# **WELDING SIMULATOR**

VR-AR Based Simulator

## VOCATIONAL TRAINING SIMULATOR

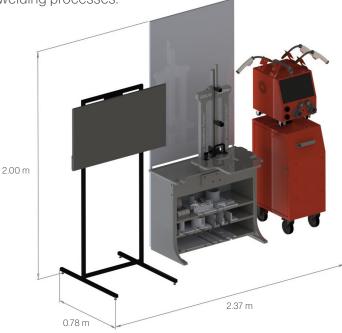
SANLAB combines deep expertise in robotics and simulation with a customer-focused approach to deliver industry-leading vocational training simulators.

Welding Simulator provides realistic training environment powered by VR and AR technologies, offering realistic training with a highly precise mask and torch motion tracking system. Designed to support skill development in SMAW, MIG/MAG, TIG, and FCAW welding processes.

## **APPLICATIONS**

- Technical & Vocational Schools
- Industrial Training Centers
- · Technical Colleges & Universities
- Shipbuilding
- Automotive
- Aerospace





DIMENSIONS	
Overall Dimensions (L-W-H)	0.78 m - 2.37 m - 2.00 m
Net Weight (product only)	140 kg
Shipping Dimensions (L-W-H)	2.30 m - 2.30 m - 1.30 m
Crate Weight (total)	190 kg
Packaging Type	Wooden crate

## **ADVANTAGES**

- Cuts costs
- Eliminates accident risks
- Increases safety
- Lowers operating & maintenance costs
- Protects equipment
- Enables all-weather training
- No worksite required
- Eco-friendly use
- · Realistic experience
- Multi-language support

## **SCENARIOS**

- SMAW-Shielded Metal Arc Welding
- MIG-Metal Inert Gas Welding
- TIG-Tungsten Inert Gas Welding
- FCAW-Flux-Cored Arc Welding

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## VOCATIONAL TRAINING SIMULATOR

SPECIFICATIONS	
Display System	43" TV
Touch Screen	13.3" touch screen
Audio System	Surround stereo
4 Real Torchs	SMAW, MIG/MAG, TIG, FCAW
Worktable	3 adjustable height levels, 14 different welding parts in various positions
Work Pieces	14+ workpieces with multiple welding positions
Welding Mask	AR/VR supported headset
Power Supply	220VAC
Minimum System Requirements	Intel(R) Core(TM) i7 - 16 GB Ram - 500 GB SSD NVidia GeForce RTX 3060 - Windows 11

Wireless Combo Keyboard Mouse

### SOFTWARE

- Weld options: straight pass, curved weave, zigzag, triangular pattern
- Weld direction selection: left-to-right and right-to-left
- Support for American (AWS) and European (ISO) welding standards
- · Compatible with both left and right-handed use
- Torch angle adjustment for push and pull techniques
- Virtual materials: stainless steel, steel, copper, and aluminum
- Real-time error detection and feedback
- Adjustable parameters: amperage, voltage, material thickness, and wire thickness

## SOFTWARE

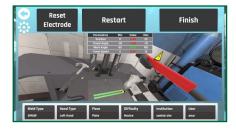
- Analysis of position, distance, speed, and angle parameters
- Analysis of penetration, porosity, and spatter
- Session recording, video playback with rewind/fast-forward, angle adjustment, and scoring system
- Student-based data storage and training history tracking
- Customizable scoring parameters with advanced management interface
- Touchscreen interaction without removing the welding mask

### **OPTIONS**

Portable version

## **SERVICE & SUPPORT**

Committed to customer satisfaction, we deliver tailored support solutions designed to meet your specific operational requirements.



Scenario Screen



Welding Simulator



Portable Welding Simulator