

**SOLDAMATIC**

AUGMENTED TRAINING TECHNOLOGY FOR WELDING



A **SEABERY** SOLUTION

Welding Training &  
Performance Digitalization  
Solution

**CATALOGUE**

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# 01. WHAT IS SOLDAMATIC?

## FACTS & FIGURES

Thousands of units in  
**+50** countries  
worldwide

**+750**  
clients in  
education & industry

**+90.000**  
professionals  
trained



**68%**

average consumable savings



Increase  
the arc-on time by

**3 to 5  
times**



Educate

**4 times more**  
students while keeping your  
existing lab infrastructure



**56%**

real workshop  
time reduction



**34%**

more certified trainees  
for IW than traditional  
methodology

Soldamatic is the first Welding Training Solution powered with Augmented Reality (AR) in the world.

Soldamatic IE is the third generation Soldamatic platform, it applies new technologies like AR to enhance the learning process and uses real welding equipment to develop skills and muscle memory.

It applies gamification to improve the motivation of trainees, personalized learning to adapt to their personal needs and green & safe technology to reduce the risks for newcomers and pollution.

\*Real case study of a Soldamatic classroom in a welding training centre.

Soldamatic IE is available in 28 languages

EN ES DE FR BR RU ZH IN IT JA TR NL KO TH PL CS ID HU RO SQ SL SR LV KA VI MS TA TE



# 02. WHY SOLDAMATIC?



2017 Best Augmented Reality Solution for enterprise at Augmented World Expo Europe. Munich, Germany.  
2014 Best Augmented Reality Solution for enterprise at Augmented World Expo Santa Clara, California, USA.



2014 Most Innovative Product for Education by Worlddidac. Bern, Switzerland.



Most visited Booth and Promising technology at Weldindia 2014. New Dheli, India.



Most Innovative Technology at Hungexpo. Budapest, Hungary.



Included by Gartner in their Augmented Reality Market Representative Vendors Report.



Most Investable Startup. Europe, Silicon Stroll Bootcamp.



Partnership with Abicor Binzel to promote healthy and safewelding together.

# 03. SOLDAMATIC IE

Soldamatic IE offers a flexible software subscription system that adapts to the market needs, it is formed by the Soldamatic Hardware + 3 Software Subscription Options:

## SOLDAMATIC EDUCATION

AUGMENTED TRAINING TECHNOLOGY FOR WELDING



Attract the new generation of young people to welding, train them better, safer, faster and reducing costs.



Metal Manufacturing Vocational Schools, Technical Universities.



Attract students. Improve safety. Spark future welders.



Licenses can be acquired yearly or lifetime.

### Hardware +3 Licensing Options



## SOLDAMATIC ADVANCED

AUGMENTED TRAINING TECHNOLOGY FOR WELDING



Bridge the gap with Industry, train in AR with complex multijoints and different industry applications.



Welding Training Centres.



Improve efficiency. Reduce costs. Prepare for Industry & Welding Competitions.

## SOLDAMATIC INDUSTRY

AUGMENTED TRAINING TECHNOLOGY FOR WELDING



Improve the productivity of the real welding operations on the field and reduce failure rate in industry recertification processes.



Industrial companies.



Improve productivity. Reduce % failure in recertification. Train better welding professionals.

	EDUCATION	ADVANCED	INDUSTRY
<b>WELDING</b>			
Specific Software for Education Welding Joints (EWJ)	On	Off	On
5 Education Welding Joints	On	Off	On
Specific Software for Advanced Welding Multijoints (AWM)	Off	On	On
Specific Software for Industrial Welding Multijoints (IWM)	Off	Off	On
TIG Pedal	Off	On	On
Base Materials			
• Carbon Steel	On	On	On
• Stainless Steel	On	On	On
• Aluminium	On	On	On
Thicknesses			
• 3, 6 & 10 mm	On	On	On
• Other thicknesses can be developed on request for AWM/IWM projects	On	On	On
Processes			
• GMAW (MIG/MAG) & FCAW, SMAW (MMA Electrode), GTAW (TIG)	On	On	On
<b>LEARNING</b>			
Soldamatic E-Learning	On	On	On
Augmented Training Methodology Course	On	On	On
Soldamatic Welding Curricula (Welding Initiation Course)	On	On	On
International Welder Program by IIW	On	On	On
Analysis Module	On	On	On
Advanced Analysis Module for Welding Multijoints	On	On	On
<b>SERVICES</b>			
Technical Support	On	On	On
Remote Assistance	On	On	On

