TECH OFFER

VR Training for Seafarers on Safe Methanol Bunkering Operations

KEY INFORMATION

TECHNOLOGY CATEGORY:
Infocomm - Augmented Reality, Virtual Reality & Computer-Simulated Environments

TECHNOLOGY READINESS LEVEL (TRL): TRL6
COUNTRY: SINGAPORE
ID NUMBER: TO175386

OVERVIEW

These VR simulations can replicate various bunkering scenarios, including challenging weather conditions, emergencies, and equipment malfunctions. Trainees can develop problem-solving skills and adaptability in a controlled setting, preparing them for real-world challenges. In addition, immersive technology enables remote training, overcoming logistical constraints and reducing the costs associated with physical training setups. Trainees can access methanol bunkering training modules from anywhere at any time, improving accessibility and scalability.

The technology provider is seeking collaboration partners spanning both industry and technology sectors, including maritime partners, bunker operators, ship owners and shipping lines, as well as VR solution developers, simulation software companies, and AI analytics providers.

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TECHNOLOGY FEATURES & SPECIFICATIONS

Virtual Reality (VR) technology creates a simulated environment that replicates real-world scenarios, allowing trainees to immerse themselves in a virtual setting. Methanol bunkering training in VR can offer a realistic and interactive experience, enabling trainees to practice procedures, understand equipment operation, and familiarize themselves with potential hazards in a safe and controlled environment. This is coupled with a proprietary assessment framework/algorithm, developed in consultation with Captains from Singapore Maritime Academy (SMA), with unique assessment criteria based on standard industry competencies and SMA's training expertise.

POTENTIAL APPLICATIONS

It can be applied to bunker operators, shipping owners & lines, and aviation & logistics for:

- Safe VR training for methanol bunkering procedures and emergencies
- Building hazard awareness, problem-solving, and adaptability
- Standardized competency assessment
- Remote and scalable training, reducing costs
- Supporting regulatory compliance
- Future-ready: VR training for enhanced crew readiness

UNIQUE VALUE PROPOSITION

Enhanced Learning Experience: Immersive technology creates a highly engaging and interactive environment, allowing trainees to actively participate, practice procedures, and make decisions, leading to better knowledge retention and skill acquisition.

Risk-Free Training: Methanol bunkering involves potential safety hazards. Immersive technology provides a safe environment where trainees can learn from mistakes without real-world consequences, fostering confidence and competence.

Realistic Simulations: VR can replicate various bunkering scenarios, including challenging weather conditions, emergencies, and equipment malfunctions. This allows trainees to develop problem-solving skills and adaptability in a controlled setting, preparing them for real-world challenges.

Remote Training Possibilities: Immersive technology enables remote training, overcoming logistical constraints and reducing costs associated with physical training setups. Trainees can access methanol bunkering training modules from anywhere, anytime, improving accessibility and scalability.

Performance Evaluation and Feedback: Immersive technology can provide real-time performance assessments, tracking actions, decisions, and response times. Integrated feedback mechanisms deliver personalized guidance, improving individual performance and identifying areas for improvement.

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