




WELD VR™

Welding Simulator

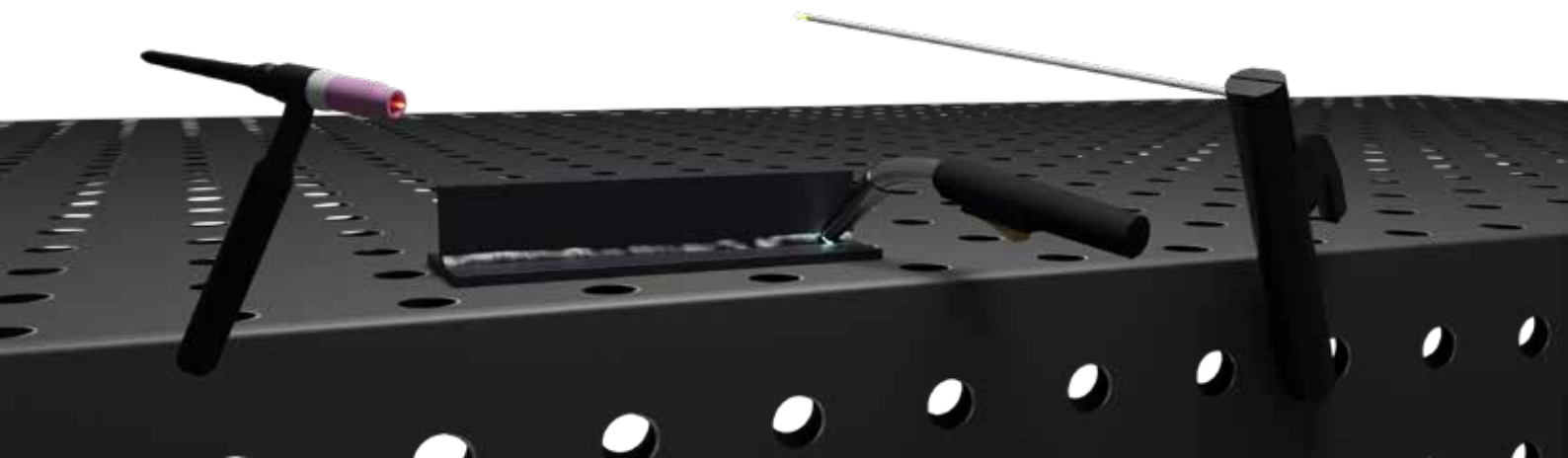
**INTEGRATE VR IN THE PRESENT AND SHAPE
THE WELDING WORKFORCE OF TOMORROW**

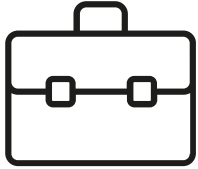


Designed by Welding and VR experts, WeldVR Welding Simulator offers a realistic welding environment where trainees can safely practice and master welding techniques without the risk of damaging equipment or endangering themselves or others.

WeldVR provides trainees with a range of welding scenarios and welding techniques (MIG, TIG, and Stick), as well as different joint types and welding positions. By incorporating realistic welding sound and lifelike puddle simulations, our simulator helps trainees to develop their ability to respond to and adjust their welding technique, ultimately enhancing their overall welding skills.

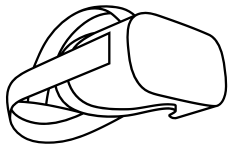
WELDVR™





COMPACT HARDCASE

Italian-made durable, shockproof, dustproof and waterproof hard case with custom foam inlay



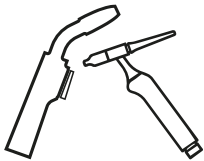
OCULUS QUEST 2

Latest Generation of Meta Oculus Quest 2 VR headset



CASTING DEVICE

Chromecast device to share the user point of view on an external display.



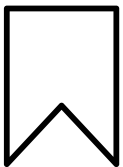
WELDING TORCHES

Custom-made Welding Torches to replicate the feel of the real ones



CLOUD ANALYTICS

Advanced Cloud Web Platform for Analytics and Reporting.



BRANDING

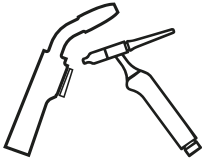
Rebrand the VR environment with your corporate identity graphics, logos or banners





TRAINING AND LEARNING MODES

WeldVR comes with both training and a learning module designed to maximize the training efficiency of the user with a large variety of interactable examples as well as most welded joints such as Lap Joint, Tee Joint and Butt Joint.



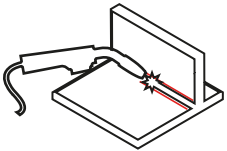
DIFFERENT WELDING TYPES

The welding types included are TIG, MIG and STICK. Which come with different tracked parameters to best describe the areas that the user can improve in.



