

STAR WARS : EPISODE II

"The system handled everything we threw at it for Star Wars: Episode I, so we knew it would be right for Episode II... **all the creatures in Episode II were animated with SOFTIMAGE|3D.**"

James Tooley, Technical Animation Supervisor on Episode II
Industrial Light and Magic
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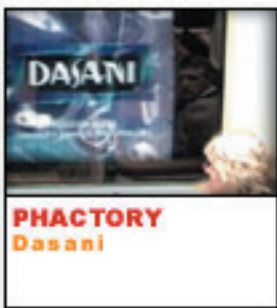
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TUNNEL VISION: New DASANI Spot Goes Underground with Softimage

By AUDREY DOYLE

The average person is bombarded with advertisements every day, as savvy vendors have claimed whatever space they can—from public toilets to telephone booths—to capture consumers' attention in an attempt to sell their wares. That's why in today's cutthroat world of advertising it's crucial to have an ad campaign that will get your product noticed.

On September 27th, the Coca-Cola Company launched just such a campaign. As riders on the Metropolitan Atlanta Rapid Transit Authority's subway system zipped through the darkened tunnel between the Dunwoody and Sandy Springs stations on Atlanta's North Line, they saw through the train's windows not the usual blackness, but rather, a vibrant, 20-second animation advertising Coca-Cola's DASANI brand of bottled water.

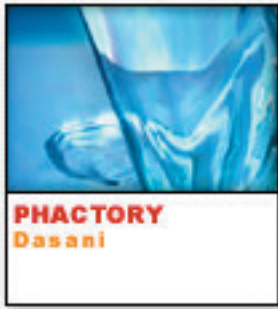


One reason the ad was so noticeable was due to its venue: one doesn't expect to see anything but blackened walls while traveling through a subway tunnel. But the other reason was because of the quality of the imagery in the ad—quality that was attainable thanks to help from SOFTIMAGE®|3D and SOFTIMAGE®|XSI™.

Scheduled for a three-month run, the innovative ad—which utilizes 3D water simulation and typography in a palette of blues to connote the refreshing properties of DASANI—was designed and produced by Phactory Productions, Inc., a New York City studio specializing in 3D design and animation for TV and film. Intended to provide a soothing and relaxing experience for commuters on their way home from jobs in the city, the ad is simple in its message: saturated color images of cascading water splash within an invisible glass, ultimately revealing the DASANI tag line: "Treat yourself well. Every day."

But despite its simple message, the ad was quite complex to create. Although it appears to be animated, it's actually composed of a sequential set of high-resolution, highly saturated, computer-generated color images created by Phactory and mounted on the subway tunnel wall using a new installation technology developed by Submedia LLC (New York City). With the Submedia technology, each digital image is output as a 400dpi

transparency by Photobition (New York City), a leader in large-format, photorealistic digital printing. The transparencies are then slipped into backlit aluminum and steel boxes that are the same size as the subway car windows. As the train shoots past the 950-foot stretch of images at 35mph, the images appear to move at 240 frames per second.

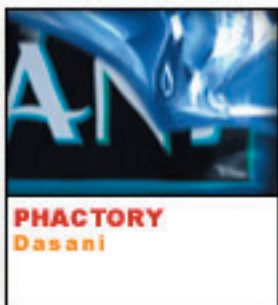


Because the images are printed at 400dpi, the Phactory animators had to create the images at an astounding size of 600 pixels wide by 12,600 pixels high. And because the Submedia technology compresses the images and then displays them at the ultra-high rate of 240 frames per second, for the 20-second spot the animators had to create and render a total of 4800 frames in order to generate the effect.

Creating and then rendering all of those frames, at such a huge size and within a five-week production deadline, was the largest technical hurdle with this project, according to Damijan Saccio, a co-owner, along with Scott Sindorf, of Phactory Productions. "But the Softimage software really helped us to overcome that hurdle," Saccio says. "These were very large frames, and the Softimage software gave us no problems at all. It really worked beautifully for us in this project."

According to Saccio, before winning the DASANI campaign Phactory had been working with Submedia on test projects involving the display technology, so when the facility was awarded the job it knew what sorts of treatments would and wouldn't work. "For instance, one thing we found out didn't work too well with the technology was extremely fast transitions, especially those that move from side to side," he says. "That type of transition was confusing to look at and pretty much ruined the animation effect. So, we knew we had to steer clear of a concept that called for side-to-side transitions from one frame to the next."

After some preliminary meetings with Coke ad executives, Phactory came up with a handful of concepts and created four or five different storyboards in SOFTIMAGE|3D and SOFTIMAGE|XSI, running on Boxx Technologies Windows NT® workstations, and showed them to the client. "We have been using SOFTIMAGE|3D for close to nine years, and are now using SOFTIMAGE|XSI in production," says Sindorf. "Because of our experience with the software, we were able to quickly visualize our ideas in storyboard form and show them to Coca-Cola."



"The software really helped us a lot in the previsualization stage. Because it's so easy to use and the two packages work well together, we were able to generate a lot of ideas to show to Coke," adds Saccio. "Plus, water is one of the hardest effects to create in CG. But we were really happy with the liquid effects we were able to generate using the software's HyperFlow feature. Actually, I'd say that SOFTIMAGE|XSI and SOFTIMAGE|3D got us the job because we were able to come up with such nice-looking storyboards. Once the client saw the boards, the job was sealed."

At this point the Phactory team, which was led by Saccio and Sindorf and included Hae-Yeon Lee and Dave Reynolds, set out to create the actual animation. To create the entire 3D environment, the 3D text, and the DASANI logo, they used SOFTIMAGE|3D. To create the water, they

used Arete Entertainment Inc.'s Advanced Fluid Simulator. Available for custom projects but not for commercial distribution, the Advanced Fluid Simulator is a C++ API runtime library that can be integrated into SOFTIMAGE|3D as well as other production and/or rendering pipelines. "This was a complex spot in terms of the water's movement. But with SOFTIMAGE|3D, we were able to figure out all the different animation variables in terms of camera moves, positioning, and timing and then plug the animation data into the Arete code," says Saccio. "It all really worked well together."



Once they finished the animation, the team rendered all 4800 frames in a series of separate passes. "There were about 9 or 10 main 3D passes, and additional 2D passes," says Sindorf. "These included a reflection pass, a transparency pass, a beauty pass, an environment pass, and a bunch of passes for the 3D text." The environment and text were rendered in mental ray®, which Saccio and Sindorf state is "the best renderer out there." The Arete water, meanwhile, was rendered in the Arete software.

According to Saccio and Sindorf, it would have been impossible to complete the DASANI ad without SOFTIMAGE|3D and XSI. "Both applications are very powerful, but that power doesn't get in the way of your creativity," Saccio says. "The software really allowed us to focus on our work, instead of focusing on how to make the software work. With these apps, we were able to bring our creative ideas to fruition without the software getting in the way."

Sindorf agrees, and adds, "With a project like this, where we had to generate so much material, we had to have software that was up to the task. SOFTIMAGE|3D and XSI are really good at being able to handle jobs of any size," he concludes. "Thanks to this software, we were able to finish this project on time and at a level of quality with which we were very happy."