

ITT Flygt Positioned to Save Millions with IMAP, DITA and Dynamic Publishing

ITT Flygt Revamps Their Technical Documentation System for Significant Time and Cost Savings

ITT Flygt, Stockholm, Sweden

ITT Flygt is the world's leading manufacturer of submersible pumps, mixers and accessories. Since the first submersible drainage pump was invented in 1947, the company has grown to a global player in the fluid handling market, with production sites in Sweden, Germany, China and Argentina, 44 wholly or partly owned subsidiaries around the globe, and representations in over 130 countries. ITT Flygt employs approximately 4000 people worldwide and earned revenue of \$1 billion in 2005.

ITT Flygt is a wholly owned subsidiary of ITT, with its corporate headquarters located in White Plains, New York (www.itt.com). ITT is a supplier of advanced technology products and services in a line of industrial branches. With 40,000 employees located around the world, the company generated \$7.4 billion in 2005 sales.

The Challenge: On-time Localized Documentation for all Products

The timely delivery of documentation is critical for the market success of new products. "Regulations in Europe and elsewhere have become very strict: without documentation in the local language, you are not allowed to introduce a product to the market," explains Agneta Weisberg, Manager of Technical Documentation at ITT Flygt. In addition, many documents, such as marketing materials, need to be available prior to product launch so that distribution partners can be prepared to start selling the products as soon as they are available. Multiple brands and new acquisitions further complicate matters as documentation must be adapted to meet different brand requirements or to standardize the documentation of acquired products.

The Solution: PTC Dynamic Publishing

Whereas desktop publishing is a manual process of creating single, monolithic documents, dynamic publishing is like the mass production of documents from a common database of reusable components. The secret behind dynamic publishing is the separation of content from layout or format. It allows the user to automatically configure different types of documents for different audiences and to publish it in multiple formats like HTML, PDF, CD-ROM or wireless devices from the same source of information. With PTC's dynamic publishing solution, ITT Flygt captures information in topic-based components using Arbortext Editor and automatically assembles and publishes documents using Arbortext Publishing Engine.



ITT Flygt leads the market with innovative products like the new 2600 generation of dewatering pumps that significantly improve wear resistance and performance consistency over the product's life, lowering the overall cost of ownership.

"Customers have become very demanding with respect to the usability of documentation; they want the content to be easily readable and understandable, and they want it to be accurate."

– Agneta Weisberg,
Manager of Technical Documentation, ITT Flygt

The Results: Improved Information Quality, Lower Costs and Time

With PTC, ITT Flygt is implementing a topic-based documentation system that enables them to use the same pieces of information in multiple documents of different types and formats. "Our products are not so different from one another, allowing us to reuse the information from one product line in others," explains Weisberg. "Safety instructions, for example, are 100% reusable for ITT Flygt." During content analysis ITT Flygt defined the topics and content structure that would enable maximum reuse of information in different contexts. Weisberg adds, "Another benefit of dynamic publishing is that it allows us to print documents on demand, reducing the amount of documentation that needs to be stocked."

Why Traditional Desktop Publishing Didn't Work

As ITT Flygt launches new products to meet divergent and specific customer demands, they are also faced with the challenge to speed up technical documentation processes while simultaneously improving the quality of the information. Not only was traditional desktop publishing unable to keep up with their increasing publishing demands, but it further impeded the process by inflating the number of documents to manage in support of new media such as Web and CD-ROM.

"Authors spent a lot of time searching for content they had already written or translated, and half the time their search wasn't successful," explained Weisberg. "Each time engineers introduced a minor modification to a component used in different products, technical authors spent hours updating hundreds of documents." Weisberg estimated that millions of SEK could be saved each year if it were easier to find existing information, reuse it in any type of document, and update documents automatically when changes occurred.

The FlyDoX Project

An experienced consultant in the field of technical documentation, Agneta Weisberg approached ITT Flygt to become the leader of an ambitious global enterprise publishing project called FlyDoX. She proposed implementing a topic-based documentation process that would allow ITT Flygt to map the same pieces of information to different document types and formats.

Before selecting software, the FlyDoX project team identified the current technical documentation process and analyzed users' needs. As a result of surveying 140 Web respondents and conducting additional telephone interviews with 14 participants, the project team defined the archetypical users for whom authors would need to write. The needs and goals of each of these "persona" provided the foundation for restructuring ITT Flygt's information. They shifted from a document-oriented to a task-oriented system to make the information more useable and searchable.

The team analyzed existing content to determine what kind of information could be reused. To date, they have defined close to 30 different types of "topics" and content structure that support reuse in different contexts. Topics are standardized pieces of information organized in blocks or chapters that can be grouped, reordered and reused to form different types of documents.

Why PTC?

ITT Flygt chose Arbortext for both its functionality and strategic opportunity. It was a decision strongly supported by the mother company ITT which is interested in deploying the same dynamic publishing solution as ITT Flygt. "There are many good products from smaller companies out there, but ITT as a global company needed a solution that is globally supported, and we knew some big companies are using Arbortext," said Weisberg. She adds that ITT is happy about the acquisition of Arbortext by PTC because

it strengthens the global position of the company and offers additional benefits through the integration with PTC Windchill as the data platform.

The New System

The new system is based on Information Mapping (IMAP), a methodology of structured writing built on behavioral science, and the Darwin Information Typing Architecture (DITA) as the data structure for capturing information. The combination of DITA and IMAP makes it easy for ITT Flygt to **author and present content in a consistent manner.** There are three basic structure levels—chapter, section and block—with specific rules about each one.

The topic-based approach required some changes to the organization. In the past, technical writers were responsible for all documents related to a particular product line and did not collaborate with one another. Now, each writer is responsible for one or more topics used across multiple product lines. The advantage of DITA and information mapping is that the author does not need to know how or where the information will be used when creating it.

ITT Flygt also wants to integrate a translation memory database, made up of a growing number of human-made translations, with a content management system. This will provide ITT Flygt with significant savings in time and costs as it enables them to quickly update translations when changes are made to documents. When changes are made, the database recalls previous translations for better consistency. Furthermore, only the changed content has to be translated, and the translated copy is automatically updated everywhere it is reused.

Expected Results

The parts list is the first dynamic publishing application that went into production, and ITT Flygt has already begun to see some process improvements and time savings. They feel this is just the tip of iceberg and expect to see additional benefits emerge over the next few months as more and more documents are supported by the dynamic publishing system. "Our technical documentation will always be accurate and up-to-date, relevant information will be easier to find and use, and it will have a consistent look and feel," says Weisberg. From the global enterprise perspective, ITT expects improved content quality with less repetitive work, especially with respect to reuse of existing translations.

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