INTERACTIVE LEARNING LESSONS

WeldVR has built-in interactive lessons for learning the basics of welding. The lessons included are: Welding techniques, Defects, Setting weld machine parameters etc.



HEATMAPS AND GUIDES

Guideline can help to see where the welding should be done. Speed tracking can be used to ensure that progress is maintained at optimum levels, angle tracking will help you to keep the advance and operating angle at their best and distance tracking can keep the arc length.



BUILT-IN GRADING SYSTEM AND ANALYTICS

WeldVR features a sophisticated grading and scoring system based on the real-time tracking of user performance in terms of speed, angle and distance. The system records the movements of the user for further analysis.



SINGLE USER - SOFTWARE ONLY



The user can choose from three modules: Training, Lessons, and Session Replay.

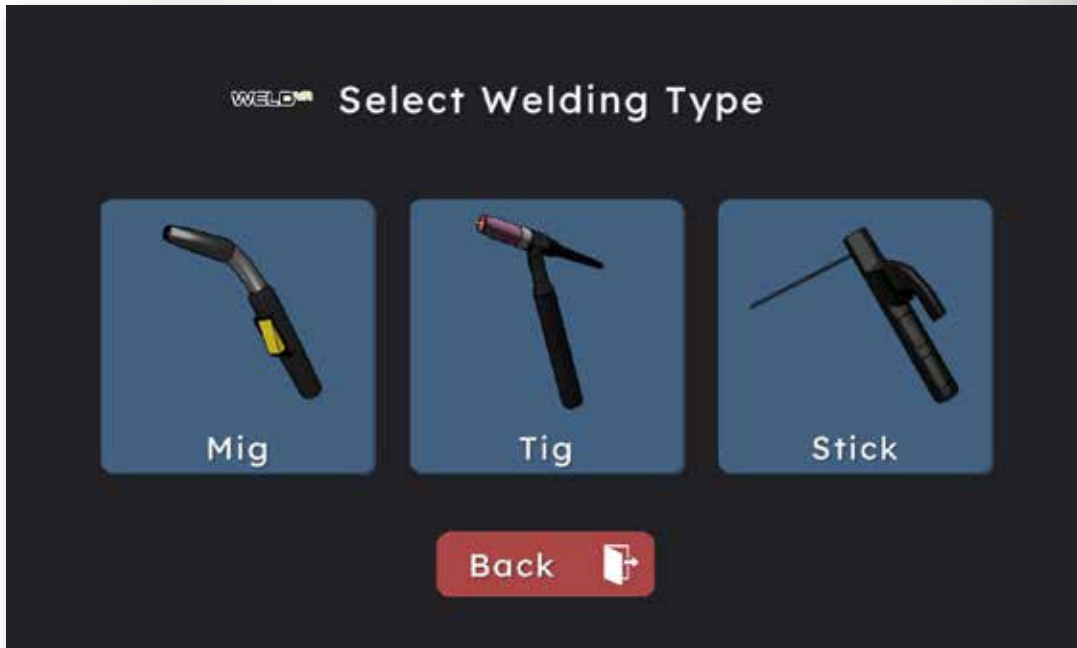
In the training module, the user can choose the welding type that is going to be used on the part.

Available welding types are TIG, MIG and Stick welding.

The General Lessons consist of welding defects that can occur, personal protective equipment, and welding techniques.

In the Welding Lessons, there are MIG, TIG and Stick welding lessons.

The Session Replay module gives users the ability to replay their welding sessions by selecting from the sessions displayed.



The users can choose and operate with one of the 3 available welding types.



MIG



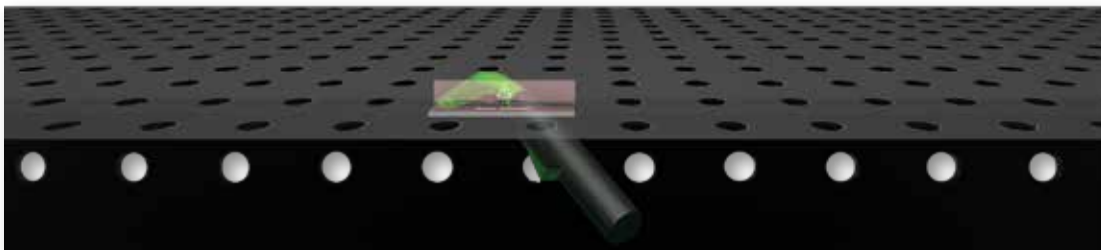
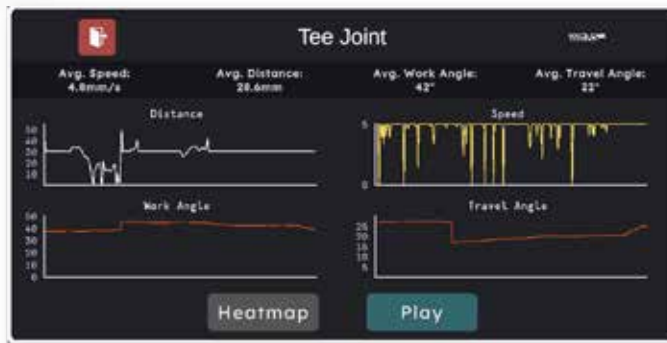
TIG



