

# SIEMENS

*Ingenuity for life*

Industrial machinery

## Agfa Graphics

Simcenter SCADAS XS helps Agfa Graphics improve efficiency when investigating vibrations and studying dynamic machine behavior

### Product

Simcenter

### Business challenges

Delivering around-the-world service on tight deadlines

Limiting vibration in the production process

Addressing large numbers of measurements required to identify vibrations for online and offline quality control

Identifying different resonance frequencies that occur when the production line accelerates to minimize/prevent vibrations

### Keys to success

Exceptional mobility, light weight and small size of Simcenter SCADAS XS

Smart functionalities suited to vibration control and troubleshooting

Standalone use or as a front-end connected to a laptop for more complex data measurements



### Testing solution from Siemens Digital Industries Software helps Agfa Graphics reduce vibrations and deliver top-quality printing plates for customers worldwide

Agfa Graphics is Agfa's largest business unit, producing the majority of all chemistry-free printing plates in the world and supplying prepress technology to one-fourth of the world's newspapers. Printing plates, the pivotal elements in the printing process, are Agfa Graphics' core business.

With a strong reputation built through years of experience and an incessant drive for innovation, Agfa Graphics maintains a focus on quality, first and foremost. To help businesses grow profitably and deliver the best possible printing results for millions of copies in a cost-efficient way, Agfa Graphics makes certain that plates undergo thorough quality checks and maintain exceptional dimensional stability on the printing press.

## Results

Exceptionally fast and easy diagnostics, real-time validation and significantly more efficient troubleshooting

Improved cost and time efficiency through less travel for specialists

Time recordings of various vibration levels at different locations on the machine



When converting the aluminum rolls into printing plates, limiting vibrations in the production process is crucial. The dynamics of the industry require that production lines work faster to cope with growing demands. Any changes implemented to increase production speed require additional quality checks and new troubleshooting techniques. More data must be taken into account and processed, and all vibrations must be identified and corrected. To successfully meet these evolving requirements, Agfa needed reliable, adaptable solutions.

### Perfecting printing through vibration control

Agfa Graphics has dedicated manufacturing facilities on all continents. It is a challenge to send specialists and equipment around the world on tight schedules to troubleshoot vibrations on machines that convert aluminum rolls into printing plates. But the support team at Agfa Graphics in Belgium found the means to secure global service on tight deadlines while saving time and money. The team

turned to a practical, easy-to-use solution: Simcenter™ SCADAS XS hardware data acquisition system from Siemens Digital Industries Software.

Portable and user-friendly, Simcenter SCADAS XS was the obvious choice for the job. In addition to the flexibility, performance and precision that characterize the full range of Simcenter SCADAS™ hardware solutions, Simcenter SCADAS XS is distinguished by its excellent portability, lightweight design and small size. Crossing countries with cumbersome hardware equipment to conduct vibration troubleshooting was previously a daring attempt, often involving demanding customs procedures. For ease of transportation, Simcenter SCADAS XS is a logical choice. The tool can simply be put in a laptop bag and quickly shipped anywhere in the world, and it requires no specialized engineering expertise from the end user. Simcenter SCADAS XS has preset templates that enable anyone to press the button, record the data and send it back to the analysts.

In the fast-paced printing industry having the right tools, especially smart digital technology, to conduct vibration testing is a major advantage. "We are always looking for efficient means to analyze vibrations and dynamic behavior in our machines and to create permanent solutions that go down to checking the frequencies and finding correlations between multichannel parallel recordings of different process signals," says a member of the Agfa technical support team. "We started to investigate this together with Siemens Digital Industries Software 20 years ago, and we began by using Simcenter SCADAS 305. As a result, we have been familiar with Simcenter testing solutions for a while. Simcenter SCADAS XS was intended as a back-up solution because of the many support demands within Agfa worldwide. As a global company, we were immediately attracted by the exceptional mobility and smart functionalities of Simcenter SCADAS, which fit our troubleshooting and vibration control needs."

#### **Increased testing efficiency**

As a portable data acquisition system, Simcenter SCADAS XS increases mobility during vibration test measurements and comes in handy on the production lines. When the lines stretch over several hundred meters, walking around with the tablet included in the Simcenter SCADAS XS system from one end to the other makes real-time validation easy. Members of the Agfa Graphics team use Simcenter SCADAS XS either standalone or as a front-end tool connected to a laptop for more complex data measurements.

"In Agfa Graphics' complex processes there are many measurements to be considered, since they perform both online and offline quality control while looking for potential issues in the process," the Agfa Graphics representative says. "A variety of sensors are used for dynamic analysis. Vibrations can occur at many levels throughout the production line, and Simcenter SCADAS XS helps Agfa to identify them."

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Agfa Graphics

## Solutions

Simcenter SCADAS XS  
siemens.com/simcentertestlab  
Simcenter Testlab  
siemens.com/simcentertestlab  
Simcenter Testing Solutions  
siemens.com/simcenter

## Customer's primary business

Agfa Graphics offers integrated prepress solutions to the commercial printing industry, the newspaper printing and publishing industry, the security printing industry and the sign and display, decoration and industrial inkjet printing industry. These solutions comprise consumables, hardware, software and services for production workflow, project and process management, cloud software and image processing.

## Customer location

Mortsel  
Belgium

In the troubleshooting process, timing is key – engineers seek to pinpoint the precise moment when vibrations occur and to detect relationships to ultimately identify the root cause. The use of Simcenter Testlab™ software working together with the Simcenter SCADAS XS hardware streamlines the diagnostics and troubleshooting.

## Printing plates – looking into the future

A good investment is a long-term investment. Simcenter SCADAS XS, which includes a tablet, enables engineers to prepare test setups at the office and ship Simcenter SCADAS XS to the other end of the world with some basic instructions for the local operator. The operator can easily perform time recordings of various

vibration levels at different locations on the machine and simply send back the unit or even transfer the data over the Internet for extremely fast troubleshooting. With the acquired data and the Simcenter Testlab software, the engineer has all the elements needed to dig into specific frequencies and transfer functions that help identify the root cause of high vibration levels.

Prevention is also high on Agfa Graphics' agenda as it moves into the future. When the lines accelerate, different resonance frequencies can occur. By identifying patterns, the excessive vibrations can be prevented. Agfa Graphics intends to use the potential of Simcenter SCADAS XS in this role as well.

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Agfa Graphics

## Siemens Digital Industries Software

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