

The world's pioneering Mixed Reality (MR) Welding Simulator



Take real welding guns

Into your Immersive World

The Best of Both Worlds :

Enhancing Augmented Reality (AR) from 2D to 3D
through Mixed Reality stereoscopic vision and
depth perception



Mobile and compact design
for convenience

- Simple and easy to operate



Real torch click triggers VR
controller, through our proprietary
hardware and software combo



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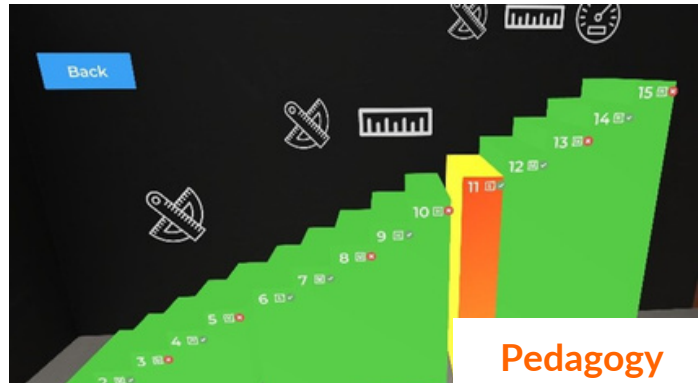
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What makes us different - the Skillveri Secret Sauce



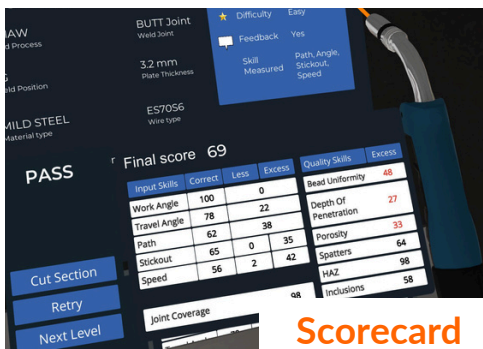
Live Feedback

Easy to understand, color coded, non-intrusive feedback in practice lessons



Pedagogy

15 stage lesson plan teaching hand-skills step-by-step



Scorecard

Simple & easy to identify improvement areas. Quality Scores & Technique Scores grouped into separate buckets.



Cut section analysis

3D cut section view within the headset, displays lack-of-fusion defects in an immersive manner

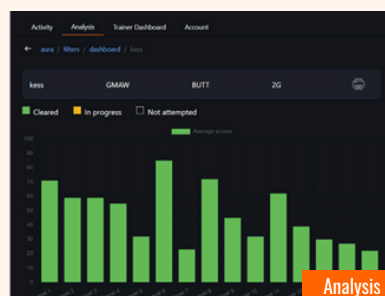


Sturdy customized carry case

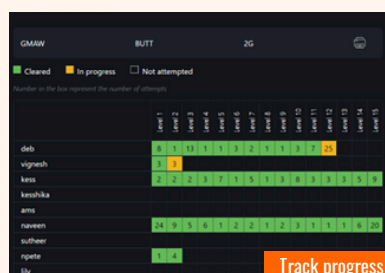
Trainer Dashboard key features

Welding (Aura)					
User	Process	Joint	Lesson	Score	Result
1. trainer	GMAW	BUTT	1	55	PASS
2. trainer	GMAW	BUTT	11	0	FAIL
3. trainer	GMAW	BUTT	11	53	PASS
4. trainer	GMAW	BUTT	11	40	FAIL
5. trainer	GMAW	BUTT	11	31	FAIL
6. trainer	GMAW	BUTT	11	48	PASS
7. trainer	GMAW	BUTT	11	41	FAIL
8. trainer	GMAW	BUTT	11	7	FAIL

Reports



Analysis



Track progress

- Manage/add students
- Track student progress, reports, analytics
- Manage difficulty levels of lessons
- Manage scoring weightage

SI #	Feature	Technical Specifications
1	3D Immersive MR Headset / Helmet (1 per simulator)	Mixed Reality (mix stereoscopic live view of real world + simulated machines) which is best of VR and AR 1832 x 1920 display per eye or better - clearer image, more realistic simulation 120 Hz - higher refresh rate gives more smooth user experience, no headaches 96° horizontal FOV - realistic feel, no screendoor effect Ability to exactly align position of objects in the virtual world to real world, including work tables and tools
2	Ergonomics	Wireless headset and gun, easy to move around in the simulation Lighter headset (Smaller size and comfortable headset for longer practice)
3	Simulator Working	No real arc or fumes; real gun trigger works seamlessly with simulation system
4	Welding Processes Supported	MIG (GMAW), Stick (SMAW), TIG (GTAW) with filler rod consumption Real welding guns with gun cables to be tracked accurately to millimeter precision
5	Welding Joints & Positions	Butt/fillet/lap joints 1G-6G and 1F-5F plate to plate, pipe to plate, and pipe to pipe
6	Different material selection	Mild Steel, Stainless Steel, Aluminum (Standard) Special alloys with pre-heating & post heating (optional)
7	Material Thickness Selection	0.8 mm - 12.7 mm Multi-pass to remember root pass and previous filling pass beads
8	Electrode thickness	MIG (GMAW) - 0.8mm, 1.2mm, 1.6mm Stick (SMAW) - 2.4 mm, 3.2mm, 4.0 mm, 4.8 mm
9	Polarity Selection	AC (for Stick/SMAW & TIG/GTAW), DCEP, DCEN
10	Gas Selections	Various mixture ratios as applicable for MIG (GMAW) and TIG (GTAW)
11	Modes of lessons	With live corrective feedback for practice mode and without live corrective feedback for exam mode
12	Live corrective feedback	Feedback in practice mode for work angle, travel angle, stickout or arc length, speed and path
13	Scorecard	Scores shown for input skills (arc length / stickout, travel speed, work angle, travel angle, welding path) and quality aspects penetration, porosity, spatters, bead uniformity etc.
14	Electrode consumption	Stick (SMAW) simulates the consumption of the electrode, and simulate slag formation and removal through chipping
15	Checking for Lack of Fusion	Analysis of bead with cut-section view to find out fusion
16	Lesson plan / Pedagogy	Progressing from basics to more advanced in terms of welding dexterity skills as well as welding positions
17	Immersive Interaction	The simulation software utilizes the full benefits of latest virtual reality / extended reality systems, provides a truly immersive, 3D simulation
18		Interactions with machines are like the real world, like machine settings, gas selections all done from realistic 3D rendering of real-world equipment
19	Network-enabled centralized reporting	Access all reports of all exercises and practice done by students. Trainer can see reports of all students and add/deactivate students. Students can see their own reports. Reports are accessible from any laptop with internet connection, or through mobile.
20	Test Coupons & Stand	T Joint, Butt Joint, Lap Joint, Pipe to Pipe, Pipe to Plate
21	Display for trainers & other students	14" or higher display with stereo audio, 1080p resolution or higher; external displays supported - Supports wireless casting from the headset to a display and multi-casting to up to 5 devices on the same screen.

The Skillveri Advantage - Worldwide Acceptance



Trusted by Industry Leaders



700+ Installations with **250+** Customers
Worldwide

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