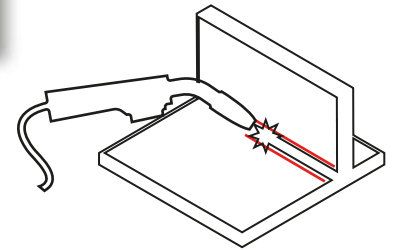
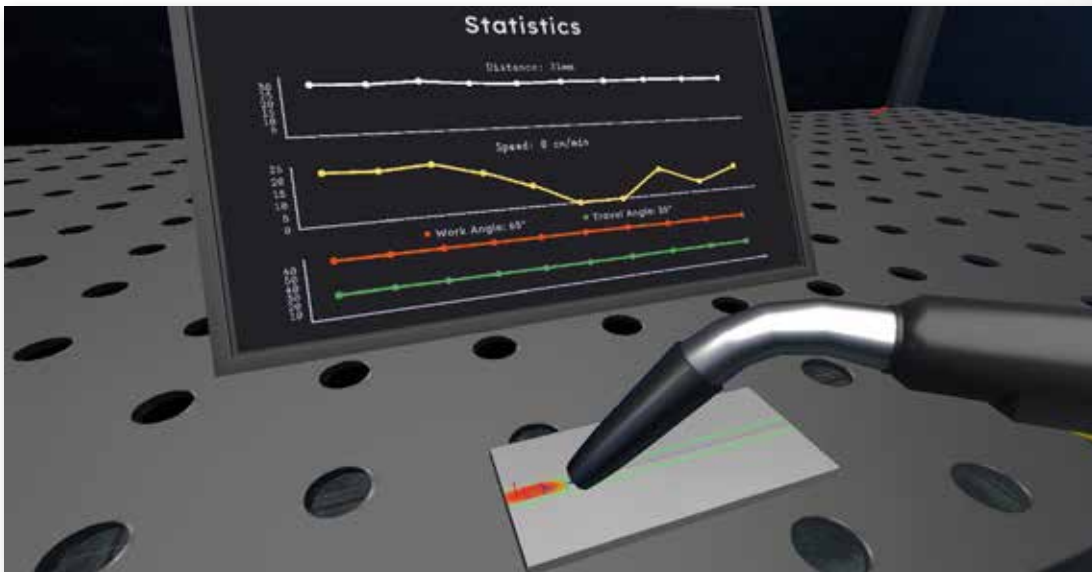
STICK



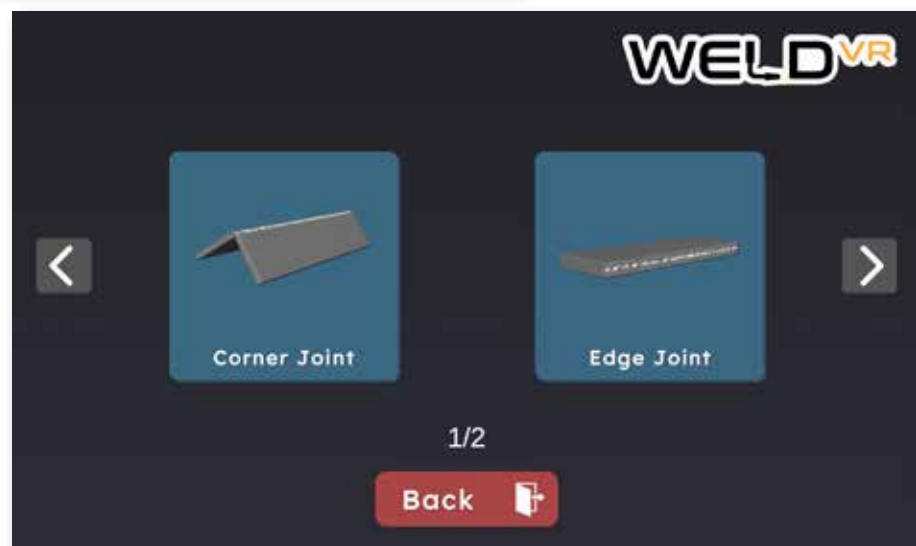
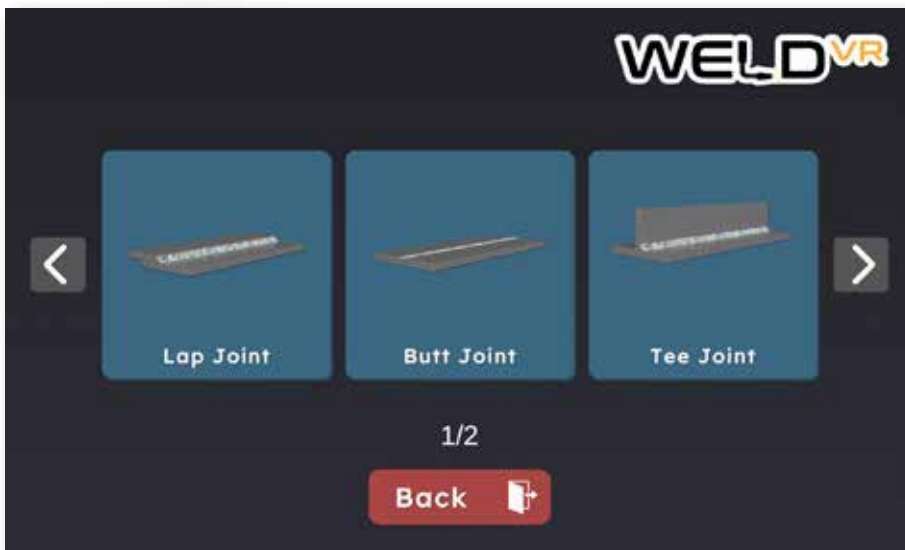
- Interactive lessons for MIG, TIG, and Stick welding
- Required personal protective equipment
- Welding techniques (push or pull)
- Welding defects
- Overview of welding types
- Recommended travel angle
- Setting the correct voltage, amperage, and wire speed
- Recommended stickout
- Types of electrodes
- Electrode coding
- Welding manipulation
- Polarity
- Types of ignitions
- Postflow