# 04. HARDWARE

All the Soldamatic IE components are real welding components. The shape of the AR simulator and its front panel are inspired in real welding power sources.

- Soldamatic Welding Simulator
- Augmented Reality Helmet

#### - Torches

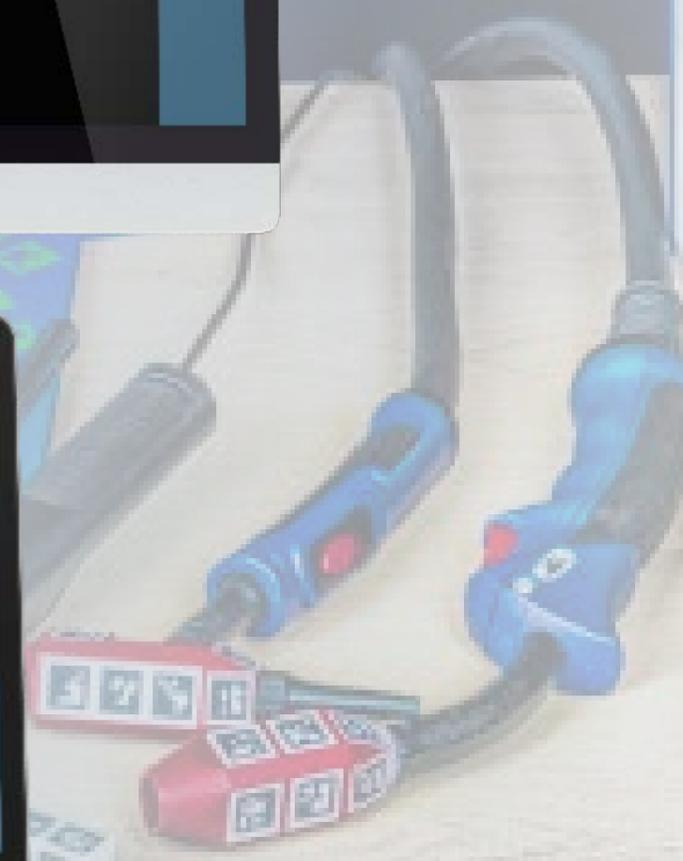
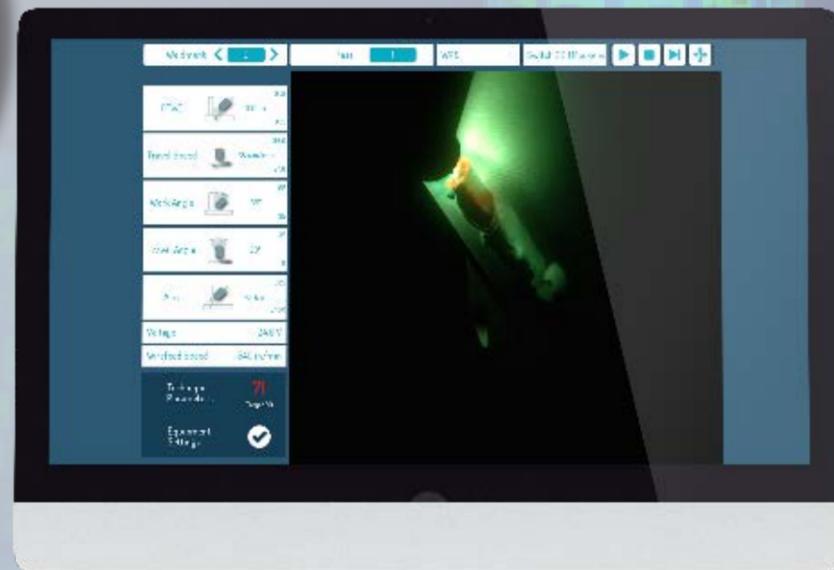
- GMAW (MIG/MAG) & FCAW
- SMAW (MMA Electrode)
- GTAW (TIG)
- Electrode Stick
- Filler rod

