



**T-SIMWELD**



**The best value welding  
training solution**

[www.tescaglobal.com](http://www.tescaglobal.com)

# Current Challenges

- ▶ Global Shortage of Welders
- ▶ Young people are digital natives
- ▶ Industry 4.0: more and better qualified welders are needed
  - ▶ Raw material prices
  - ▶ Environmental Sustainability

**T-SIMWELD** “ THE BEST VALUE WELDING TRAINING SOLUTION ”

## KEY BENEFITS

### 01. PROVEN EFFECTIVE WELDING TRAINING SOLUTION

- ⌚ < TRAIN MORE WELDERS IN LESS TIME
- 💰 < SAVE MONEY WHILE IMPROVING SAFETY
- 🛡️ < ENGAGE YOUNG PEOPLE INTO WELDING
- 📄 < IMPROVE WELDING QUALITY TRAINING DRIVEN BY NATIONAL AND INTERNATIONAL STANDARDS
- 🌿 < BE MORE SUSTAINABLE

## 02. KEY FEATURES

- ▶ 5 Physical welding coupons: Overlapped plate, V-Butt plate T-Angled plate to plate, V-Butt pipe, T-Angled pipe to plate
- ▶ Real welding torches: GTAW, GMAW, SMAW
- ▶ 1 to 25 mm thickness
- ▶ 5 Physical welding coupons: Overlapped plate, V-Butt Plate T-Angled Plate to plate, V-Butt pipe, T-Angled pipe to plate
- ▶ Advanced features: bend test, safety checks
- ▶ Aluminum, carbon steel, stainless steel
- ▶ E-learning, Analysis Module
- ▶ National and International contents and curricula
- ▶ Hindi, English and other languages available





## 03. ENGAGING LEARNING EXPERIENCES

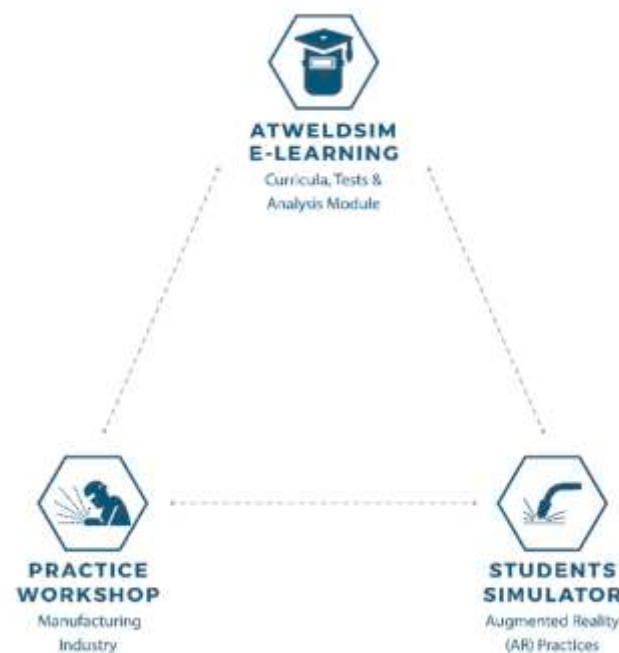
### AUGMENTED LAB

### SIMULATED LAB + REAL LAB



### AUGMENTED TRAINING METHODOLOGY

First weld it in Augmented, then in real, using quality contents and managing your students in a personalized way.



## 04. MORE REALISTIC EXPERIENCE POWERED BY AUGMENTED REALITY

### T-SIMWELD

#### AUGMENTED REALITY



Simulates only what needs to be simulated, leaving physical parts in their real state. With this, we provide realism to the student without eliminating sensory perception, which is important for training potentially dangerous skills in risky environments.