In the session browser, the player can find all their past sessions. Choosing a session will load a recording of it so that the user can replay their past sessions and review their mistakes.



- Visual cues can be opened before or during the welding process, helping the user to perform more accurate welding.
- Guidelines help the user by showing two lines to keep track of where to weld.
- A heatmap can provide more visual feedback on the consistency of the weld pool.

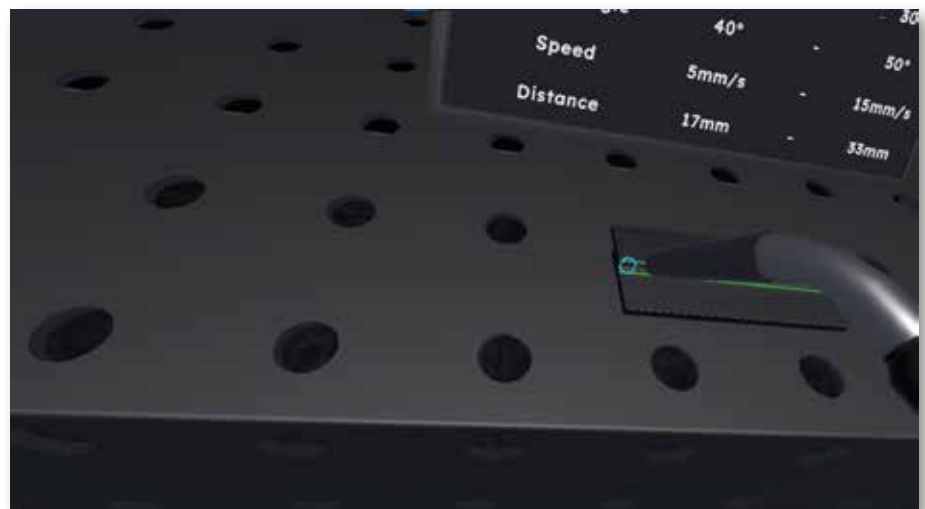


The user can choose one of the following Flat Joints:

- Lap Joint
- Butt Joint
- Tee Joint
- Corner Joint
- Edge Joint



The user can select the orientation and difficulty before starting the welding process.



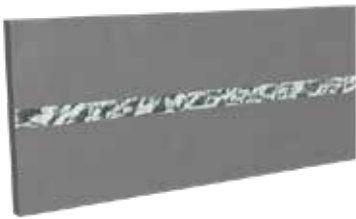
The reticle aim helps maintain the accuracy and the distance from the weld tip to the part.



Butt Joint (Overhead 4G)



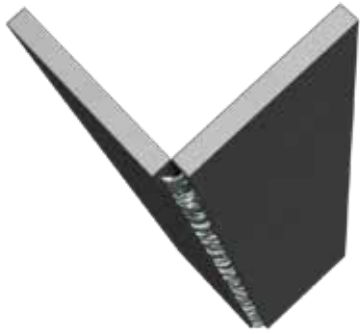
Butt Joint (Vertical 3G)



Butt Joint (Horizontal 2G)



Butt Joint (Flat 1G)



Corner Joint (Overhead 4G)



Corner Joint (Vertical 3G)



Corner Joint (Horizontal 2G)



Corner Joint (Flat 1G)