#### - Education Welding Joints

- V-Butt plate
- V-Butt 6" pipe
- Overlapped plate
- T-Angled plate to plate
- T-Angled 6" pipe to plate

#### Optional:

- Router (Only for classroom configurations)
- Server (Only for classroom configurations)
- Flight Case
- Workstand
- TIG Pedal



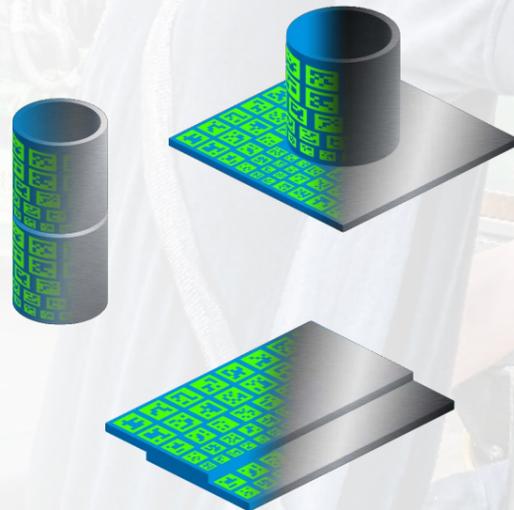
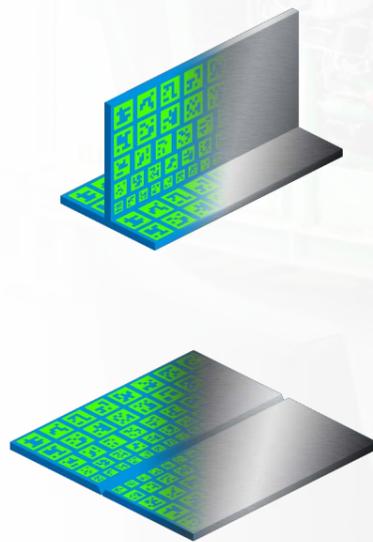
# 05. WELDING JOINTS



## Education Welding Joint

The most used joints in welding training & certification worldwide.

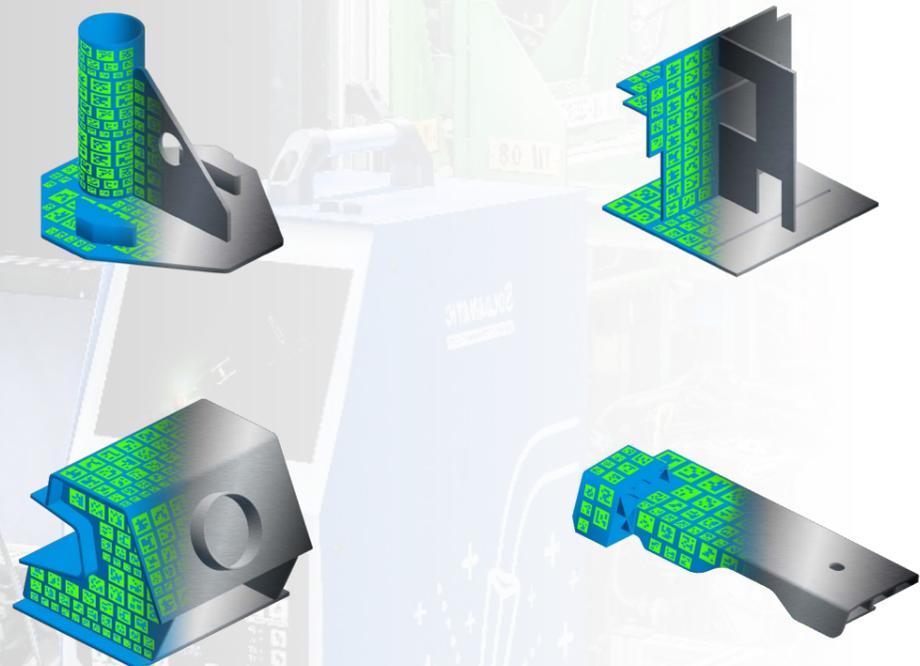
- V-Butt Plate
- V-Butt 6" Pipe
- Overlapped Plate
- T-Angled Plate to Plate
- T-Angled 6" Pipe to Plate



