

Seabery

Robotics

**STATE OF THE ART,
TURNKEY, SCALABLE
AND EFFECTIVE
ROBOTIC WELDING
TRAINING SOLUTION**

POWERED BY
AUGMENTED REALITY



CONTEXT



INDUSTRY 4.0 IS ACCELERATING AUTOMATION

Automated tasks in factories are expected to grow from 5% to 8% by 2028. Collaboration between people and machines requires increased skills for operators.



GLOBAL SHORTAGE OF WELDERS

Global demand for welders is increasing by 8% globally. Existing welders are retiring. Traditional Welding Training is inefficient and doesn't attract young people.



ROBOTICS ARE THE BACKBONE OF AUTOMATION

Since 2009, the number of manufacturing robots has more than doubled. Manufacturing Industrial Robots are expected to grow by 80% by 2026.



Soldamatic

SOLDAMATIC ROBOTICS IS THE MOST REALISTIC, COMPLETE AND, FLEXIBLE ROBOTIC WELDING TRAINING SOLUTION.

- > It works with Augmented Reality.
- > It uses real components.
- > It incorporates a training plan for robotic welding.



BENEFITS



Training operators in robot programming for **specific welding routines.**



Modernizes the welding training center by training students in the latest industry requirements.



The augmented reality technology **allows the use of the real robot and teach pendant and reduces consumption and risks.**



It can be **integrated in almost any robot** in the actual market.



It incorporates **different welding parts based on real market practices.**

HyperReal-Sim™

AN EXCLUSIVE AND PATENTED PLATFORM PROVIDED ONLY BY SOLDAMATIC THAT OFFERS THE MOST REALISTIC WELDING TRAINING SYSTEM ASIDE FROM REAL LIFE WELDING.



Real robot, real components



Welding bead quality & Settings



Real torches



Advanced analysis module: Cross section and bend test



Welding Joints based on industry best practices



Remastered HD Welding Sound

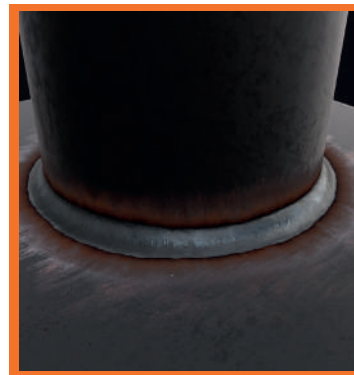
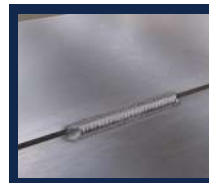


Power source-like controls



Precisely calibrated

Examples of Soldamatic's real time welding simulation.



HOW IT WORKS

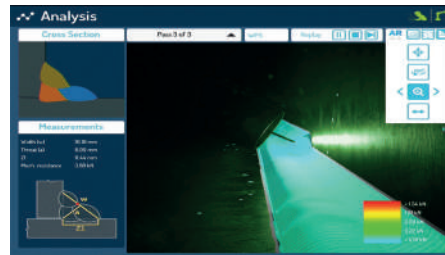


- › Soldermatic welding simulator connected with the robot.
- › Robotics welding torch compatible with any robot.
- › Training or advanced coupons are available.
- › Robotic welding curriculum.
- › Train the trainer.
- › Processes: gmaw, fcaw.
- › Materials: carbon steel, stainless steel, aluminum.
- › Cross section, bend test and mechanical resistance included in the analysis module.

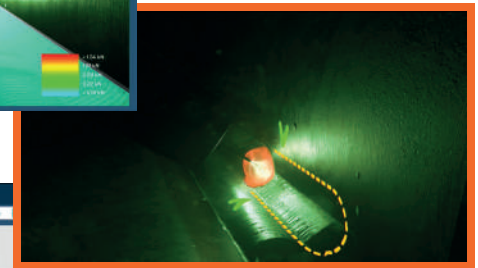
ROBOTICS CONTENT

- › Introduction to robotics welding.
- › International diploma in robot welding at the basic level (irw-b).

Soldamatic e-learning to create and manage all your courses, students and contents.



Parameter	Value	Score
Technique	94	93
Settings	94	99
Robot	94	99
Robot Tool	94	94
Work Angle	94	92
Travel Angle	94	99
CPW	94	92
Travel Speed	94	99
Roll	94	99
Crane	94	99
Temperature	94	99



AUGMENTED TRAINING

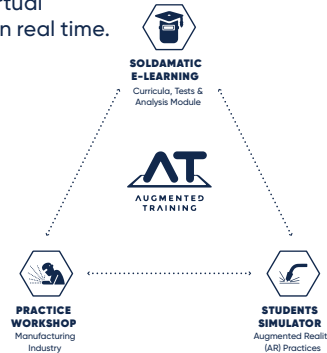
FULLY FLEXIBLE TRAINING SOLUTION – TRANSPARENT AND CONSISTENT EXPERIENCE ON-PREMISE, REMOTE AND VIDEO LEARNING



- Transparent and consistent learning experience from classroom or remote locations with video recording.
- Real time server connection is not required, all information is updated once the connection is re-established.
- Trainers and students can access the virtual classroom, share their screen and chat in real time.

