

A collection of Miele vacuum cleaners, including a red canister, a white canister, a black upright, a white stick, and a white cordless stick, arranged on a light-colored wooden floor. A circular red robot vacuum is also visible in the foreground.

# MIELE RELIES ON SCHEMA

With sales amounting to almost 4 billion euros and a 20,000-strong workforce in 2017, the owner-managed company is still enjoying continuous growth. Anywhere where innovation and sustainability are at the heart of a company's philosophy, the information processes must also meet the most stringent requirements. That is why Miele has decided to put its technical writing on a new footing by using SCHEMA ST4 as an authoring environment. The solution enables Miele to respond to increasing demands on product documentation and to be strategically open to the challenges of modern information products and processes in the age of digitisation.

The Miele logo, consisting of the word "Miele" in a white, bold, serif font, centered within a red rectangular background.

## PROJECT HIGHLIGHTS

### ST4 at its best

- Fifty technical writers, spread across several sites, prepare around 15,000 documents for over 7,000 products
- Wide variety: user manuals, medical device documentation, recipe and cookbooks, FAQs, packaging texts
- Translation into more than 40 languages
- Publication: high-end PDF directly from ST4, InDesign, in-house XML

### What impresses Miele

- High-quality data and layout
- Constantly increasing volume of documents processed by the same number of staff
- Performance gains of up to 70% for work processes
- Ability to be integrated into the Miele tool environment and adaptability to Miele's requirements
- Optimal system maintenance
- High level of service provided by SCHEMA as a project partner



## MIELE CREATES MODERN INFORMATIONAL PRODUCTS AND PROCESSES USING SCHEMA ST4

**Miele is the world's leading manufacturer of premium appliances for cooking, laundry care and floorcare. Miele also makes dishwashers, washing machines and tumble dryers for commercial use as well as appliances for the reprocessing of medical instruments and laboratory equipment within its "Miele Professional" business unit.**

Miele is the world's leading manufacturer of premium appliances for cooking, laundry care and floorcare. Miele also makes dishwashers, washing machines and tumble dryers for commercial use as well as appliances for the reprocessing of medical instruments and laboratory equipment within its "Miele Professional" business unit. The company is known for its focus on the highest quality standards in terms of performance, efficiency, functionality and durability. As a long-established brand, Miele offers a wide range of products for cooking, laundry care and floorcare, such as vacuum cleaners, washing machines, tumble dryers and steamers, as well as special applications for clinical use, such as

washer-disinfectors for medical laboratories. This presents a huge challenge where technical writing is concerned, as there are over 7,000 products to write documentation for. If you include the different variants, this amounts to a total of 15,000 documents and each one is translated into up to 40 languages. This large volume of documentation can only be tackled by a huge team, which is why almost 50 technical writers are employed at Miele across several sites – another logistical challenge. When writing content, the technical writers adhere to an in-house controlled language with fixed writing and style conventions.

### **ST4 wins the race**

"Before using SCHEMA ST4 as a modern authoring environment, we used to work with a DTP solution, which simply wasn't up to the task anymore," recalls Adrian Schröder, Head of Content Management / Technical Information Management at Miele. The file-based, decentralised data storage became more and more of a stumbling block. The technical writers did not have ac-

cess to the entire database and it was also impossible to develop consistent version management. The existing set-up also did not allow the company to enter into the world of cross media and digitisation. What convinced Miele to opt for SCHEMA ST4 when choosing a new system? Important factors included standard functionalities like modularisation, reuse of content and professional translation support. In addition, the company had high demands on IT in terms of performance and integration. "Here at Miele we've also always had very high expectations when it comes to the layout quality," reports Adrian Schröder. "SCHEMA was able to offer us the best solution we could find on the market." ST4 also scored highly as it is possible to classify content modules using taxonomies. Miele was equally impressed that many of their requirements were already covered by the standard configuration of ST4, which is why it came out on top compared to its competitor products.

### Entering the new world step by step

Miele has now been using SCHEMA ST4 as its content management system for five years. The 50 technical writers work with a customised system; an adapted version of the standard configuration with customer-specific modifications. "For technical information we have a separate DTD at Miele that we cannot do without," explains Adrian Schröder. The SCHEMA project team has also developed tailored solutions for interfaces. The flexible architecture of SCHEMA ST4 makes this easy, as Schröder recalls, reflecting on the development phase: "SCHEMA offered us a very professional service as a manufacturer." Miele is taking a gradual approach

to the switch to ST4. The first product group to migrate from the old system to ST4 following the official rollout was washing machines. Other products have followed since then, and whenever there was a new generation of appliances. Today, the documentation on almost all Miele products is produced using ST4. However, the technical writers not only create the "traditional" forms of technical documentation with ST4, such as user manuals and service documentation; the same tool is used to produce many other kinds of information products, like recipes and cookbooks, programming manuals containing hundreds of pages, or texts for accessory packaging.

