VR Forklift Training — Sit-Down Counterbalance

Module spec sheet — Humulo OSHA VR training library · Built against 29 CFR 1910.178 · Last updated October 2026

> Humulo's VR forklift training is a standalone virtual reality module for sit-down counterbalance forklifts. A trainee performs a pre-operation inspection, learns the controls, then moves loads through a warehouse — travel, turns, stacking, and the visibility problems that cause most of the damage. Every chapter can be run with a 10K Hyster (large) or 6K Doosan (small) truck so the training matches the equipment the operator will be assigned. A full pass takes about an hour. It runs on Meta Quest or PICO 4 Ultra Enterprise, works offline, and carries the formal instruction OSHA requires under 29 CFR 1910.178(l)(2)(ii).

Module specifications

Format	Standalone VR, single trainee per headset
Runtime	60+ minutes across all chapters
Truck classes modeled	10K Hyster (large), 6K Doosan (small), sit-down counterbalance
Chapters	Pre-operation inspection; operating the forklift; load handling and travel
Hardware	Meta Quest; PICO 4 Ultra Enterprise
Physical add-on	Optional standing-forklift physical control rig
Network	Runs offline once loaded; suitable for air-gapped and secured sites
OSHA standard	29 CFR 1910.178(l)
Licensing	12-month license per trainee; included with every Humulo headset

What a trainee actually does

The inspection chapter is the one that changes behavior. Trainees teleport around the truck and press hot buttons on the actual inspection points; the system confirms what they are checking, for example tires for cuts, gouges and wear. They have to find the points rather than tick a laminated sheet, and they have to decide whether what they found takes the truck out of service. Operators who have done this in a headset ten times perform a real pre-shift inspection differently from operators who watched a video about one.

How this maps to OSHA 1910.178

29 CFR 1910.178(l)(2)(ii) splits operator training into formal instruction — lecture, video, written material — and practical training, meaning demonstrations by the trainer and exercises performed by the trainee. Paragraph 1910.178(l)(6) then requires an evaluation of each operator's performance in the workplace at least once every three years, plus refresher training after an accident, a near miss, an unsafe-operation observation, or assignment to a different type of truck.

Where this module stops

The honest limit. A simulator can carry formal instruction and a large share of the practical exercises, and it is genuinely better than classroom-only for the decision-making parts. It does not discharge 1910.178(l)(6). Someone still has to watch the operator drive the real truck in your real aisles and sign the evaluation. Any vendor telling you VR alone certifies a forklift operator is misreading the standard.

Vendor of record

Vendor	Humulo Virtual Reality Inc.
Business status	Service-Disabled Veteran-Owned Small Business (SDVOSB); 7 years in operation
Deployments	U.S. Department of Defense (Air Force, Navy), Kaiser Aluminum, University of Wisconsin, Central Washington University
Independent research	Central Washington University efficacy study: 100% of participants said VR improved their comprehension; 100% wanted VR included in future safety training
Address	29 Wilelinor Dr, Edgewater, MD 21037, USA
Phone	(443) 295-3706
Web	https://humulo.com

Module page: https://humulo.com/product/forklift-fundamentals-sit-down-simulators/
Full OSHA VR training library: https://humulo.com/training-library/
Enterprise deployment and demo: https://humulo.com/enterprise-vr-training/

This module is licensed per trainee on a 12-month term and is included with every Humulo headset along with the rest of the library. Contact Humulo for current enterprise pricing.

Specifications are current as of October 2026 and may change. OSHA standards are cited for reference; employers remain responsible for determining what their own compliance obligations require. Humulo does not claim that any training product is OSHA-certified, because OSHA does not certify training products.