

# Yokogawa Electric Corporation

## Manufacturer saves tens of thousands of dollars annually and speeds document production using Adobe Acrobat software and Adobe PDF

### PROFILE

- A leading company in the measurement, control, and information fields
- Employees: 19,000
- Headquarters: Tokyo, Japan
- [www.yokogawa.com](http://www.yokogawa.com)

### BENEFITS SUMMARY

- Acrobat and Adobe PDF have reduced costs and paper use by 50%.
- Online annotation tools and support for WebDAV have enabled Yokogawa to speed document reviews by weeks.
- The ability to exchange Acrobat PDF files allows Yokogawa to include reviewers in remote locations.
- Customers can easily view and search technical manuals in Adobe PDF using Adobe Acrobat and Adobe Acrobat Reader® software.
- Adobe PDF documents displayed onscreen look the same as the originals.
- Acrobat and Adobe PDF eliminate printing and transport time, enabling Yokogawa to speed document delivery.
- Yokogawa has been able to reduce document storage costs because the company can order documents in smaller units.
- Searchable Adobe PDF files facilitate information sharing across the organization.

As a manufacturer of technical products such as control systems for industrial automation, Yokogawa Electric understands the importance of high-quality sales tools and documentation. The company creates approximately 25,000 pages of technical documentation for CENTUM system products each year. Producing these documents can be expensive, especially with paper-based workflows that generate printing, storage, shipping, and disposal costs. By moving to electronic documentation using Adobe Acrobat software and Adobe PDF (Portable Document Format), Yokogawa Electric is delivering critical business documents months faster while reducing costs by tens of thousands of dollars each year.

Yokogawa Electric is the headquarters of the Yokogawa Group, a leading manufacturer of measurement and control products with 125 companies in 29 countries. One of its main products, the CENTUM system, is applied in many petrochemical, pharmaceutical, and iron and steel plants worldwide. To reduce costs, speed document production, and facilitate information sharing, the Yokogawa Group launched the CyberDoc project. CyberDoc is a system of network database servers that enable electronic documents in Adobe PDF to be instantly retrieved, viewed, and printed on demand from any Yokogawa office worldwide. Electronic documents such as technical manuals are also provided to customers in Adobe PDF on CD-ROM.

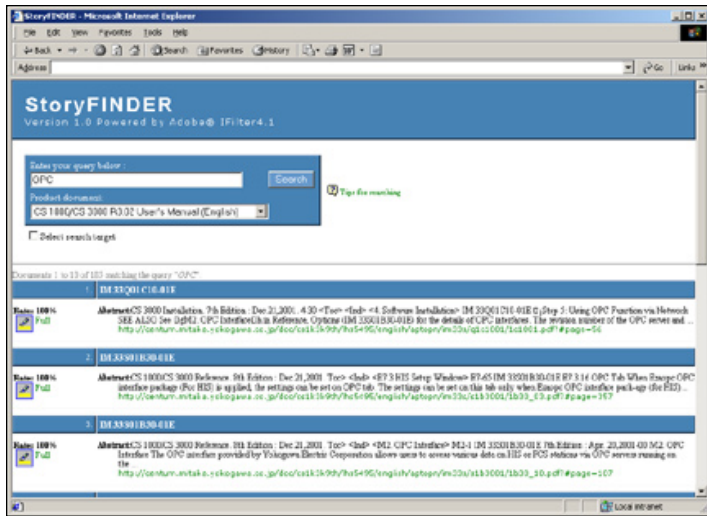
### High-quality printing

Yokogawa Electric's Systems Division was among the first to implement CyberDoc. The division creates sales tools and manuals using Adobe Illustrator and Adobe PageMaker software and converts them to Adobe PDF for distribution via CD-ROM and the CyberDoc system. Yokogawa selected Adobe PDF because it preserves the exact formatting of the original documents and allows anyone, regardless of their software applications or computer platforms, to retrieve documents. Customers can easily view and search technical manuals in Adobe PDF using Adobe Acrobat and Adobe Acrobat Reader.

"We needed an electronic format that would enable product manuals and sales tools to be printed, because people may not always be able to view the documents on a computer," says Hideto Shimizu, manager of the e-Document Group, System Business Division, at Yokogawa Electric. "We selected Adobe PDF because it is the only electronic format that enables high-quality printing, displays documents onscreen with the same appearance as the originals, and is well suited to network distribution."

### Cutting costs in half

The Yokogawa business units that have completed conversion to electronic documents using Acrobat and Adobe PDF are realizing substantial business benefits, including a 50% reduction in



**Yokogawa Electric's Systems Division converts sales tools and technical manuals to Adobe PDF for distribution via CD-ROM and the CyberDoc system. Customers can easily view and search technical manuals in Adobe PDF. Online annotation tools and support for WebDAV in Acrobat have enabled Yokogawa to speed document reviews by weeks.**

*“Acrobat and Adobe PDF have led to more than just the ability to easily share documents. They have streamlined document creation, reduced costs, and led to major improvements in efficiency and communications.”*

Hideto Shimizu  
Manager  
e-Document Group  
System Business Division  
Yokogawa Electric



paper use and printing costs. By eliminating printing and shipping time, Yokogawa is accelerating document delivery. Storage of printed publications and management of obsolete inventory have been reduced as well because documents previously ordered in units of 1,000 copies are now typically ordered in units of 100.

#### Streamlined technical reviews

In addition to reducing costs and paper usage, Acrobat and Adobe PDF are speeding document development and delivery. Producing specialized technical documents can be a time-consuming endeavor. Each technical manual for CENTUM system products at Yokogawa is updated twice annually, with ten or more engineers making numerous revisions. Previously, engineers wrote comments by hand, and tracking their remarks required considerable time and effort.

Now documents are converted to Adobe PDF for review. Yokogawa developed an intranet-based revision system that takes advantage of WebDAV compatibility and online annotation tools in Acrobat to enable multiple users to simultaneously edit Adobe PDF files. Engineers can view a list of revisions made by each reviewer, and all comments are consolidated in a single place. Comments can be made in the context of other reviewers' remarks, reducing confusion and eliminating duplicate comments. “Using the online

annotation capabilities of Acrobat, comments are not overlooked and documents can be revised with far greater speed and accuracy,” says Shimizu.

Yokogawa Electric can also take advantage of the annotation capabilities of Acrobat to include remote reviewers who don't have access to Yokogawa's intranet site. Reviewers' annotations can be extracted as small Acrobat FDF (Forms Data Format) files and e-mailed to people in remote locations. They in turn can send their replies in Acrobat FDF. All comments are subsequently combined into a single file, reducing the burden on production managers, who would otherwise have to track each individual's comments.

#### Sharing information company-wide

Another major goal of the CyberDoc project was to build a knowledge base of intellectual property so data could be reused and more easily shared. By storing documents as searchable Adobe PDF files, Yokogawa employees can quickly search across tens of thousands of pages of information to find what they need. The result is that documents can be created faster and information can be readily leveraged across the entire organization. “Acrobat and Adobe PDF have led to more than just the ability to easily share documents,” says Shimizu. “They have streamlined document creation, reduced costs, and led to major improvements in efficiency and communications.”

#### TOOLBOX

- Adobe Acrobat
- Adobe Acrobat Reader
- Adobe Illustrator
- Adobe PageMaker
- Adobe PDF IFilter
- Microsoft IndexServer
- Microsoft Internet Information Services
- Microsoft® Windows NT® 2000 Server
- PCs
- Power Macintosh G4 computers