### Fully automated in all channels

The high-performance print interface of ST4 is largely responsible for making it so easy to create "everything from a single source". This interface makes it possible to produce a high-end quality PDF version of a document directly from the content management system in a fully automated manner. "The huge advantage of ST4 is that we can manage our different layouts ourselves using the Page Layout Designer," emphasises Adrian Schröder. And there certainly are a number of different layouts at Miele: for the A5 and A4 formats there are approximately 40 different versions. This is a feature that is now part of the standard configuration of ST4, thanks to the valuable feedback provided by Miele at the system implementation phase. Another solution to a former layout headache has also been found – for the document figures. In the old system environment, the figures were managed using error-prone, manual work processes. Now, ST4 reliably updates the figures in a practically fully automated manner. The graphic elements are created by the Callout Designer (ST4's graphics module), while the text elements – in all languages – are incorporated straight from the development database via an interface, without any manual intervention. "This is one of the areas where we save the most time thanks to ST4," says Schröder, looking at the numbers. The packaging texts are also handled in a similar way; they are managed and translated in ST4. The graphics department receives an InDesign file from ST4 for every piece of packaging, which can then be processed further. Schröder: "Here we've achieved a performance gain of 70 percent". As well as the print channels using PDF and InDesign, Miele also uses SCHEMA ST4 in a modern content delivery scenario. ST4 can adapt selected content in an XML produced from the company's own system and copy it into the Miele service application via an interface. This application is a platform providing service technicians with up-to-date information and instructions at the touch of a button.

### Great benefits from a strategic standpoint too

"It's clear after five years of using SCHEMA ST4 that we definitely made the right choice," sums up Adrian Schröder today. What are the main benefits, in addition



to the high-quality results, for him as the IT strategist and group-wide system manager? For one, its integration capability; ST4 provides a structured XML format for the translation memory system, which is used to transfer only the content that has not yet been translated; this has made translation management much easier. What's more, there are interfaces to SAP and the development environment, which enable deeper integration of the system and process worlds. "Recently, when special data sheets became a mandatory part of our documentation, to be quite honest it was no big deal at all. We now load the required data from SAP directly into ST4 via an interface, so the technical writer no longer needs to give any consideration to data and layouts." Secondly, Schröder rates the flexibility around managing workflows highly: "We can support collaborative processes, such as for the packaging texts, or technical writers can carry out the entire documentation process independently, as for user manuals". Schröder is equally enthusiastic about the administration and maintenance features in SCHEMA ST4 as a Component Content Management System. For him, the comprehensive reporting options in ST4, which provide information about process statuses and

data quality, are vital tools. Miele has also developed its own reports for specific questions, which Schröder uses to retrieve the required parameters directly from the database via the API.

#### **Tackling a constantly growing workload with no additional staff**

There are currently 50 technical writers working with SCHEMA ST4 at Miele. At times, up to 40 clients are in use at the same time. However, no one would even know that the writers are based in several completely different locations. The technical writing process in ST4 is continuing to expand. Language editing software will soon be incorporated as an assistance system. And of course, new document types will start to be managed using ST4. The introduction of SCHEMA ST4 at Miele is one of the reasons why the technical writing team has not needed to be expanded to date, despite the increasing demands. Although the data throughput is growing, and many challenging trends are on the horizon, Adrian Schröder is optimistic about the future: "I'm certain that SCHEMA ST4 will continue to be of great assistance to us both operationally and with regard to our strategic goals."



## SCHEMA – Complex Documents Made Easy.

SCHEMA GmbH was founded in 1995 in Nürnberg and today has around 120 employees.

SCHEMA ST4 is an XML-based editing and content management system, offering extensive features for all aspects of the creation, management, translation, quality management, publication and distribution of product information of any kind. SCHEMA ST4's scalability makes it suitable for small editing teams as well as for company-wide solutions for information logistics. SCHEMA ST4 can be used as a standard product or a customer-specific solution. With the SCHEMA Content Delivery Server, information can be distributed intelligently to all common platforms, independently of SCHEMA ST4.

Our products and solutions are successfully deployed across various branches of industry to simplify 'complex documents,' including technical documentation, software documentation and help systems, catalogs, labeling for pharmaceutical companies, training material, solutions for specialized publishers, contract and bid management. SCHEMA ST4 is based on Microsoft .NET technology with Windows and web clients, and can easily be integrated and deployed into modern IT landscapes, as it supports the entire bandwidth of documentation standards (XML, XSL:FO, DITA, etc.). SCHEMA ST4 offers a broad line-up of interfaces (XML editors, MS Office, Adobe CS & FrameMaker, SAP, etc.). SCHEMA is proud to be part of an active network of renowned partners, as this enables SCHEMA to offer specialized solutions for its customers as well.

Among the many customers already using solutions based on SCHEMA ST4 are: ABB, Agilent, Avaloq, Bosch, Boehringer Ingelheim, Bundesanzeiger, Carl Zeiss, Daimler, Deutsche Bundesbank, General Electric, Hewlett Packard, Lindauer DORNIER, MAN, Miele, Reifenhäuser, Roche Diagnostics, Schaeffler Gruppe, Siemens, Österreichische Bundesbahnen, Philips, STOLL, T-Systems, Voith and Wolffkran, and many more.

**For more information:**  
[www.schema.de](http://www.schema.de) · [blog.schema.de](http://blog.schema.de)

