VINCI

Virtual Reality is one of the greatest communication and knowledge transfer tools ever invented. VINCI creates tools to lower the complexity, knowledge, and cost needed to create and manage Virtual Reality simulations. Through our innovations, we will enable a new generation of thinkers, creators, and instructors to create their own.

www.Vinci-VR.com contact@vinci-vr.com

Renewable Energy Case Study

Siemens Gamesa

VINCI's Codex VR Platform is a comprehensive training tool with realistic 3D simulations, analytics, and a content creator built specifically with trainers in mind. This case study examines how the Siemens Gamesa was able to achieve amazing results by using Codex.

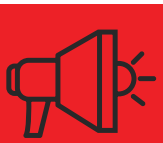
Background

Siemens Gamesa Renewable Energy (SGRE), pioneered the offshore wind sector in 1991, building the world's first wind power plant and has since established itself as the global leader in offshore power generation. Committed to continuing it's tradition of leading from the front, Siemens has partnered with VINCI VR to create the first ever virtual reality wind turbine training simulations to pass a Global Wind Organization (GWO) audit.

Problem

For the past 28 years, Siemens has offered new technical employees antiquated training, consisting primarily of power point with limited hands-on training. Due to high overhead costs, limited hands on training time, and a lack of knowledge retention, the company has chosen to integrate Vinci VR's virtual reality training platform as a fundamental aspect of the training program.

Nacelles are expensive, large, and weigh over 400 tons presenting significant training cost and logistical challenges. As the wind turbines located in the United States are in remote areas and are constantly evolving, it is not financially feasible or often safe to send technicians for on site training. Due to the limited number of available training turbines, trainees lack the necessary physical and visual repetitions required to safely operate the equipment while on the job. These challenges also lead to a lack of equipment familiarity and overall unsafe operating environments.



90%

Trainees achieved great results at 10% of the cost of physical simulators. That's 90% reduction costs!

CODEX

End-to-End Virtual Reality Training Platform

01 Create

Creating and modifying VR simulations is as easy as a creating a Power Point. Instructors can personalize training, create procedures, and ensure VR training is updated with changing Operating Procedures.

02 Simulate

Students are immersed in a detailed 3D environment enabling realistic hands-on training. Scale up training repetitions and select from a range of different training modes like guided walkthroughs and other scenarios.

03 Analyze

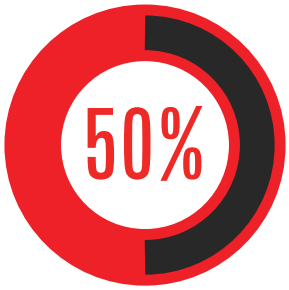
Codex analytics enables instructors to Live Stream multiple VR views to a monitoring station, record student performance data, replay video and identify trends in classes with data visualizations.

04 Optimize

Once you have gained insight, you can optimze your training programs by tracking student's interactions, gaze focus, and mistakes to identify trends that work.

Improved Performance

Codex helped students improve their total performance by 30% compared to previous training methods.



Improved Confidence

Training with Vinci VR gives users confidence. Over 50% of trainees were ready to operate real aircraft.

Solutions

Vinci has created an industry leading 360 degree immersive virtual reality training experience for Siemens technician trainees. Trainees can now simulate troubleshooting in a realistic environment an unlimited number of times at a fraction of the cost.

"Having a tool like CODEX for a global organization like Siemens Gamesa can enable us to create training that is diverse, effective and relevant "

Dr. Brown, Head of Training, Siemens Gamesa Renewable Energy

The training modules offer on the job scenarios simulating high elevation, and enclosed spaces providing trainees with low risk and high stakes training. In the event a trainee makes an error that would result in personal injury, the system terminates the scenario and provides a damage assessment. Siemens can then use Codex analytics to review real time footage of the scenario and drive performance improvements based on trainee actions. This further provides instructors insight into what types of scenarios are prone to high error so future training can be deliberately tailored.

"We believe having a tool like CODEX will quickly and cost effectively allow us to build up a diverse library of training tools."

Dr. Brown, Head of Training, Siemens Gamesa Renewable Energy

Vinci VR's industry leading training products have allowed Siemens to directly lower training costs and create a more productive workforce of technicians.