Smoke & Mirrors NY www.smoke-mirrors.com New York

Autodesk<sup>®</sup> Flame<sup>®</sup> Autodesk<sup>®</sup> Softimage<sup>®</sup>

## Dinosaurs in Denver.

# Smoke & Mirrors NY passes the 3D test with help from Autodesk<sup>®</sup> software.

The Autodesk software worked wonderfully. When you consider that this was a test spot on a new pipeline, you might expect more technical problems, but the entire project went remarkably smoothly. Our 3D department has a very good feeling about the future.

—Sean Broughton Director/Creative Director/Editor Smoke & Mirrors NY



Image courtesy of Smoke & Mirrors.

#### Summary

Having just expanded their 3D animation department, legendary effects house Smoke & Mirrors NY was eager to test the strengths and capabilities of its newly formed crew. Using Autodesk® Flame® and Autodesk® Softimage® software, the fledgling 3D team decided that a good way to challenge themselves would be to create their own version of a historical —make that prehistorical—favorite. The result is "Dino," a 30-second spot that combines an immense dinosaur, a frozen Colorado pond in the city of Denver, and some spectacular ice dancing.

As the spot opens, the quiet quacking of ducks is interrupted by a giant foot landing on cracking ice. From that somewhat ominous opening, however, viewers are treated to a full-sized brontosaurus slipping and sliding across the ice to the strains of Tchaikovsky's *The Nutcracker Suite* with the Denver skyline as backdrop. The dinosaur eventually appears to regain his equilibrium as he executes a spectacular pirouette, only to lose it just as quickly. As he crashes to the ice once more, the tagline lets viewers know that dinosaurs are now in Denver—at the Museum of Nature & Science.

#### **The Test**

"We had never done anything like this before," admits Sean Broughton, creative director at Smoke & Mirrors NY, and director and editor of the Dino spot. "In fact, we just made the story up out of the blue, and we were using it as a way to show various agencies what we could do and how. Incredibly, one of those agencies, Carmichael Lynch, was working on a spot for the Denver Museum of Nature & Science and said our test spot was exactly what they were looking for. We then turned the complete spot around in about a month, including going out and shooting it."

The original 3D brontosaurus was created using Softimage and composited into high-definition scenes that Smoke & Mirrors NY had shot in nearby Central Park. To bring the dino to Denver, they had the agency commission a photographer to take some appropriate still photographs of the city, which were then composited into the background using Flame.

"Autodesk Flame is still the best compositing system there is," says Broughton.

The agency also wanted a concluding shot for the spot that would allow the dinosaur to really show both his grace as well as his dinosaur qualities, which led them to end the spot with a crashing pirouette. To get a sense for how a dinosaur might feel on ice, the Smoke & Mirrors NY team took turns sending each other spinning through the office on a wheeled desk chair.

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To give the beast appropriately ungainly movements, however, it was back to Softimage: "We combined a pretty complicated rig together with a lot of complex shape animations," explains Steven Parish, live action director and lead CG artist at Smoke & Mirrors NY. "We used Softimage to help model some extreme shapes and used the system's Animation Mixer to blend in and out between them. We also used lattice deformers to have his skin react realistically when he hit the ground."

#### **The Result**

"The composited shots were all tracked in 3D, but we found that the ice was lacking the kind of detail we wanted," continues Parish. "We were going to have to re-create the ice field in order to get more believable detail. Luckily, Softimage is equipped with Interactive Creative Environment (ICE) technology, which helped us achieve the look we were after. Using ICE for particles was really helpful because we could change the look very quickly, as well as add elements to make things look more slushy or powdery."

To light and render their creation, the Smoke & Mirrors NY team used Autodesk Softimage and its incorporated mental ray<sup>®</sup> renderer for final gathering and global illumination.



Image courtesy of Smoke & Mirrors.

"We had some pretty heavy displacement maps, especially when the dinosaur comes very close to the screen," says Parish. "They were slowing down our machines, and we were concerned that our renders would take forever. As we fine-tuned and optimized those scenes, however, they ended up taking about 20 minutes each to render. We were very pleased with that." "The Autodesk software worked wonderfully," agrees Broughton. "When you consider that this was a test spot on a new pipeline, you might expect more technical problems, but the entire project went remarkably smoothly. Our 3D department has a very good feeling about the future."



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