## Advanced Welding Multijoint

Greater complexity, adapted to the industry requirements.

Different thicknesses, welding sequences and challenging positions in the same piece.



## Industrial Welding Multijoint

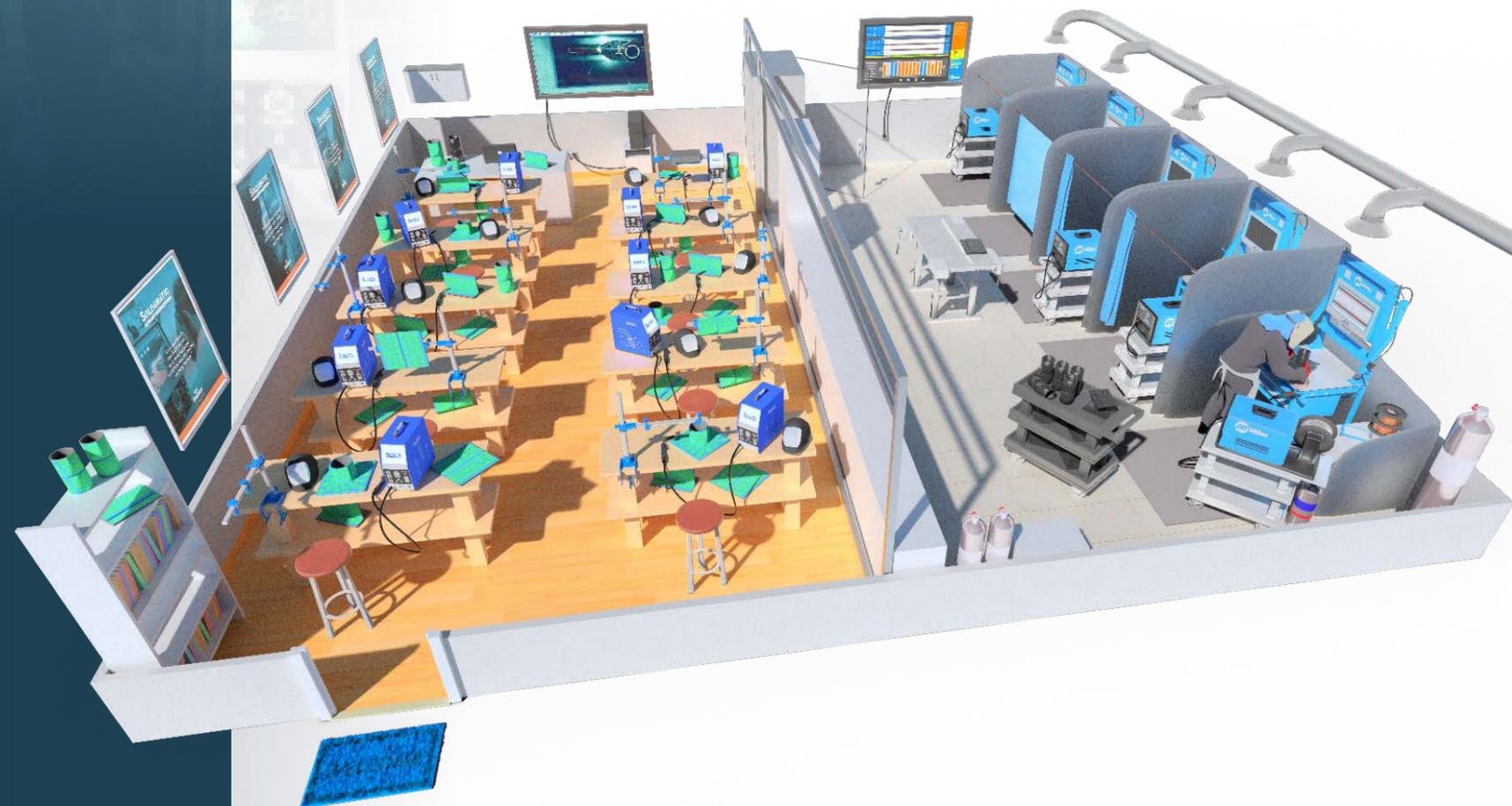
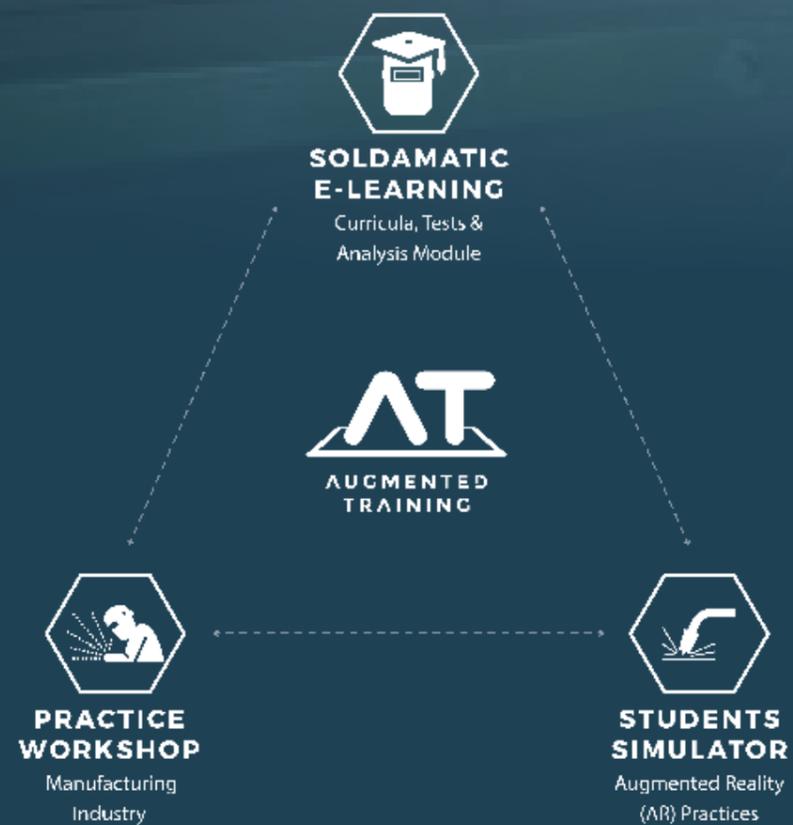
Made to meet customer specific training and performance needs.

Bring your real pieces to Augmented Reality, train your welders with these augmented pieces and reduce costs and recertification failure.

# 06. AUGMENTED TRAINING

AT proposes a new educational paradigm that promotes intensive practice, it is a dynamic and flexible model, which allows instructors to easily manage different courses with numerous students, regardless of their level of knowledge and/or learning pace.

Each student can join the training at any time, and only progresses once each stage has been satisfactorily completed, which allows them to set their own learning pace and guarantees a high level of qualification.