Is an enhanced, real-world experience



**AR IS REAL,  
NOT A VIDEO GAME**

# 05. DEVELOPED BY SEABERY, THE WORLDWIDE #1 MANUFACTURER OF AR WELDING TRAINING SOLUTIONS



**+750**

CLIENTS IN  
EDUCATION & INDUSTRY



**+90,000**

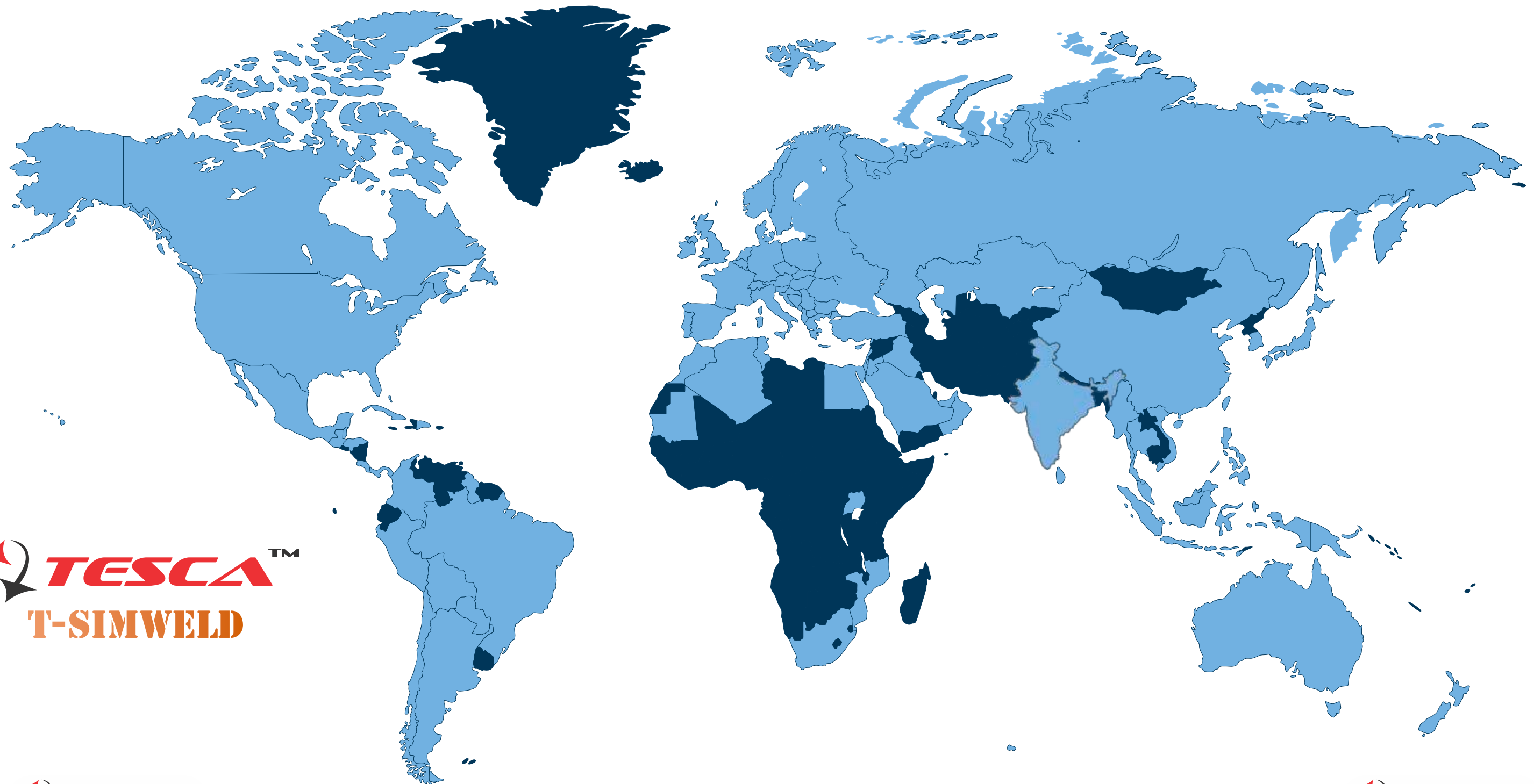
PROFESSIONALS  
TRAINED



**+75**

COUNTRIES

Governments, educational institutions, universities and large industrial corporations are using Seabery solutions.



DIMENSIONS (WITHOUT ACCESSORIES)	259x424x236mm			
WEIGHT (WITHOUT HELMET)	8.8 kg			
WEIGHT (WITH HELMET)	9.8 kg			
WELDING PROCESSES SUPPORTED	GMAW (MIG/MAG) & FCAW G/S, SMAW (MMA Electrode), GTAW (TIG)			
WELDING POSITIONS	1F, 2F, 3F, 4F, 1G, 2G, 3G, 4G, 5G, 5F, 6G, 6F			
DEFAULT WELDING JOINTS INCLUDED	YES, Education Welding Joints: Overlapped plate, V-Butt plate, T-Angled plate to plate, V-Butt pipe, T-Angled pipe to plate			
REAL WELDING TORCHES	Yes			
WELDING SOUNDS	Recorded in a real welding lab			
ACCESSORIES	Filler rod, welding gloves, Wi-Fi antennas. OPTIONAL: Workstand, lab server including router, and flight case			
VOLTAGE SELECTION	YES, it can be modified during the exercise			
INTENSITY (AMPERAGE) SELECTION	YES, it can be modified during the exercise			
SHIELDING GAS SELECTION	YES, the flow can be modified during the exercise			
WIRE SPEED SELECTION	YES, in GMAW (MIG/MAG) and FCAW, it can be modified during the exercise			
COUPON MATERIAL SELECTION	Carbon steel, stainless steel, aluminum			
GAS COMPOSITION	MATERIAL	GMAW	GTAW	FCAW
	Carbon Steel	Argon - Co <sup>2</sup> , CO <sup>2</sup>	Argon	Argon - Co <sup>2</sup> , CO <sup>2</sup>
	Aluminium	Argon	Argon	-
	Stainless Steel	Argon - O <sup>2</sup>	Argon	-
COUPON THICKNESS SELECTION	3mm, 6mm, 10 mm 1mm, 15mm, 20 mm & 25mm			
ELECTRODE STICK / FILLER ROD DIAMETER SELECTION	GMAW: carbon and stainless steel: 0.8mm 1mm 1.2 mm aluminum: 1mm 1.2mm SMAW: carbon and stainless steel: 2.5 mm 3.25mm 4mm GTAW: carbon steel, stainless steel and aluminum: 2mm 2.4 mm 3.2 mm FCAW: carbon steel: 1.0, 1.2mm			
ELECTRODE STICK / FILLER ROD SELECTION	GMAW: carbon steel: ER70S-6 stainless steel: E316L Si aluminum: ER5356 SMAW: carbon steel: E7018, E6010, E6013 stainless steel: E316L GTAW: carbon steel: ER70S-6 stainless steel: ER316L Aluminum: ER5356 FCAW: carbon steel: E71T-1, E71T-7			
MULTIPASS EXERCISE WITH DIFFERENT PROCESSES	YES			
WELDING PROCESSES	Straight, Triangle, Convex, Circle, Zigzag			
WELDING PATTERN/WEAVE	Push / Drag			
TRANSFER MODES	Short circuit, globular, spray			

