



# Immersive VR Training: Welding Underwater

Experience safety, precision, and innovation in underwater welding training through Virtual Reality

**Underwater welding** is one of the most challenging and high-risk professions in the world. To prepare divers and welders for real-life conditions, we have developed an interactive Virtual Reality (VR) training program that simulates the environment, safety measures, and welding process beneath the sea.

Our contents provides hands-on, risk-free learning that enhances skills, ensures safety, and builds confidence before entering real underwater missions.

### **Inside Content**

#### 1. General Information About Welding

This module introduces the fundamentals of welding techniques with a focus on underwater applications. Trainees explore essential tools, safety guidelines, and the differences between surface and underwater welding.

- Gain a strong theoretical foundation.
- Understand underwater-specific challenges.

welding









#### 2. Blood Pressure Check Before Diving

Before diving, divers must ensure their health and fitness. This VR simulation guides trainees through a step-by-step blood pressure check, highlighting the importance of physical readiness before starting underwater welding tasks.

- Learn correct procedures for pre-dive medical checks.
- Understand why monitoring health is critical for diver safety.





#### 3. Safety Gear & Precautions Before Diving

Wearing proper safety gear is crucial for every diver. This simulation provides a detailed walkthrough of the diving suit, welding equipment, and protective gear needed before going underwater.

- Practice step-by-step safety preparation.
- Understand equipment checks and emergency protocols.

#### 4. Jumping into the Sea & Welding Process

This immersive simulation places the trainee into the realistic environment of diving and welding under water. It covers the descent, positioning, and execution of welding tasks in a submerged environment.

- Hands-on welding practice in VR.
- Experience underwater challenges without real-world risks.
- Learn how to maintain control and efficiency while submerged.







## **Benefits of the VR Project**

- Safe Training Environment: No risk of injury or accidents.
- Cost-Effective: Reduce training costs compared to real underwater missions.
- Immersive & Realistic: High-quality VR visuals replicate real diving and welding scenarios.
- Skill Development: Build confidence and competence before entering real conditions.
  - Scalable: Suitable for individuals and industrial training programs.