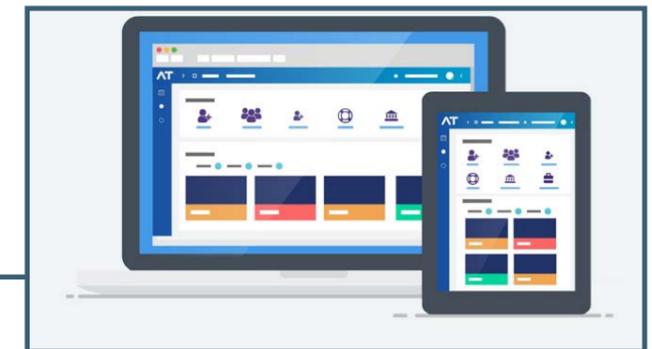
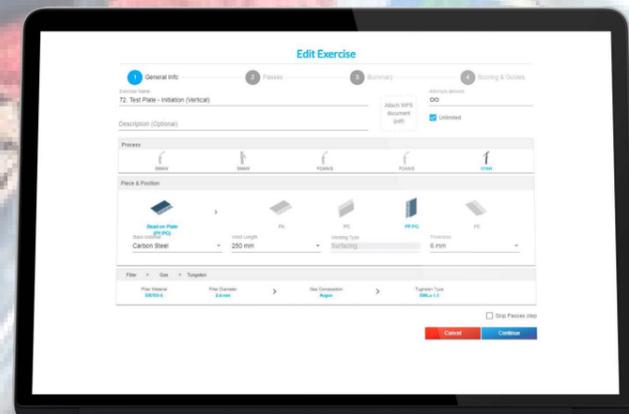
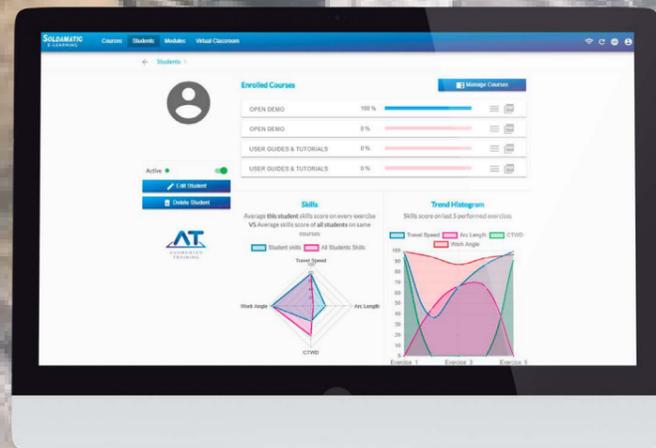




# SOLDAMATIC E-LEARNING

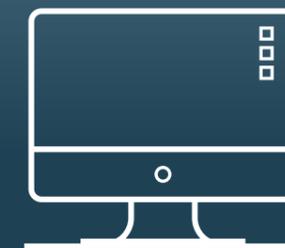
Learning Management application, focused on helping instructors to manage the whole training program, monitor and assess the trainees' performance and generate statistics and reports.

Students can access their profile to check their courses, review their practices, take tests and analyse their performance

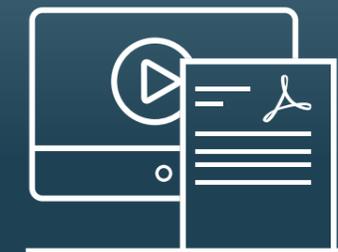


## AUGMENTED TRAINING METHODOLOGY COURSE

The course provides teachers with the necessary skills and abilities to follow the Augmented Training Methodology. It offers the student a personalized learning experience and improves his motivation thanks to gamification.



100%online



Video and PDF Contents

# 07. CONTENTS

High quality welding curricula developed by international experts to be performed with Soldamatic IE. These courses will allow instructors to teach welding according to the most demanded international standards and using the innovative Augmented Training methodology of Soldamatic.