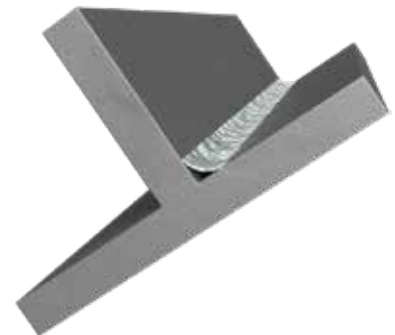
Tee Joint (Overhead 4F)



Tee Joint (Vertical 3F)



Tee Joint (Horizontal 2F)



Tee Joint (Flat 1F)



Lap Joint (Horizontal 2F)



Lap Joint (Flat 1F)



Lap Joint (Overhead 4F)



Lap Joint (Vertical 3F)



Edge Joint (Overhead 4G)



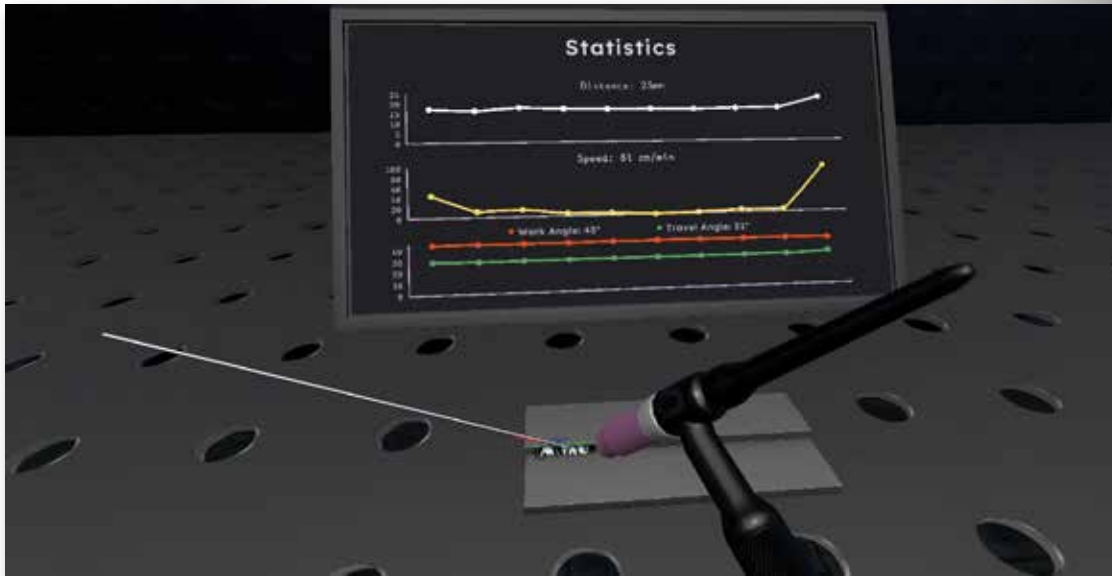
Edge Joint (Vertical 3G)



Edge Joint (Flat 1G)

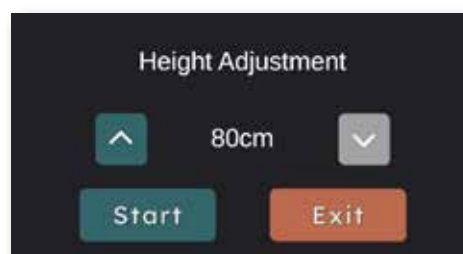


Edge Joint (Horizontal 2G)

