

Fujitsu Technology Solutions GmbH

Web-based order management

The range of test specimens at Fujitsu Technology Solutions GmbH's Center for Tests and Compliance in Augsburg, Germany is very diverse. IT systems, from the complete system platform down to microcontrollers, form the core: At more than 80 test stations, 25 employees test the equipment's electromagnetic compatibility and product safety, and run environmental, thermal, mechanical, packing, acoustic and endurance tests. Around two-thirds of the orders come from the internationally operating parent company Fujitsu, with the other third commissioned by external customers.

Fujitsu, headquartered in Tokyo, is the world's fourth largest supplier of IT solutions and services, and employs more than 180,000 members of staff. Many global research and development units are located at Fujitsu Technology Solutions GmbH, a Fujitsu subsidiary in Germany. The Center for Tests and Compliance in Augsburg acts as an independent accredited test laboratory with an EMC measurement area, environmental and acoustic chamber, shaker, dual-chamber thermal shock chamber, and many other measurement devices. Around 2,500 tests are conducted here annually, with roughly two-thirds of the test pieces coming from the IT world to serve Fujitsu customers in 187 countries around the world. The product range for external customers, however, extends well beyond the IT sector. Starting with units for medical technology and the lighting product industry, robots are just as much a part of this range as are inserting machines with printers. "We do everything that we can fit into our measurement areas and cover as far as the standards are concerned," as Environmental Laboratory Director Stefan Klein explains.

The initial situation

The center in Augsburg has drawn up around 21,000 reports at the approximately 80 test stations during the last five years. The documents confirm that the test products stand up to all the relevant tests in the individual countries. At the same time, the test report, with complete order documentation, and the certificates from external service providers represent the preconditions for importing products like the Celsius workstations or Primergy servers into target countries. Efficient handling and transparent evaluation of the data set would have become impossible a long time ago without a powerful laboratory management system.

"Laboratory management software is never really final."

Stefan Klein, Laboratory Director Environmental Testing, Fujitsu Technology Solutions GmbH, Augsburg

The Center for Tests and Compliance has been working with software from dacore Datenbanksysteme AG since 2001. Today there are around 65 workstations with modules such as customer management, offer creation, costing, test plan preparation, measurement station and calibration management, quality management, management and storage of standards and everything up to complete invoicing. The system communicates with the operating system that is installed on each computer. From the start, a convincing argument for the complex software was the fact that it was developed individually for the Augsburg test center's special interests consequently, the customer pays for the specific development work, and there are no licensing fees. The dacore experts have been on hand to support and advise users through all stages, from the original performance specification throughout the entire project up to today, as well as for the system's maintenance and ongoing further development and refinement.

The web tool

The focus of the Augsburg laboratory was on establishing a convenient interface between customers and the test laboratory and the structured acquisition of orders and all necessary data and their distribution to the associated test laboratories when they decided on the development of an integrated web tool in 2003. Today they use this tool to process all document and order management jobs through to product termination planning. "We can find everything," Stefan Klein reports. And at incredible speed as well. All data and information are archived, and are also suitable for copying. And everyone involved can transparently trace the history in detail. Data backup as defined by ISO 9000 is a free added service. Before the web tool was introduced, it often took a number of people hours or even days to gather the information "manually" that customers, partners or the sales area requested on products, tests and certificates and send it by mail. Today order inquiries from customers or Sales initially only from within Fujitsu arrive exclusively via the web tool.

The orders processed in Augsburg are immediately available on line 24/7 in the current version at any location in the world, depending on the previously defined access right. Each laboratory area sees exactly its own orders, their status and the corresponding records. A filter and search function allows selective searches for results. Information that requires more than the normal access right can be viewed via a substitute regulation. In addition, developers and sales staff employees can store their own documents with predefined structures in the database via the web tool. The system develops and evolves like all software from dacore continuously and organically through the years: for instance, an interface to certain cooperating measurement technology manufacturers was activated, the temperature measurement was linked to the booking, and measurement equipment monitoring and a LabWizard for automatic record preparation with selection lists, photos, etc. were integrated. A matrix of standards has been activated since the autumn of 2009. This matrix contains the country-specific standards established around the world with a link to the special features, conditions and status of each, easily identifiable in an overview.

Outlook

Like the entire Laboratory Management System from dacore, the web tool and the database can also be used by employees at a second, independently operating Fujitsu test center in Paderborn, Germany, without incurring any extra costs for users. As in Augsburg, work without the powerful software is now inconceivable at the Paderborn center. At present, there are also considerations of redesigning the web tool to allow possible test criteria to be derived from the customer's product request. The customer will only have to select the main test requirement, and an intelligent system filter will take care of all the rest. According to planning, external customers will also be integrated into the new web tool.

dacore services and technical installation

- Requirements analysis
- Development of individual software for the laboratory (Labman) and customers (Webtool)
- Special PDA application for recording
- Peripheral measurement operations
- Architecture with distributed servers
- Client-server solution with Windows SQL Server
- Microsoft Sharepoint integration
- Interfaces to various systems (master data, measuring equipment, product data, measuring workplaces, Rohde & Schwarz EMC32)
- Installation and launch
- Technical support