percent of companies used documentation or content management systems in 2005 to make technical documentation more efficient. It was already 40 percent last year. Another ten percent are introducing a corresponding system or looking for the right providers.

"These figures should be taken with a grain of salt," says Ulrich Pelster, Managing Director of gds GmbH, which developed the content management system docuglobe. In the end, only the tekomp employees took part in the survey. "An estimated total of 90 percent of the company still doesn't use appropriate software solutions." His explanation: the importance and added value of technical documentation is often not recognized or considered necessary to investments. "Technical documentation is frequently seen as a necessary evil."

Through appropriate systems, it can be used to implement crucial simplifications into the workflow, eliminate potential sources of error, and reduce costs. 50 percent of the users surveyed in the tekomp study rated the cost-benefit ratio as positive, while another 16 percent rated it as very positive.

URACA and Kubota Brabender Technologie, which rely on the gds product docuglobe today, share this estimation. The product's crucial added value: the system works with reusable content called information modules. If parts of the content in a module change, for example if a workpiece that is integrated into multiple products has been refined,

the updates will automatically be applied to all documents – a feature that is very important to users based on experience and saves a lot of work. “Thanks to the new structuring, we managed to achieve a recycling rate of about 50 percent in today’s manuals for two completely different-looking devices,” explains the head of the Documentation department at Kubota Brabender Technologie GmbH. “We never could have done this before.”

URACA uses this feature for a different scenario: since introducing the system in 2012, data has been gradually migrated to docuglobe while at the same time being reviewed for CE compliance – a process that could take several more years by Theil’s estimate. For this reason, URACA is starting by concentrating on specific recurring elements such as EC conformity and installation declarations. There were originally 150 files in different languages and for different products. The devil is in the details: although the documents only comprised two pages, there were 20 to 25 individual modules that constantly had to be updated individually. In some cases there’s just one line, one sentence, or one number to change, but the effort involved used to be immense, according to Theil. “Especially with these conformity declarations, which have to be updated twice a year, we’ve saved six to eight weeks of time per employee.”

Theil also points out the variable management in docuglobe as a “very helpful” feature: for some products or their variants, the technical data will occasionally change even though the features do not. Using the corresponding variables, this data is updated in the respective versions, regardless of the language, in a single step. Graphics can be handled similarly. Experts also highlight the easy use of templates, layout and preview functions, and version control for documents.

Saving time on translations

Another major issue is translation. Any change made to the German version of documentation has to be applied to the variants in other languages for foreign markets as well. In the past, this often meant sending the entire document to a translation agency, which entailed considerable costs. “We’re seeing a significant reduction in costs thanks to the ability to reuse individual modules,” says the head of the Documentation department at Kubota Brabender Technologie. “It doesn’t take as long to translate.” His colleague Theil has a similar report. “The sources of error are practically nil now.” Quite the contrary. During migration, it turned out that some document versions in the respective languages were different lengths, which hinted at inconsistency.

The bottom line: using the software is worth it. “Where I needed a week to revise an operating manual before, now I need maybe two or three days, including all the drawings,” says the head of the Documentation department at Kubota Brabender Technologie. “The work has simply been given structure.” Theil agrees. “We anticipate time savings of up to 50 percent once all the data has been migrated.”