The Advanced and Industry licenses include the International Welder program according to the Guideline IAB-089 from the European Welding Federation (EWF) and International Institute of Welding (IIW), designed to be taught with Soldamatic IE, and also suitable for the acquisition of the SENSE certificate from the American Welding Society (AWS).

Soldamatic IE contents include theory, tests and welding practices ready to be performed in different difficulty levels, with or without help icons.

Upload your own welding courses or take advantage of the digital training content specifically developed for Soldamatic IE.

If you want more information about our contents, please visit our website <http://www.soldamatic.com/welding-contents/>

Contents provided by:



International  
Welding  
Experts



# 08. DATA SHEET

DIMENSIONS (WITOUT ACCESORIES)	420x237x535mm (16,53x9,25x21,06 in.)
WEIGHT (WITHOUT HELMET)	9,5 Kilograms (20,94 lbs)
WEIGHT (WITH HELMET)	10.8 Kilograms (23,80 lbs.)
WELDING PROCESSES SUPPORTED	GMAW (MIG/MAG) & FCAW G/S, SMAW (MMA Electrode), GTAW (TIG)
WELDING POSITIONS	PA, PB, PC, PD, PF/PG, PE, PH/PJ, HL045/JL045 - 1F, 2F, 3F, 4F, 1G, 2G, 3G, 4G, 5G, 5F, 6G, 6F
DEFAULT WELDING JOINTS INCLUDED	YES, Education Welding Joints: Overlapped plat, 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
ACESSORIES	STANDARD: AR Welding Mask, welding torches, filler rod, welding gloves OPTIONAL: Workstand, flightcase, GTAW (TIG) Pedal, Advanced Welding Multijoints, Industrial Welding Multijoints, classroom server including router and Wi-Fi antenna.
VOLTAGE SELECTION	YES
INTENSITY (AMPERAGE) SELECTION	YES
SHIELDING GAS SELECTION	YES
WIRE SPEED SELECTION	YES, in GMAW (MIG/MAG) and FCAW
COUPON MATERIAL SELECTION	Education: carbon steel Advanced and Industry: carbon steel, stainless steel, aluminium
COUPON THICKNESS SELECTION	YES: 3mm, 6mm, 10mm
POSSIBILITY TO USE OTHER THICKNESSES	YES: On demand for AWM / IWM Projects
ELECTRODE STICK / FILLER ROD DIAMETER SELECTION	GMAW : carbon and stainless steel: 0,8mm 1mm 1,2 mm GMAW : aluminium: 1mm 1,2mm SMAW : carbon and stainless steel: 2,5 mm 3,25mm 4mm GTAW : carbon steel, stainless steel and aluminium: 2mm 2,4 mm
ELECTRODE STICK / FILLER ROD SELECTION	GMAW : carbon steel: ER70S-6 stainless steel: E316LSi aluminium: ER5356 SMAW : carbon steel: E7018, E6010, E6013 stainless steel: E316L GTAW : carbon steel: ER70S-6 stainless steel: ER316L Aluminium: ER5356
MULTIPASS EXERCISE WITH DIFFERENT WELDING PROCESSES	YES
WELDING PATTERN / WEAVE	Straight, Triangle, Convex, Circle, Zigzag Push / Drag
TRANSFERENCE MODES	Carbon and stainless steel: Short & globular spray
DEFECTS ANALYZED	Porosity, splashing, 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
INTERNATIONAL PUBLISHERS CONTENT	YES, DVS, CESOL, Ludo Breemans, International Welder Course

