

## CASE STUDY

### Unique Surfaces Call for Custom Solutions

#### Snapshot:



**Client** – Simformotion LLC

**Website** – [www.catsimulators.com](http://www.catsimulators.com)

**Industry** – Training technology

**Challenge** – Producing a decal that would adhere to their machinery’s unique surface, provide longevity in adverse and varying environments, and meet Caterpillar’s stringent performance requirements and visual identity.

**Solution** – A redesigned decal with a high bond strength yet fluid adhesive for consistent adhesion.

**Results** – The decals exceeded desired specifications and no longer failed in the field.



#### Client Overview:

Simformotion LLC—a leader in heavy equipment simulator training solutions—is a licensee for Caterpillar Inc. Their operator training simulators address initiatives such as safety and production; while ensuring training can be delivered day or night, regardless of weather conditions. Their simulators are chosen as training solutions in such markets as mining, contracting, trade unions, government and trade and vocational schools. Simformotion LLC is an affiliate of CSE Software Inc.

#### Challenge:

Simformotion’s current decals were not effectively adhering to their Cat Simulators due to the simulator’s unique and uneven surface. Due to the poor adherence as well as varying environmental conditions, the decals were prone to peeling and erosion. Simformotion needed help determining a marking solution that would enable their decals to sufficiently adhere to their application surface and meet Caterpillar’s brand identity and performance requirements.

#### Solution:

Muir arranged a facility visit to Simformotion and completed a **Needs Analysis** involving a detailed examination of their simulator’s application surface. It was determined that the application surface of their equipment was coated with a textured paint consisting of peaks and valleys. Technically termed “low surface energy”, this surface attribute tends to repel adhesives rather than attract them – and requires a high bond strength and yet fluid adhesive that can provide consistent adhesion to both the peaks and the valleys.

As part of our **Total Program Management**, Muir recommended a more effective adhesive to meet the performance requirements and, at the same time, decal engineering changes to comply with Caterpillar’s brand identity guidelines. Muir also provided decal prototypes for testing, and installation training to better ensure decal longevity.

#### Results:

Simformotion’s virtual training simulators are marked with decals that adhere well and provide the specified longevity – while accurately representing the Caterpillar brand.

Muir was honored by being recognized as Simformotion’s trusted decal provider. Since then, we have partnered with Simformotion to add efficiencies and increase the performance levels for several other marking projects.

“ We were so pleased when we were introduced to Muir for our label needs. Finding a supplier who not only understood our deadlines, but also went out of their way to visit our facility and help us figure out the best solution for our product was priceless. We’ve been working with Muir for over a year now and they have continued to live up to the same service and quality standards as when they were initially courting us for our business.”

*Vanessa Price (Pflederer)  
Simformotion LLC  
Project Manager*

#### About Muir Omni Graphics:

For more than forty years, Muir has been providing some of the world’s leading manufacturers, utility companies and service organizations with turn-key decal production and management solutions, including OEM Markings and Decals, Fleet and Corporate Vehicle Markings, Corporate Identity, Control Panels and Fascias, Warning Labels and Signage, and Specialty Graphics. For more information, visit [www.muirgraphics.com](http://www.muirgraphics.com).

