HAYSSENSANDIACRE

Wrapping up packaging machine documentation with 3DVIA Composer

With 3DVIA Composer software, HayssenSandiacre can create documentation imagery directly from 3D CAD models, accelerating documentation development.

HayssenSandiacre, a Barry-Wehmiller Company, has grown dramatically since Herman Hayssen invented the first automated bread-wrapping machine in 1910. Today, the company is the global leader in form fill seal (FFS) packaging technology, with more than 10,000 HayssenSandiacre bagging and packaging machines in use worldwide.

HayssenSandiacre has introduced many of the packaging industry's innovations and quality improvements. For example, the Ultima® line of vertical FFS packaging machines doubled bagging output, reaching packaging speeds of 130 bags per minute. The company's reputation for innovation and quality extends beyond the intricate engineering that underlies its sophisticated packaging technology and includes the production of operator manuals and user documentation, which support the many customers who rely on HayssenSandiacre machines.

"Customers use our machines to package everything from coffee and snacks to pet food and pharmaceuticals, so we need to provide clear, easy-to-follow instructions," explains Tech Writer Nick Caggiano. "Our manuals often run 300 to 400 pages, and keeping up with all of the different types of maintenance, service, and operational instructions is a real challenge."

HayssenSandiacre commonly takes digital photographs during machine assembly and combines those with written instructions to lay out its manuals using Adobe® FrameMaker® software. Caggiano says this approach has several drawbacks: taking photographs is difficult to manage, requiring shooting at odd hours to coincide with various stages of machine assembly; the process requires frequent consultations with Engineering; and the company's reliance on written descriptions necessitates an extensive translation effort, with materials translated into several languages.

"We need to make our documentation more visual, to lessen the need for translation, and make the process less dependent on machine assembly," Caggiano says. "An opportunity was offered by the Barry-Wehmiller corporate office to evaluate 3DVIA Composer™, to see if it could help us more effectively address these documentation challenges."

Challenge:
Produce information-rich user documentation for its bagging and packaging machines while reducing translation costs and minimizing development delays.

Solution:
Implement 3DVIA Composer technical communications software to develop higher quality documentation materials directly from 3D CAD models.

Results:
- Cut translation costs by 52 percent
- Developed documentation 30 to 40 percent faster
- Eliminated engineering and photography delays
- Produced better documentation more quickly

Click here to view an animation showing how to change out the cutting blade on the Ultima SV machine, which was created with 3DVIA Composer.

∂S SOLIDWORKS

No longer lost in translation

The first project for which HayssenSandiacre deployed 3DVIA Composer software involved creating instructions for changing out the cutting blade on the company's Ultima SV vertical FFS machines. The cutting knife needs to be replaced with a sharpened blade when it becomes dull, with the frequency dependent on the thickness of the bagging medium used and the number of machine cycles run. Caggiano says he created instruction diagrams for the procedure with 3DVIA Composer directly from the SolidWorks® CAD model.

"Using 3DVIA Composer, we were able to achieve our goal of replacing lengthy word descriptions with visuals, including a complete animation of the process," Caggiano stresses. "The new instructions are easier to understand, were produced more quickly, and reduced the amount of translation required."

"Replacing words with visual instructions has the potential to reduce our translation costs by 52 percent," notes Phyllis Millard, manager of training and technical publications. "That's a significant reduction in costs."

Documentation without delays

Before implementing 3DVIA Composer, Caggiano says he had to gauge when different machines were at various stages of assembly so he could take supporting photographs, typically a week or two before shipment. With 3DVIA Composer, Caggiano can work with the actual SolidWorks model well in advance of machine assembly, saving valuable time and alleviating scheduling hassles.

"It's stressful trying to get to each machine when it is being built or tested," Caggiano points out. "Now, I can work in 3DVIA Composer when the design is released—and once I get started, I can complete the work more quickly. On the cutting blade change-out instructions, for example, I completed the project 30 to 40 percent faster than it would have taken using photographs."

More flexible materials, improved efficiency

By using 3DVIA Composer software to develop product documentation, HayssenSandiacre not only can produce its hard-copy manuals and CD-based content more efficiently, but can also handle design changes more effectively and deliver content that supports potential online applications.
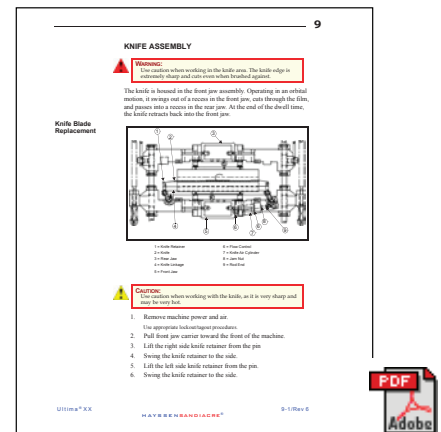
"3DVIA Composer makes it much easier to process design changes," Caggiano stresses. "Without 3DVIA Composer, every design change requires retranslations. With 3DVIA Composer, I can simply change the drawings to match the design change instead of retranslating the text.

"The ability to create process animations is also a big advantage," he adds. "In a 20- to 30-second animation, our customers can see the actual process. Instead of trying to process written instructions, they can actually see on the screen what they are looking at on the machine and understand what they need to do."

"USING 3DVIA COMPOSER, WE WERE ABLE TO ACHIEVE OUR GOAL OF REPLACING LENGTHY WORD DESCRIPTIONS WITH VISUALS, INCLUDING A COMPLETE ANIMATION OF THE PROCESS. THE NEW INSTRUCTIONS ARE EASIER TO UNDERSTAND, WERE PRODUCED MORE QUICKLY, AND REDUCED THE AMOUNT OF TRANSLATION REQUIRED."

Nick Caggiano
Tech Writer

Before 3DVIA Composer

After 3DVIA Composer

3DVIA Composer software allows HayssenSandiacre to replace documentation that heavily depends on written text (top) with higher quality, more visual materials (bottom), saving time and reducing translation costs.

HayssenSandiacre
225 Spartangreen Blvd.
Duncan, SC 29334 USA
Phone: +1 864 486 4000
www.hayssensandiacre.com
VAR: TriMech Solutions,
Charlotte, NC, USA

Dassault Systèmes
SolidWorks Corp.
175 Wyman Street
Waltham, MA 02451 USA
Phone: 1 800 693 9000
Outside the US: +1 781 810 5011
Email: info@solidworks.com
www.solidworks.com