DEFECTS ANALYZED	Porosity, spatter, slag inclusion
REPORT FEATURES	CTWD, Travel Speed, Work Angle, Travel Angle, Trajectory, Voltage, Wirefeed Speed, Technical Parameters, Equipment Settings
ANALYSIS MODULE	YES
ON-SCREEN HELP GUIDES	YES, they can be added/removed
PREDEFINED WELDING EXERCISES	YES, AT Welding curricula
LMS APPLICATION	YES, E-Learning: manage students, create curricula and exercises and monitor the training
LMS APPLICATION: STUDENTS ACCESS	YES, Visualize contents, progress, take tests
REMOTE TRAINING / DISTANCE LEARNING	Yes
STUDENT PERSONALIZED PROFILE	YES, practices report and progression
CUSTOMIZED PRACTICES	YES, customized in E-Learning
POSSIBILITY TO TRY DIFFERENT SETTINGS DURING THE EXERCISE AND THEIR EFFECTS IN THE WELDING BEAD	YES
VISION TECHNOLOGY	Augmented Reality
PIECE CAN BE MANIPULATED SEPARATELY	YES, it can be manipulated at any time during the exercise to perform a visual inspection of the welding bead. The workpiece is not attached in any way to the workstand
REAL ENVIRONMENT DURING SIMULATION	YES
UNIT CAN BE USED WITH GLASSES	YES
POWER SUPPLY	NOX Hummer Bronze 500W
PROCESSOR	Intel® Core™ i5-9500E
CHIPSET	Intel H310
RAM	8+8 GB DDR4
GRAPHIC CARD	Intel UHD Graphics
HARD DISK	M.2 SSD 128Gb
AUDIO	Realtek Audio
OPERATING SYSTEM	Seabery Operating System optimized for AT Weldsim
BACK PANEL PORTS	1 x HDMI 4 x USB 2 x Ethernet 2 x Wifi Antennas 1 x jack
AR VISION MODULE RESOLUTION	MIPI LCD 4,7" HDMI Display input up to 1280x720 Ultra-low video distortion 24-bit True Colour

CAMERAS RESOLUTION (X2)	640x480 / 800x600 Autofocus
OPERATING TEMPERATURE	-30 ~ +70° Celsius
HUMIDITY	10 to 90 percent relative humidity non-condensing
UPDATES	Software updates and bugfixing (Same version) included
REMOTE MAINTENACE	Yes
REGULATIONS	ISO 9001 Quality Management System ISO 14001 Environmental Management System
WARRANTY	1 year. Up to 2 more years optional

#### SERVER

INSTALLATION TYPE	On-Premise
RAM MEMORY	4GB DDR4 2400MHz
MOTHERBOARD	ASUS H110M-D
MICROPROCESSOR	Intel Core I3-7100
POWER SUPPLY	550W 100-240V <sub>ac</sub>
HARD DISK	1TB SATA3
NETWORK CARD	Gigabit Ethernet PCIe 10/100/1000Mbps

#### E-LEARNING REQUIREMENTS

##### WINDOWS

WINDOWS 10 64 BITS

Processor: Intel i5 2.5ghz

RAM: 8GB

Graphic card specifications: Nvidia Geforce 950

#### LANGUAGES AVAILABLE

ENGLISH / HINDI / TELUGU / MARATHI /TAMIL



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More info at

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**www.tescaglobal.com**