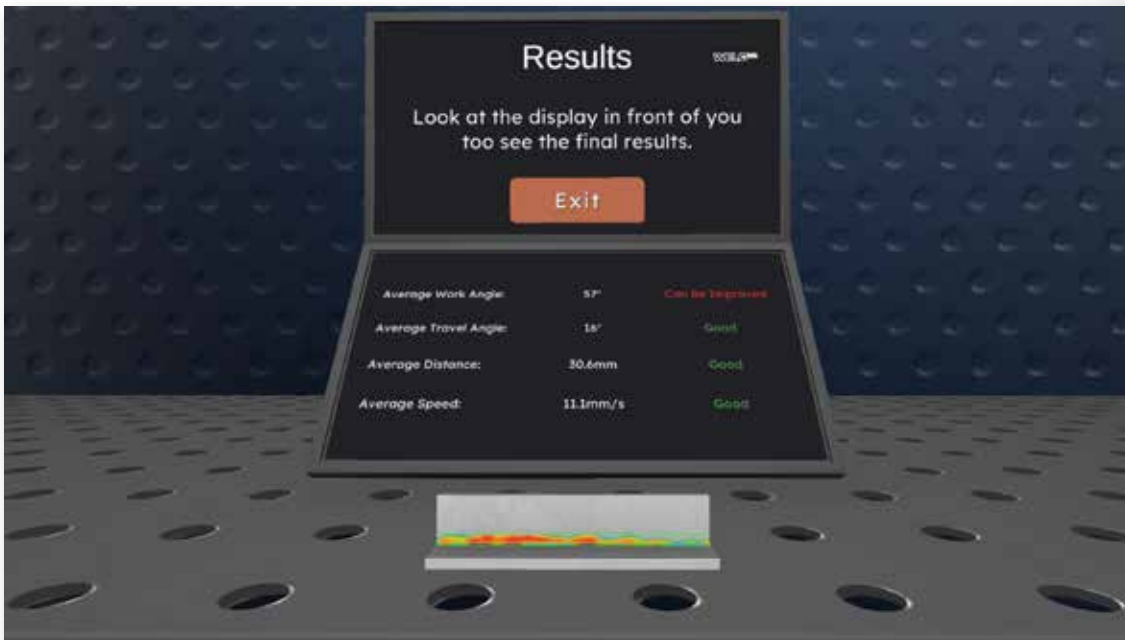


Analyzed parameters:

- travel angle
- work angle
- travel speed
- distance between the contact nozzle and the workpiece.

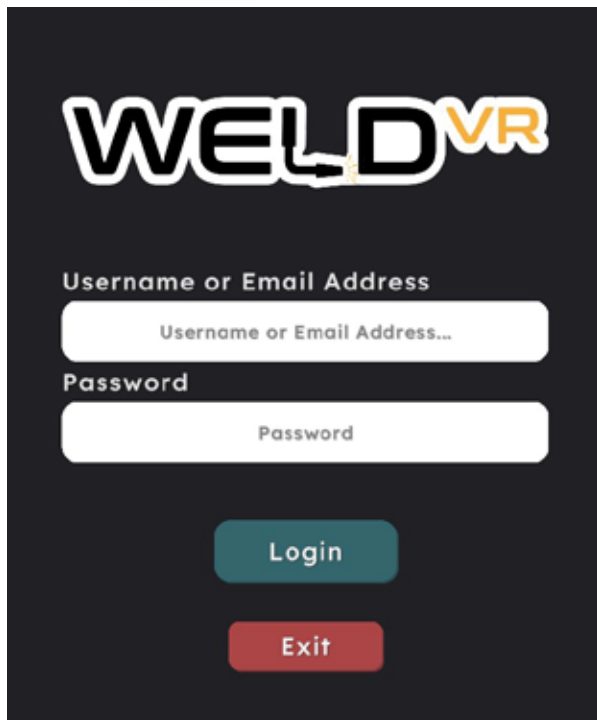


Height adjustment of the table



WeldVR features a sophisticated grading and scoring system based on the real-time tracking of user performance in terms of travel angle, work angle, speed and distance. The system tracks and records the user's torch movement for each training session for later analysis.

WeldVR provides real-time feedback through heatmaps. The active heatmap indicates the weld height for each bead and highlights the over and under-welded areas. The visual feedback helps the user to maintain a correct distance during the whole training process. The torch gun movement during each session is recorded and displayed as tracking lines.



The login screen features the WELDVR logo at the top. Below it, there are two input fields: 'Username or Email Address' and 'Password'. At the bottom, there are two buttons: 'Login' (teal) and 'Exit' (red).

WELDVR

Username or Email Address

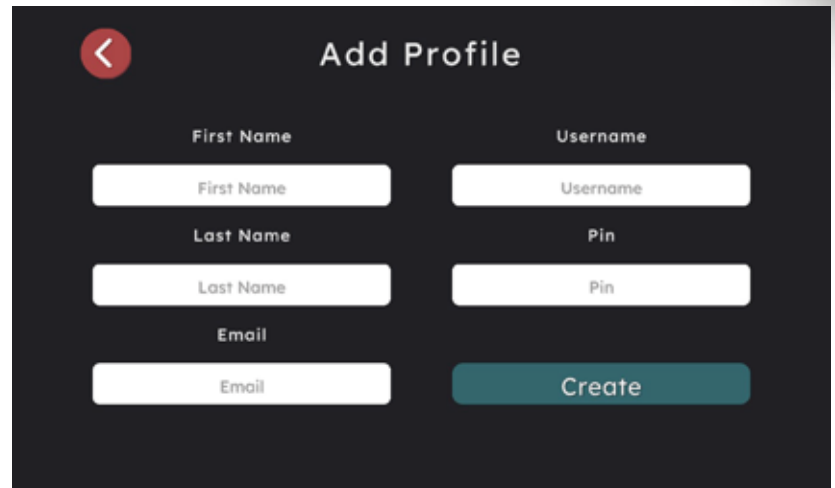
Username or Email Address...

Password

Password

Login

Exit



The 'Add Profile' screen has a back arrow in a red circle at the top left. It contains two columns of input fields. The left column has fields for 'First Name' and 'Last Name', each with two input boxes. The right column has fields for 'Username' and 'Pin', each with two input boxes. A 'Create' button is at the bottom right.

