Case Study: Alstom Power

Spare Parts Point-and-Click

Docware GmbH, Fuerth
Spare Parts by a Mouse Click

Service and spare parts data provided in an optimised manner minimise downtimes

One of the cornerstones of a smooth-running after-sales and spare parts business is access to up-to-date, machine-related data. The management of information in after-sales, service and spare parts departments can be optimised through the use of electronic service and spare parts catalogues.

Customer satisfaction is highly dependent on a committed after-sales service department. The supply of spare parts is a key element, and availability and rapid delivery form part of this process. Both aspects must be ensured 24 hours a day, for all sites and all plant types. Machine and plant manufacturers must satisfy their customers’ demands for minimum plant downtimes and must offer the fastest possible response times in a service case. The prompt delivery of spare parts depends entirely on access to the necessary spare parts information.

Electronic spare parts catalogues optimise the provision of complex spare parts information. They provide access to up-to-date customer-specific spare parts data at all times. They also speed up the process of searching for and ordering the parts required, and help to minimise plant downtimes.

ALSTOM Power Inc. in Richmond, VA, is one company using an electronic spare parts catalogue system to optimise the procurement of spare parts. The system is available on the Internet and on CD. The company, which belongs to the global giant ALSTOM, is a manufacturer of power plants providing the most economic and environmentally friendly solutions to keep plants profitable and competitive. In this connection the company is continually implementing new service products to support customers’ success, enhancing power plant maintenance and management.

How ALSTOM and ALSTOM’s Customers use PARTS-PUBLISHER:

Parts can fail unexpectedly at power plants creating an unplanned outage that requires immediate part replacement and service. Power plants also carefully plan maintenance outages requiring a complete parts list, as well as spare parts, submitted months in advance of the outage.

Replacing unplanned or planned parts is no problem for an ALSTOM Power customer because the manufacturer guarantees to minimise the repair and downtimes of its plants. One of the key elements of a prompt and reliably functioning spare parts system is the PARTS-PUBLISHER electronic spare parts catalogue system which ALSTOM Power uses for its electronic Web-based spare parts catalogues. The catalogues allow customers, engineers and staff from the after-sales service department access to up-to-date, plant-specific spare parts data. This is how it works:
When ALSTOM supplies and installs power plants, it provides its customers with a password-protected plant-specific illustrated parts catalogue online.

**All information interlinked**

All spare parts and service information for one plant (description, part numbers, module numbers, illustrations, etc.) can be called up from the illustrated spare parts catalogue where all this information is combined and interlinked. To identify and order a spare part, customers and service technicians use their PC or laptop to call up the Web-based spare parts catalogue from ALSTOM Power. All authorised users therefore receive all the spare parts and service data they need in a matter of seconds whenever and wherever they need it. Descriptive illustrations and parts lists are interlinked. Users can jump between the two areas with just a mouse click.

The Web-based catalogue can be called up on all common browsers.

**Finding parts quickly and reliably**

The spare parts required and any related information can be quickly and easily located with the illustrated parts catalogue. Numerous search mechanisms and a user-friendly interface are provided for efficient identification of the right spare part. For example, if you know the name or number of the part you need, you can use this information to find a spare part. Just enter the corresponding term or spare part number in the search screen and the spare part you want will be displayed both in the parts list and as a drawing in a matter of seconds. What happens if the service department employee knows what the part looks like, but does not know its precise name or order number? No problem. The illustrated catalogue allows a known spare part to be identified in the plant's technical drawing. With a mouse click, the user can jump from the overview drawing for the complete system to detailed views extending right down to the modules and individual parts. Areas of drawings which
are of particular interest can be enlarged and viewed in more detail thanks to the continuously variable zoom function. An overview window displayed in parallel to the close-up image shows which part of the system the detailed view is referring to, so that users do not lose their way in large drawings. Flexible navigation and the zoom function within the drawing allow spare parts to be found quickly using their appearance and position in the system. All the necessary ordering data are displayed in the parts list by clicking on the relevant item numbers in the drawings.

The sophisticated and reliable search and navigation options provided by the electronic catalogue have made it possible to greatly reduce search times and queries by phone for the process of procuring spare parts.

**Around the clock system**

The electronic spare parts catalogue system makes both the identification and ordering of spare parts easier than ever. ALSTOM Power's Web-based catalogue is integrated in an e-commerce and PARTS-PUBLISHER provides the catalogue functions.

**Automated catalogue production**

By using the PARTS-PUBLISHER spare parts catalogue system, ALSTOM Power has not only improved the presentation, quality and availability of service and spare parts data. The processes involved in the production of catalogues have also been optimised, thereby saving money.

Most of the processes involved in producing either CD or Web-based spare parts catalogues are carried out automatically with a few mouse clicks. PARTS-PUBLISHER functions on the basis of the single-source method. This means that the catalogues for all media (paper, CD and Internet) are produced from the very same data source - the PARTS-PUBLISHER catalogue database. Parts lists, drawings and descriptive documents are combined in one system. Any changes to the data are taken into consideration in all media. The data does not therefore have to be processed several times, thus eliminating redundancies.

**Setting hotspots automatically**

One of the features of the PARTS-PUBLISHER workbench is a tool which can be used to automatically set hotspots, even in batch mode. Hotspots are sensitive areas featuring hyperlinks which can be placed on item numbers, alphanumeric order numbers or graphic components. They are required to link images or drawings and parts list information in electronic catalogues.

The hotspot tool can be trained for different types of drawings. The result of each training process can be saved and called up again at any time to set hotspots in other similar drawings. Calibrating parts lists and hotspots produces logs of missing or incorrect entries which can be corrected manually. Match rates of close to 100% are achieved with good quality drawings.
Extensive configuration options

PARTS-PUBLISHER offers a wide range of configuration options. The contents of catalogues as well as the structure and layout of the catalogues can then be adapted as required without the need for programming. Once catalogue templates have been produced, they can be filled continuously with new data.

Conclusion

By using the PARTS-PUBLISHER catalogue software from Docware, ALSTOM Power has created ideal conditions for ensuring a professional after-sales service and simplifying the process of purchasing spare parts for its customers. Plant-specific illustrated catalogues, which contain links to all service and spare parts data, feature numerous search functions and also enhance the presentation and quality of the data and optimise the way in which the necessary spare parts and associated information are found. Shorter search times, correct parts identification and correct orders mean shorter downtimes for power plants, cost savings and happy, loyal customers.

PARTS-PUBLISHER spare parts catalogue software

PARTS-PUBLISHER is a standard software package for the professional management and optimised provision of product, service and spare parts information. It can be configured individually and has a modular structure. Production lists, spare parts catalogues, service information systems, spare parts shops or service portals can be automatically produced and updated with this database-supported software.

The software combines product, spare part and service data from various data sources in one database. This database can be used to operate the print, CD and Web-based media by means of the single-source method.

The data can be combined manually or using existing standardised interfaces.

The centralised data (spare parts lists, graphics, blow-up drawings, photos, animations, documentation such as repair manuals or safety instructions, etc.) can be automatically linked and prepared with a few mouse clicks. Individual catalogues or information systems (machine-, device- or user-specific, for individual customers, etc.) can be produced (without programming) thanks to the wide range of configuration options.

PARTS-PUBLISHER allows a company's staff and their customers, dealers and suppliers to access perfectly prepared service and spare parts information at any time. No matter whether they use the CD or Web-based version, all information on spare parts and service, ranging from illustrations and order numbers to prices through to repair and maintenance instructions, is available at a glance.

The spare parts needed and any associated information is quickly found and can be ordered directly from the catalogue system without any manual data transfer.