LMS APPLICATION	Yes: manage students, create curricula and exercises and monitor the training program in real time.
CUSTOMIZED PRACTICES	YES, customized in Soldamatic E-Learning
STUDENTS PERSONALIZED PROFILE	YES, practices report and progression
POSSIBILITY TO TRY DIFFERENT SETTINGS AND THEIR EFFECTS IN THE WELDING BEAD	YES
VISION TECHNOLOGY	Augmented Reality
PIECE CAN BE MANIPULATED SEPARATELY	YES
REAL ENVIRONMENT DURING SIMULATION	YES
UNIT CAN BE USED WITH GLASSES	YES, the welding mask uses a screen
POWER SUPPLY	80-264 VAC 47-63Hz
PROCESSOR	Intel Core® i7
CHIPSET	Intel® H110 Express Chipset
RAM	4GB DDR4
GRAPHIC CARD	NVIDIA® GeForce GTX 950
HARD DISK	Solid State   64 GB MSATA
AUDIO	Realtek High Definition Audio
OPERATING SYSTEM	Seabery Operating System optimized for Soldamatic IE
DISPLAY SIZE	9,7"
DISPLAY RESOLUTION	HD LCD 1024 x 768 XGA
REAR PANEL PORTS	Screen: HDMI/Display Ports USB: 1x USB 2x USB 3.0 Connection: 2x LAN 2x Antennas Wi-Fi Dual Band Audio: Microphone & speakers ports Others: Robotics port
AR VISION MODULE RESOLUTION	HD LCD 4,8" HDMI Display input up to 1024x600 Ultra-low video distortion 24-bit True Colour
CAMERAS RESOLUTION (X2)	800X600
OPERATING TEMPERATURE	0 - 45°
HUMIDITY	10 - 80%
SUBSCRIPTION OPTIONS	YES: Annual or Lifetime
UPDATES	YES, online and offline Software updates & bugfixing (Same version) included in the license with no additional cost New system versions included in the annual license with no additional cost
REMOTE MAINTENANCE	YES
SPECIFIC CUSTOMER ADAPTATIONS ON DEMAND	YES
REGULATIONS	CE and FCC
CERTIFICATIONS	ISO 9001 Quality Management System ISO 14001 Environmental Management System
WARRANTY	1 year by default, up to 4 more years optional

MADE IN SPAIN

#### LANGUAGES AVAILABLE

English EN	Spanish ES	German DE	French FR	Portuguese BR	Russian RU	Chinese ZH
Hindi IN	Italian IT	Japanese JA	Turkish TR	Dutch NL	Korean KO	Thai TH
Polish PL	Czech CS	Indonesian ID	Hungarian HU	Romanian RO	Albanian SQ	Slovenian SL
Serbian SR	Latvian LV	Georgian KA	Vietnamese VI	Malaysian MS	Tamil TA	Telugu TE
Sinhalese SI						

#### SOLDAMATIC SERVER

RAM MEMORY	DDR4 4GB 2133 MHz 4GB 1.2V
MOTHERBOARD	Intel socket 1151
MICROPROCESSOR	Intel Core i3
POWER SUPPLY	550W 100-240Vac
HARD DISK	HDD 1Tb
NETWORK CARD	Gigabit Ethernet PCIe 10/100/1000Mbps



#### SOLDAMATIC E-LEARNING REQUIREMENTS

- Windows 64 Bits	Min High Sierra 10.13
- 2.2GHz 3MB	SSD: 128GB
- RAM: 4gb	Processor: 1,86 GHz Intel core 2 duo
- Display min: 1366x768	RAM: 2GB
- Graphic card specifications: 2GB VRAM DirectX 9 compatible graphic card	Graphic Card: NVIDIA GeForce 320M 256MB
NVIDIA GeForce 750 or better   GeForce 900	
Mobile series or better	
AMD Radeon HD 6000 series or better	
Radeon HD 7000 Mobile series or better	



Seabery is an international company pioneering the development of Augmented Reality (AR) for professional training.

We are leading the market of Augmented Reality training solutions thanks to our large worldwide network of partners within industry, institutions and education.

[SEABERYAT.COM](http://SEABERYAT.COM)



More info at  
[SOLDAMATIC.COM](http://SOLDAMATIC.COM)