Add Profile

First Name

First Name

Last Name

Last Name

Email

Email

Username

Username

Pin

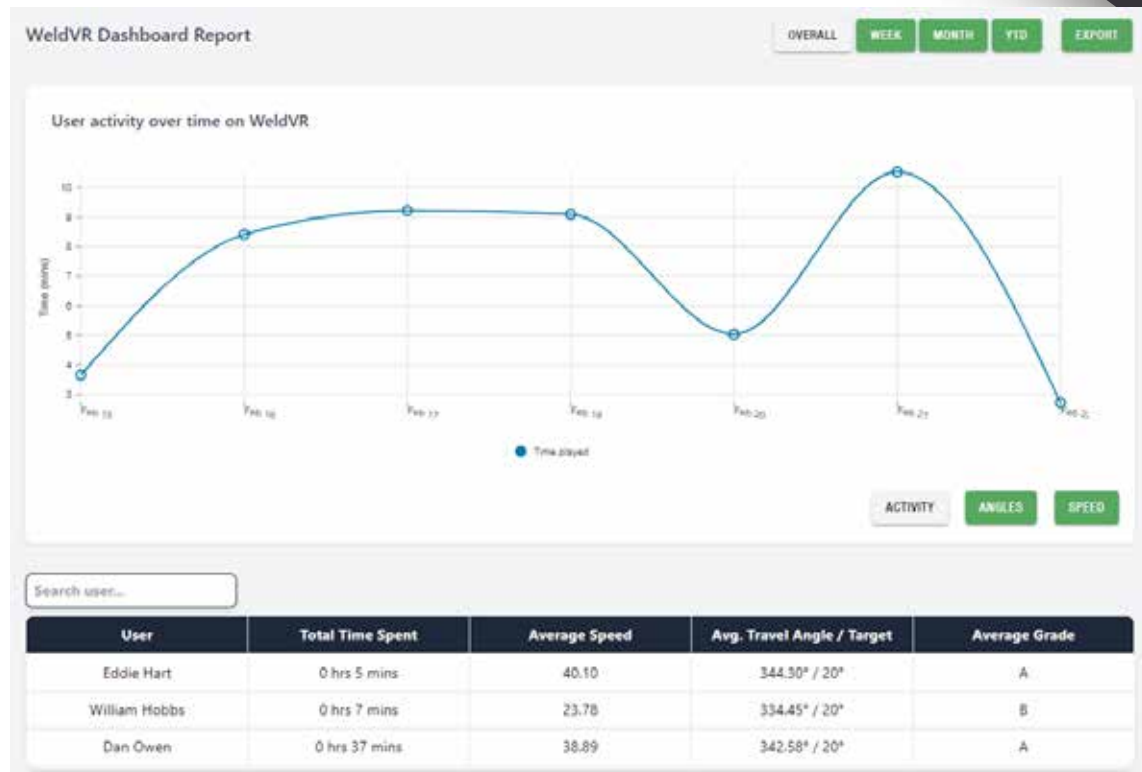
Pin

Create

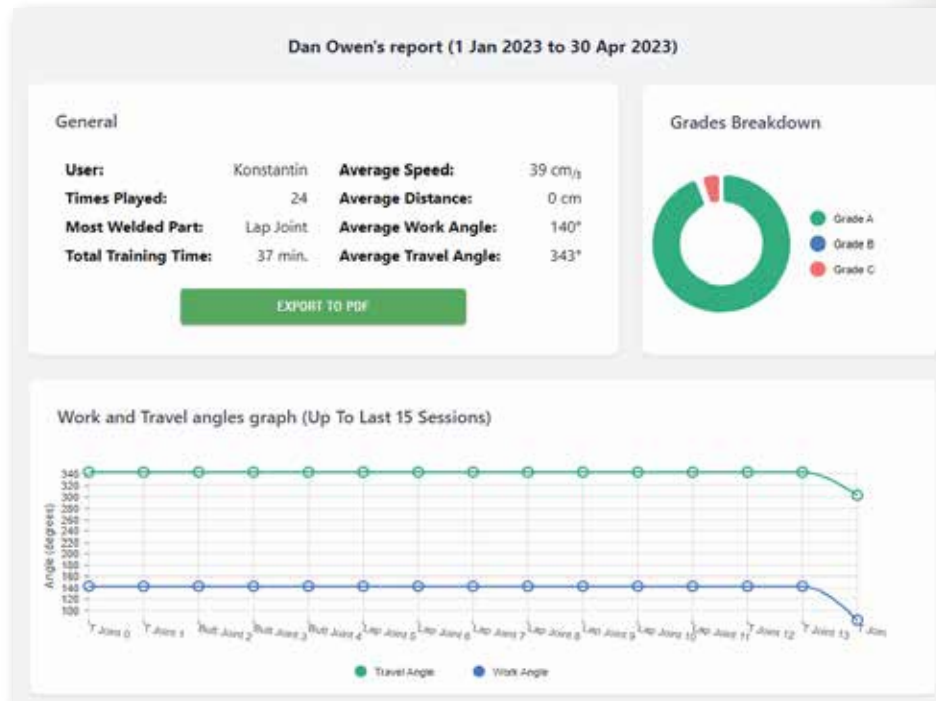
With the Enterprise Version you will be able to log in and create multiple user accounts within the organization and keep track of the individual user progress. Included is our Web-based administration panel to manage users, organization settings, active VR devices and an online shop to purchase additional products, services and VR apps.



