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Matthew Wallace

CEO and President, VRSim

SimSpray--The State of the Art Virtual Reality Tool that Trains Painters and Coaters Faster, While Reducing Training Costs

"A really good automotive painter isn't an artist; he's consistent," according to Shawn Dixon, Lead Auto Body Instructor at Cape Fear Community College in Wilmington, North Carolina. Dixon has been training his students to be consistent with **SimSpray**, a stand-alone system that uses virtual reality to simulate spray painting and coating in a fully immersive 3-D environment.



SimSpray[™] is a proprietary product developed by **VRSim**, in East Hartford, Connecticut. **VRSim** creates training tools to help teach industrial trades and manufacturing skills.

SimSpray combines physical components with virtual reality to create a one-of-a-kind experience that includes visual and auditory cues in an easy-to-use format. **SimSpray** is the *only* product that provides an immersive virtual reality experience while allowing the trainee to walk around and interact with a fully three dimensional representation of an object such as: a gas tank, i-beam, vehicle door, etc. to create a spray painting and coating experience that looks, sounds and feels real.

The **Polhemus PATRIOT**TM **motion tracking system** is the choice for **SimSpray**, due to its flexibility, accuracy, and price. For industrial

versions that require more tracking volume, the **Polhemus LIBERTY**TM **system** is being used. With a reputation for producing repeatable results, **Polhemus motion trackers** are a great fit for training and simulation applications requiring precision and consistency.



Polhemus Patriot System



Polhemus Liberty System





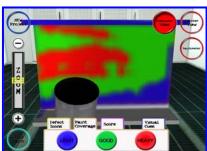
Photo Courtesy of VRSim

Dixon touts the system as being a great training tool because "**SimSpray** gives immediate feedback without having to prep a panel, be exposed to harmful chemicals, or release VOC's (volatile organic compounds) into the atmosphere."

According to Dixon, consistent angle, travel speed and setback are all elements to master within the technique; **SimSpray** trains on all these things. Dixon noted, "I am always telling my students who are learning to paint that they need to be like a robot--'just do it the same way every time.' I think **SimSpray** is going to make better robots out of my students."

SimSpray allows people to give virtual painting a try without worrying about any of the risks that are normally associated with spray painting. Traditional training methods pose risks that include exposure to hazardous chemicals in the coatings and solvents by inhaling vapors from spraying, absorbing the chemical through skin contact, or injecting the chemical with

Jim Brown, Auto Body Program Coordinator for Guilford Technical Community College, located in Jamestown, North Carolina, loves the results of **SimSpray** from the training perspective, but also sees its value in recruiting efforts. "**SimSpray** helps students grasp the fundamental basics of painting in an atmosphere they can relate to ... The results are faster, safer, and cost effective learning experiences. **SimSpray** is an awesome recruiting tool that draws a lot of attention and interaction to the painting trade."



SimSpray Thickness Uniformity Map Photo Courtesy of VRSim

Using virtual reality to augment traditional training helps minimize these risks during the training process. Instead, **SimSpray** allows students to practice in a safe classroom environment without exposure to hazardous VOCs, while building muscle memory and perfecting spray painting techniques.

high pressure spray painting equipment.

Cost savings as well as environmental factors also make **SimSpray** attractive to the spray painting training and simulation market. Unlike traditional methods of training, there are zero costs for materials during the trial and error phase. By reducing the need for materials and eliminating hazardous waste and air emissions, **SimSpray** decreases the costs of traditional programs while minimizing the impact on the environment.



SimSpray can help advance spray paint training in educational and manufacturing programs. The simulation augments traditional training methods and allows a novice painter to receive one-on-one attention from a virtual instructor, while providing objective feedback on each project. The result is an optimized training experience and a system that produces painters faster than traditional approaches where an instructor oversees several trainees simultaneously.

"SimSpray is the first product in the coatings industry that uses immersive virtual reality to teach basic skills," said Matthew Wallace, CEO and President of VRSim. "The system is built with the end user in mind; the simulation is flexible and will integrate with existing teaching methods."

Wallace went on to emphasize that **VRSim** has just begun to demonstrate how effective virtual reality can be as a training tool. "This is the first part of what will be a modern approach to learning. The company is working on a whole collection of feature improvements that will expand the user experience in beneficial ways. There are a lot of exciting things in store," said Wallace.

For more information on **VRSim**, visit: www.vrsim.net

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