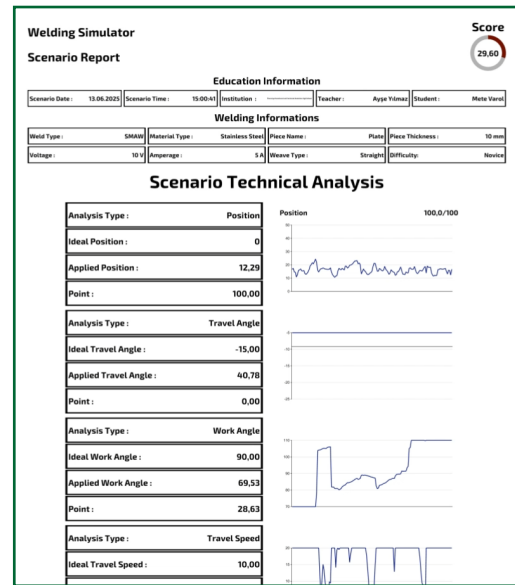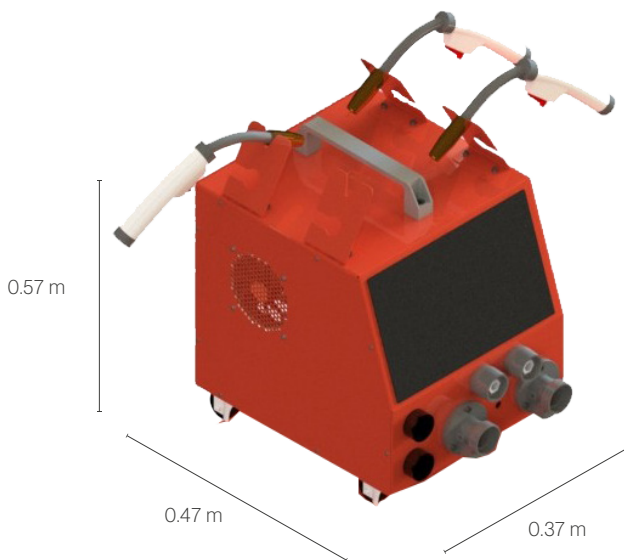# DATASHEET

PORTABLE WELDING SIMULATOR

VR-AR Based Simulator

Portable 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.

0.57 m

0.47 m

0.37 m

DIMENSIONS

Overall Dimensions (L-W-H)	0.37 m - 0.47 m - 0.57 m
Net Weight (product only)	45 kg
Shipping Dimensions (L-W-H)	0.75 m - 0.75 m - 0.90 m
Crate Weight	85 kg
Packaging Type	Wooden crate

SYSTEM SPECIFICATIONS

Display System	13.3" touch screen, 43" TV
Audio System	Surround stereo
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

DATASHEET

PORTABLE WELDING SIMULATOR

VR-AR Based Simulator

WELDING SIMULATOR SPECIFICATIONS

Supported Welding Processes	SMAW, MIG/MAG, TIG, FCAW
Welding Positions	PA, PB, PC, PD, PF/PG, PE, PH/PJ, 1F, 2F, 3F, 4F, 5F, 1G, 2G, 3G, 4G, 5G, 6G
Worktable	No
Welding Mask	AR/VR supported headset
Touchscreen Interaction	No need removing the welding mask
Accessories	4 real torchs for SMAW, MIG/MAG, TIG, FCAW
Materials	Stainless Steel, Steel, Aluminium, Copper
Work Pieces	Plate, L piece, T piece, Lap piece, Butt plate
	12cm pipe, 5 cm pipe, 12 cm pipe plate, 5 cm pipe plate
Coupon Thickness Selection	Yes
Weld Options	Straight Pass, Curved Weave, Zigzag, Triangular Pattern
Weld Direction Selection	Left-to-right, right-to-left
Hand Selection	Right / Left hand selection
Voltage Selection	Manual
Amper Selection	Manual
Difficulty Selection	Novice, Intermediate, Expert
Error Detection	Real-time error detection and feedback
Guides	Facilitating learning through visual guidance

Portable Welding Simulator

Portable Welding Simulator
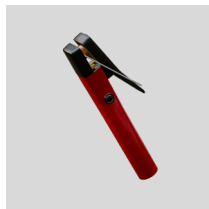
DATASHEET

PORTABLE WELDING SIMULATOR

VR-AR Based Simulator

WELDING SIMULATOR SPECIFICATIONS

Adjustable Parameters	Amperage, voltage, material thickness, wire thickness
Analyzed Parameters	Analysis of position, distance, speed, angle parameters
	Analysis of penetration, porosity, and spatters
Standards	American (AWS) and European (ISO) welding standards
Reports	Visual analysis and reporting of position, angle, and speed parameters
Session Recording	Recording and multi-angle replay of student welding scenarios
Data Storage	Student-based data storage and training history tracking
Scoring	Customizable scoring parameters with advanced management interface
Environment	Real welding environment, high graphics quality
Sound	Real welding sound
Training Advantages	Safe, cost-effective, and measurable welding training
Remote Support	Yes
Warranty	2 years

MIG
Metal Inert
Gas Welding

SMAW
Shielded Metal
Arc Welding

TIG
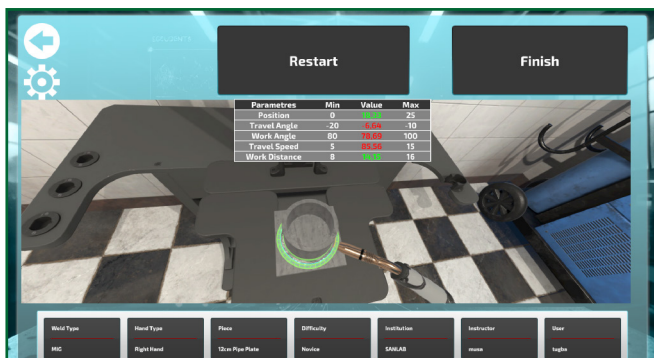Tungsten Inert
Gas Welding

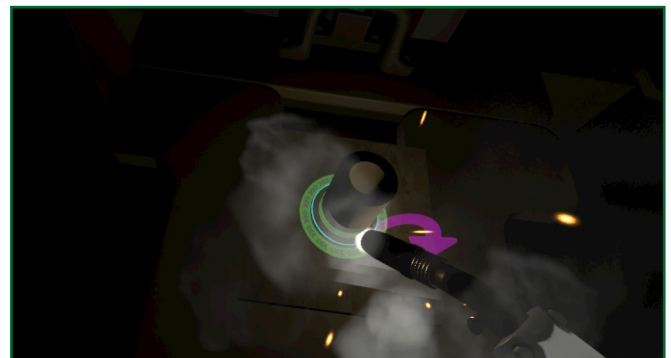**FCAW**
Flux-Cored
Arc Welding

Scenario Screen

Scenario Screen