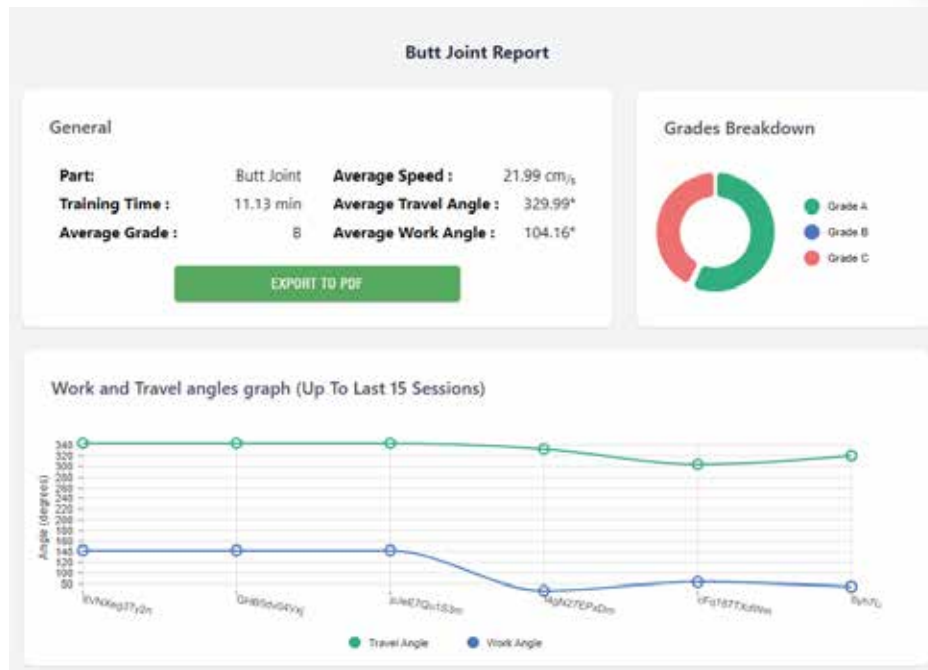
Web-based administration panel to manage users, organization settings, active VR devices and an online shop to purchase additional products, services and VR apps from Cythero.



Each WeldVR All-in-One package includes a 1 Year free access to the cloud web portal for analytics and reporting.



The User Report represents a recap of the user's progress for the selected period. It displays the total time played, the most welded part, and the grades breakdown for their latest session.



The Part Report contains all of the relevant information for the selected part.

User	#	Part	Date	Avg. Work Angle	Avg. Travel Angle	Avg. Speed	Avg. Distance	Grade
- Total	-	-	-	135.14	341.43	36.47	0	A
William Hobbs		Butt Joint	2023-02-22 16:45:47	74.78	320.69	4.73	0	C
William Hobbs		Butt Joint	2023-02-22 16:45:47	74.78	320.69	4.73	0	C
William Hobbs		Butt Joint	2023-02-22 10:00:00	66.73	332.44	12.9	0	A
William Hobbs		T Joint	2023-02-21 10:03:40	142.58	344.3	40.09	0	A
William Hobbs		T Joint	2023-02-21 10:03:40	142.58	344.3	40.09	0	A
William Hobbs		T Joint	2023-02-15 10:03:40	142.58	344.3	40.09	0	A
Eddie Hart		T Joint	2023-02-21 10:03:40	142.58	344.3	40.09	0	A
Eddie Hart		T Joint	2023-02-21 10:03:40	142.58	344.3	40.09	0	A
Eddie Hart		T Joint	2023-02-15 10:03:40	142.58	344.3	40.09	0	A

Session Info
CLOSE

William Hobbs welded Butt Joint On 2023-02-22 16:45:47

Session Info

Part Name : Butt Joint

Session Start : 2023-02-22 16:45:47

Session End: 2023-02-22 16:46:31

Session Duration (min): 0.73

Material Usage (kg): 0

Average Speed (cm/s): 4.73

Average Work Angle (°) / Target: 74.78 / 90

Average Travel Angle (°) / target: 320.69 / 20

Average Distance (cm): 0

Grade: C

EXPORT TO PDF

The Usage Report is a list of each session that has been played by the user and a detailed view for each session.