



# WELDING SIMULATORS



*the training is simulated  
...the **skills are real***

**ACE VR WELDER** is a 3D innovative simulator, that provides a fast and safe way for training.

**ACE VR WELDER has the capability to import different virtual welding pieces into the system to allow for client specific welding exercises.** (Subject to additional fees)

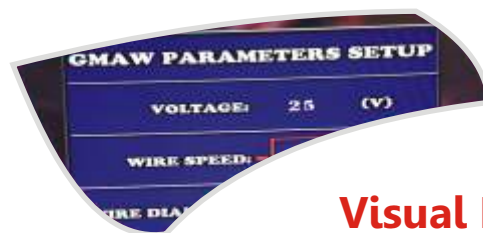
## Features

- MIG MAG, TIG & Coated Electrode.
- Instructor station
- Report generation
- Life like parameters and controls
- Right & left handed set up
- Briefing for review
- Easy installation (Plug and Play)
- Immersive interactive system with virtual reality mask (3D) and torches.



## Hardware

- Life like weight and sized equipment
- Welding torches
- Mask with 3D view
- Coated electrode
- MIF-MAG
- TIG



## Visual Help



## Immersive Environment



## **Technical specification for welding simulator**

|                           |  |
|---------------------------|--|
| Product                   | Welding Simulator  |
| Vision Technology         | Virtual Reality  |
| Input Supply              | Single Phase 230v,<br>50 - 60 Hz, (5 - 11amp)                    |
| Learning Concepts         | Didactic   |
| Process Simulated         | SMAW, GMAW, GTAW   |
| Joint Configuration       | Butt, Fillet, Lap,<br>Pipe To Plate<br>And Pipe To Pipe          |
| Welding Position-Basic    | 1G To 4G<br>(upto Overhead)                                      |
| Welding Position-Adv.     | 5G To 6G (Pipe To Pipe<br>And Pipe To Plate)                     |
| Skills Learned            | Arc Length, Speed, Work<br>Angle, Travel Angle<br>& Straightness |
| Defects Analysis          | Porosity & Spatter   |
| Virtual Work Stand        | Facility To adjust the Job<br>In All Positions-Upto 6G           |
| Analysis Modes<br>Report  | Video Replay And   |
| Evaluation<br>Methodology | Objective (score) /<br>Graphical (trends)<br>evaluation          |
| Viewing Points            | HD Vision Helmet,<br>Simulator System<br>Screen And Projector    |
| Thickness of Materials    | 3.0, 6.0 & 10.0 Mm.  |

## **Simulator Parameters**

- CC / CV Function
- Polarity selection DC+, DC- and AC
- Digital display of Current, Voltage , Wire feed speed & Gas pressure adjustment
- Synergic control for parameter selection
- Provision for selection of 2 Step and 4 Step trigger options in GMAW process.

## **Scope of supply**

|   |         |
|---|---------|
| Virtual Trainer Set<br>including Display<br>and CPU       | : 1 No. |
| GMAW Torch Set  | : 1 No. |
| SMAW Torch Set  | : 1 No. |
| GTAW Torch Set with<br>Electrode                          | : 1No.  |
| Server software   | : 1 No. |
| Butt Weld, Fillet Weld<br>(Haptic Plates Job)             | : 1 Set |
| Virtual Reality Helmet                                    | : 1 Set |
| Accessories and components to meet above<br>specification |         |





## Features of the welding simulator

- The simulator is with Real environment simulation
- Machine is not producing any real arc and real fume.
- Viewing from helmet - HD Vision
- Different levels of practice (degree of difficulty)
- Every weld bead is evaluated by the simulator
- SMAW process simulation will have a feel of actual electrode consumption
- Simulator Provides 3D Environment with simulation of Smoke, Spark and Welding Sound during Welding training.
- Menu Language selection in Regional language (Hindi , Gujarati etc.) to facilitate ease in training to student.
- Guidance for Skill parameters during welding (Continuously)
- Guidance for Ideal vision of welder during welding (Continuously)
- Free Teacher software with Create, Edit and Delete options for Courses, Modules and

Student details.

- Possibility to include additional process and improvements in the same simulator
- Possibility to include PDF uploads in Indian language of choice
- Remote Maintenance and updates through online
- Networking of simulators can be possible.
- Facility to monitor Performance of each student
- Learning through didactic and trainer guidance
- VR Resolution - High Resolution
- Colour - 32Bit True colour
- Facility to connect to Monitor / Projector
- Polarity selection - DC+, DC-, and AC
- Machine includes pre-defined courses.
- Administrator and Trainer Login is available to monitor and evaluate students activity Data Back Up and Calibration Facility.
- Server Installed to operate ,Control and design the course by Admin and Teacher.



### **Ace Infobahn Pvt. Ltd.**

311, Lodha Supremus II, Near New Passport Office, Wagle Estate, Thane 400 604.  
Email: skill.equipment@gmail.com | Tel.: 022-4974 9090, 022-4974 8280