

## Onew360PT Specification

### 1. Overview Picture



### 2. Product Introduction

The ONEW-360PT welding simulator is the portable version of the ONEW-360 welding simulator. It is based on the augmented reality (AR) technology software system and the overall design of the AR all-in-one machine to achieve a virtual teaching and training environment with simultaneous and real-time interaction among multiple people. ONEW-360PT welding simulator system includes a variety of welding type training systems. It has training on SMAW, GMAW and GTAW.

It has the advantages of environmental protection, energy saving, general welding operation skill training and evaluation of integrated features. Its revolutionary innovation has changed the traditional welding training mode, and it is the leading machine and system for training the welding engineers and workers.

The product uses the low delay efficient acquisition technology, accurate optical positioning and touch the force feedback technology, solved many problems of the traditional welding training. It make the trainer feel real welding process in the simulation and the training process is high efficient.

### 3. Specification for Vision Helmet:

Positioning accuracy	5mm
Positioning Space	4.5M*4.5M
Refresh rate	90Hz

### 4. Specification for Welding Torch:

Positioning Mode	AR Tracking sensor
Positioning accuracy	1 cm
Data Transmit mode	Wireless support



## 5. Specification for Functionality:

### 4.1. Basic Functions

Process simulated	SMAW, GMAW, AND GTAW
Joint configuration	BUTT, FILLET, LAP, PIPE to PLATE AND PIPE TO PIPE
Welding position	1G To 4G 5G To 6G
Inside Tips	Arc Length, Speed, Work Angle, Travel Angle
Defects	Porosity & Spatter
Analysis modes	Playback And Report
Evaluation methodology	Objective (Score) / Graphical (Trends) Evaluation
Welding material selection	Carbon Steel, Stainless Steel, Aluminum
Thickness of materials	3.0 , 6.0 & 10.0 mm.
Polarity selection	DC+, DC-, AC
CV/CC selection	Constant Voltage / Constant Current Selection
Shielding gas selection	GMAW: Carbon dioxide, Argon mixture, Argon GTAW: Argon, Helium
Gas speed selection	GMAW(L/min): 10,12,15,20,25 GTAW(L/min): 6,8,10,12,15
Wire speed selection	GMAW(m/min): 1.2,2.0,4.0,6.0,8.0,10.0 GTAW(m/min): 0.5,1.0,2.0,3.0,4.0,5.0
Electrode stick/wire selection	GMAW: Solid Wire , Flux-cored Wire, Al Wire SMAW: E6010, E6013, E7018 GTAW: Wire Feed, No Wire Feed
Electrode stick diameter selection	GTAW(mm): 1.6,2.0,2.4,3.2,4.0 SMAW(mm): 1.6,2.0,2.5,3.15,4.0,5.0.
Wire diameter selection	GMAW(mm) : 0.8,1.0,1.2,1.6

Training server(optional)	Web based Management System including: Student Management, Class Management, Course Management, Device Management, Homework Management, Exam Management, Notice Management, Consumption Management, Training Report Management, Printing Management and etc.
Certification	CE AND ISO-9001

#### 4.2 Basic Training Course

Arc travel training	Arc ignition, linear arc method, linear reciprocating arc method, zigzag arc method, Crescent arc method, and triangle arc method. Oblique Triangle arc method, Spiral-arc method, arc ending process.
Welding Training	Butt, Fillet, Lap, Pipe to Plate and Pipe to Pipe with all training positions.

#### 4.3 Free Training

Welding Training	Butt, Fillet, Lap, Pipe to Plate and Pipe to Pipe with all training positions.
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#### 4.5 Network Functions

login	Login by different trainers. Personalized training and evaluation process.
Training Record Upload	Video Playback And Report upload to server. Need Server to Support.

### 6. Extension Function (Optional, Need Extra Charge)

Server Mainframe	Some network functions need a server mainframe to support.
Training records & playbacks	Training records& playback server storage and management.
Account management	Support Different account login and management of students and classrooms.
Welding knowledge	Welding Knowledge management.
Tasks system	In-class task assignment, homework assignment, exam assignment and management.

### 7. Contact Information

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