THE AUGMENTED TRAINING METHODOLOGY

- New educational paradigm.
- Combine AR simulation with real welding practice.
- Allows instructors to manage numerous courses and students.



Real Welding



Soldamatic

GLOBAL DEPLOYMENT IN EDUCATION AND INDUSTRY 4.0

Seabery – Augmented Training methodology combines the practical part of Augmented Reality with the practical part of reality. This is the concept of Augmented Lab, which allows the students to immerse in simulation environments in which they can practice in the most realistic way without limitations, risk-free, and without additional costs.

Augmented Lab Real Workshop



Content by International Publishers



E-LEARNING MANAGEMENT SYSTEM (LMS) APPLICATION SPECIFICALLY DESIGNED TO WORK UNDER THE AUGMENTED TRAINING METHODOLOGY

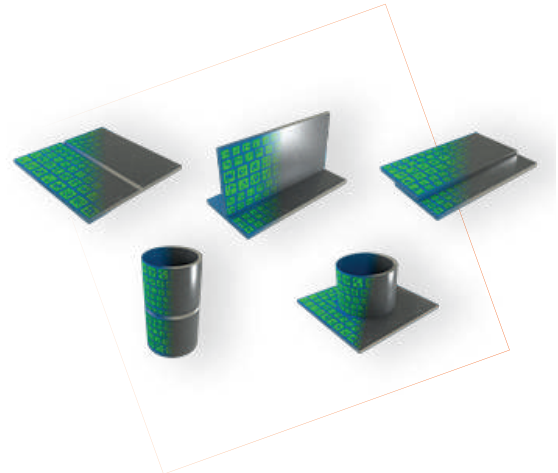
- Create and manage courses: Theory, practice and tests
- Review exercises and generate statistics and reports
- Share exercises, review the virtual classroom and chat live
- Students have their own access to their courses, contents, practices and reports



WELDING JOINTS

TRAINING WELDING JOINTS

The most used welding joints for training in the world in accordance with the UNE-EN ISO 9606 norm.



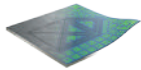
COUPONS	MATERIAL	THICKNESS	CROSS SECTION	MECHANICAL RESISTANCE	BEND TEST
V-Butt plate	Carbon Steel, Aluminium & Stainless Steel	3,6,10 mm	Yes	No	Yes
Overlapped plate	Carbon Steel, Aluminium & Stainless Steel	3,6,10 mm	Yes	Yes	Yes
T-Angled plate to plate	Carbon Steel, Aluminium & Stainless Steel	3,6,10 mm	Yes	Yes	Yes
T-Angled pipe to plate	Carbon Steel, Aluminium & Stainless Steel	3,6,10 mm	Yes	Yes	Yes
V-Butt pipe	Carbon Steel, Aluminium & Stainless Steel	3,6,10 mm	Yes	Yes	Yes

WELDING JOINTS

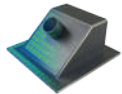
ADVANCED WELDING MULTIJOINTS



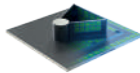
*Foundational
Ambidex*
Positions: PB
& PF



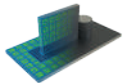
*Robotic
Foundational
'House'*
Positions: PA



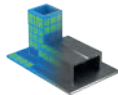
*Robotics
Foundational
Complex Sequence*
Positions: PB, PF,
HL045



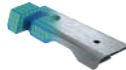
*Robotics
Foundational
Ability Test*
Positions: PB,PF



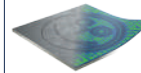
*Robotics
AWS CRAW*
Positions: PB,
PF



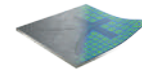
*Robotics
Foundational
Assembly*
Positions: PA



*Automotive
Chassis
Assembly*
Positions: PB



*Robotic
Foundational
'Face'*
Positions: PA

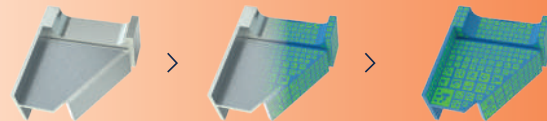


*Robotics
Foundational
'Chinese
character - 大'*
Positions: PA



INDUSTRIAL WELDING MULTIJOINTS

Bring real welding joints to Augmented Reality.
Developed to cover specific welding training and
performance needs.



Seabery

SEABERY IS **THE INTERNATIONAL LEADER**

in professional skills training with augmented reality-based simulation solutions for the 21st century workforce, with partners and presence in more the 80 countries.

SEABERYAT.COM

Soldamatic is leading welding training with a State-of-the-art, Turn-Key, and Scalable solution to create the next generation of welders effectively and efficiently.



Seabery
Augmented
Technology



Seabery
Augmented
Technology



Seabery

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