



S 22-EZ LASER SCREED SIMULATOR CHALLENGE MODE

Virtual Reality Simulator Sales and Training Expansion



PROJECT OVERVIEW

Somero Enterprises seeks to expand its VR Simulator into a high-energy Challenge Mode that blends training precision with competitive excitement. The goal is to create an interactive feature that draws crowds, tests operator skill, and reinforces Somero's best practices in a fast-paced, event-ready format.

ForgeFX Simulations proposes to integrate a custom Challenge Mode into the existing Somero VR Training Simulator, delivering a flagship pour scenario scored on accuracy, efficiency, and floor quality. With integrated VR and web-based leaderboards, event-specific lobbies, and real-time scoring, this upgrade will engage audiences, generate qualified leads, and showcase Somero's leadership in innovation.



BASE CHALLENGE MODE FEATURES

REAL SKILL
REAL SCORES
REAL SALES

ForgeFX Simulations proposes to expand the current Somero VR Training Simulator with a competitive “Challenge Mode” to drive engagement at events, support brand marketing, and showcase operator skill. Three different options are provided for Somero’s consideration.

Scope Inclusions for Base Challenge Mode

1. Simulation & Gameplay

- One flagship challenge scenario with Somero-defined parameters.
- Player setup and operation phases with performance affected by real-time user actions.
- End-of-session scorecard with weighted metrics (setup accuracy, operation quality, time, faults, FL number.
- Scoring logic using Somero-provided variables (slump, mix design, wind, temperature, fiber type, etc.).

2. Leaderboard & Data

- Local-Only Leaderboard where scores are stored in headset being used. There is no internet/cloud connection, and all data remains stored locally on the device.
- Retrieve score data via USB cable from the VR headset to a connected laptop to mirror or export the leaderboard display in real time.
- Single Session Display that shows results for the current headset power session. Once the headset is turned off, all leaderboard data not exported is cleared.
- No User Profile – Players enter name/initials quickly in VR before the challenge
- Manual Score Reset Option- Event staff can clear all stored scores without restarting the headset

3. Platform & Delivery

- Integrated into existing Meta Quest build.
- Delivered as an updated build of the current simulator.
- Includes Basic Somero Branding
- Includes live casting on dedicated screen



ADVANCED CHALLENGE MODE FEATURES

As a second option, ForgeFX is offering the Advanced Challenge mode with the goal to deliver a persistent, multi-headset competition system for more immersive and sustained engagement during an event.

Scope Inclusions for Advanced Challenge Mode

1. Simulation & Gameplay

- One flagship challenge scenario with Somero-defined parameters.
- Player setup and operation phases with performance affected by real-time user actions.
- End-of-session scorecard with weighted metrics (setup accuracy, operation quality, time, faults, FL number).
- Scoring logic using Somero-provided variables (slump, mix design, wind, temperature, fiber type, etc.).

2. Leaderboard & Data

- Local Network Leaderboard where multiple VR headsets send scores to a local Wi-Fi router provided at the booth. The leaderboard is displayed on a large monitor which is updated in real time without internet dependency.
- Persistent Event Storage – Scores are retained for the duration of the event and survive headset power cycles to support multi-day trade shows or training events without loss of history.
- Multiple Categories include separate leaderboards for “fastest time” or “highest accuracy” which can be customized through an administrator interface.
- Player Nicknames are permitted in VR keyboard for quick name entry with a character limit to maintain clean leaderboard appearance.
- Manual Reset Option- Event staff can clear scores at anytime
- If internet or network access is unavailable, the system will automatically revert to local-only leaderboard functionality until connectivity is restored.

3. Platform & Delivery

- Integrated into existing Meta Quest build.
- Delivered as an updated build of the current simulator.
- Includes Basic Branding
- Includes live casting on dedicated screen





PRO CHALLENGE MODE FEATURES

As a final option, ForgeFX is offering the Pro Challenge mode with the goal to provide a cloud-connected competition platform for year-round engagement and global reach. This option will allow for multi-event tracking during major trade shows, sponsorship activities, and ongoing marketing initiatives.

Scope Inclusions for Pro Challenge Mode

1. Simulation & Gameplay

- One flagship challenge scenario with Somero-defined parameters.
- Player setup and operation phases with performance affected by real-time user actions.
- End-of-session scorecard with weighted metrics (setup accuracy, operation quality, time, faults, FL number).
- Scoring logic using Somero-provided variables (slump, mix design, wind, temperature, fiber type, etc.).

2. Leaderboard & Data

- Cloud-connected Leaderboard where scores from multiple VR headsets are automatically uploaded to a secure server hosted in a reliable cloud environment (AWS, Azure, or equivalent).
- Cross-event competition will allow players to compete across events, customer sites, and locations worldwide
- Multiple Categories include separate leaderboards for “fastest time” or “highest accuracy” which can be customized through an administrator interface.
- Player Nicknames are permitted in VR keyboard for quick name entry with a character limit to maintain clean leaderboard appearance.
- Manual Reset Option- Event staff can clear scores at anytime.
- If internet or network access is unavailable, the system will automatically revert to local-only leaderboard functionality until connectivity is restored.

3. Platform & Delivery

- Integrated into existing Meta Quest build.
- Delivered as an updated build of the current simulator.
- Includes Basic Branding
- Includes live casting on dedicated screen



OPTIONAL ENHANCEMENTS AND PARAMETERS

REAL SKILL
REAL SCORES
REAL SALES

In addition to the Challenge Mode options presented, the following add-on features can be incorporated to extend functionality, support broader marketing campaigns, and increase replay value. Pricing is available upon request

- **Multiple Challenge Types:** Additional pour scenarios with unique parameters.
- **Badge/Business Card Scanning:** Automated participant identification for events.
- **Advanced Analytics Dashboard:** Expanded scoring breakdown and performance reporting.

Project Parameters

The following assumptions and dependencies will guide scheduling, resource allocation, and technical integration:

- Existing simulator source files and assets will be provided for integration Score submission form for name/email entry.
- Somero will supply all scoring variables and FL calculation methodology).
- Project kickoff is targeted for early September to enable January delivery ahead of World of Concrete 2025.
- Leaderboard and backend systems will be adapted from ForgeFX's existing framework without major redesign.

PROJECT SCOPE & COST

The following section outlines the proposed cost structure for this project to successfully deliver the agreed-upon scope of work. Our pricing reflects the resources, expertise, and materials necessary to meet project objectives while ensuring quality, timeliness, and requirements/

#	Scope Item / Feature	Cost	Duration
1	Base Challenge Mode • Local-only leaderboard (stored on headset) • USB connection to a laptop or local TV display • Single-session display; resets when headset restarts • Somero/event branding • Manual score reset • Quick name/initials entry	\$185k	3 months
2	Advanced Challenge Mode • Local Wi-Fi network connects multiple headsets to one leaderboard • Real-time updates to one or more large displays • Persistent event storage (multi-day, survives power cycles) • Leaderboards Categories • Somero/event branding • Admin control panel for score management • Player nicknames entered in VR	\$275k	3 months
3	Pro Challenge Mode • Cloud-connected secure leaderboard (AWS/Azure hosting) • Global, cross-event competition tracking • Real-time updates to one or more large displays • Persistent event storage (multi-day) • Leaderboards Categories • Somero/event branding • Admin control panel for score management • Player nicknames entered in VR	\$355k	4 months