SOLDAMATIC

AUGMENTED TRAINING TECHNOLOGY FOR WELDING

An innovative educational solution based on
Augmented Reality to enhance your training experience!

Catalogue

Release June 2016

www.soldamatic.com

Seabery

RELEASE YOUR TALENT

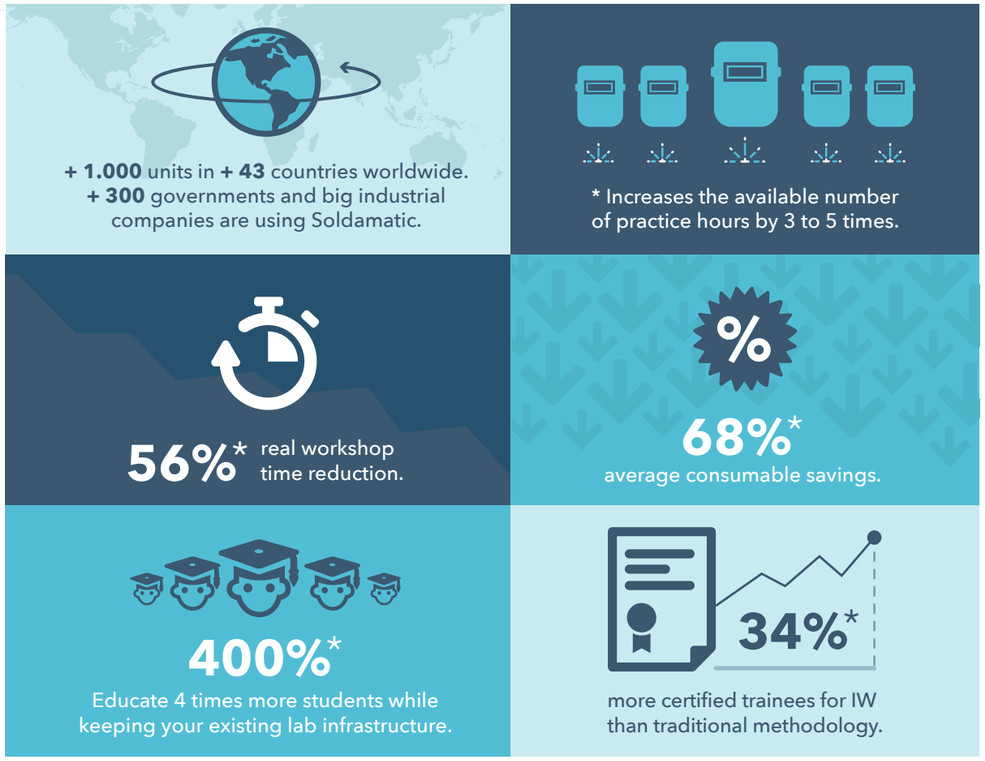
INDEX

Soldamatic is the first AR welding simulator worldwide, which together with the **Augmented Learning Management System (ALMS)** based on the concept of Augmented Training, allows training future qualified welders in a more sustainable and efficient way, saving time and reducing costs.

For list prices or to find your distributor give us a phone call (+34 959 807473) or write us to customer@seabery.es

01 WHY SOLDAMATIC?

Soldamatic Augmented Training enables training institutions to close the gap between the market demand for qualified welders and the available workforce of students and professionals seeking continued education programs:



*Real case-study of a Soldamatic classroom in a Welding Centre

• Improving the quality of the training by increasing the skill level of the trainees producing high qualified professionals locally, where they are needed.

• Providing an attractive technology for women and young professionals to get trained and open a door to the industrial sector.

• Green technology that helps reducing CO2 emissions, consumables and energy of the welding programs.

• Minimizing labour risks: avoiding physical risks for students until they acquire a skill level that minimizes injures while practicing.

02 CREDENTIALS

Auggie Awards Santa Clara, California

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

worlddidac

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

IIW INDIA DWE EKAM

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

hungexpo

Most Innovative Technology at Hungexpo. Budapest, Hungary.

Gartner

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

SILICON STROLL BOOTCAMP

Most Investable Startup. Europe, Silicon Stroll Bootcamp.

ABICOR BINZEL

Partnership with Abicor Binzel to promote healthy and safewelding together.

iiw AWS EWF CESOL SPANISH WELDING ASSOCIATION DVS MEDIA

SOLDAMATIC
AUGMENTED TRAINING TECHNOLOGY FOR WELDING

03 SOLDAMATIC COMPONENTS

SIMULATOR

The shape of the Augmented Reality simulator Soldamatic Augmented Training is inspired in real welding power sources. It supports all four manual arc welding: MMA/SMAW, MIG-MAG/GMAW, FCAW and TIG/GTAW. Its dimensions are 400 x 230 x 440 mm (15,75 x 7,9 x 17,3 in.) and it weights approximately 15 kilograms (without accessories).

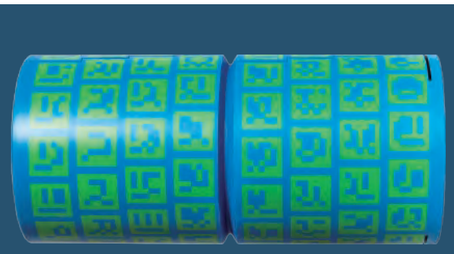
Technical features:

- **Storage system:** SSD 60GB
- **Graphic card:** last generation intel i7
- **Motherboard:** Asus RAM 4GB DDR3
- **Graphic processor:** GTX750
- **SbyOS:** Seabery Operating System optimized for Soldamatic
- **Internet connection:** WiFi+card Ethernet connection
- **Power supply:** 650W/120-240V

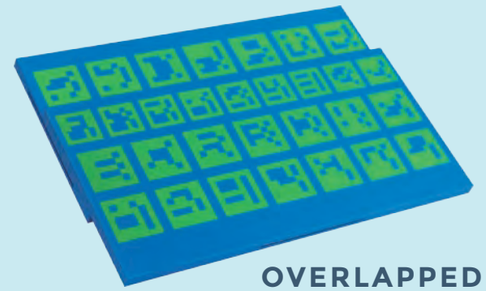
AUGMENTED REALITY HELMET

The ergonomic design of the Augmented Reality helmet allows you to display the environment of your welding space providing a similar effect of a real welding mask. The standard helmet shell is made of ABS plastic and is aimed to protect the vision modules of the AR helmet.

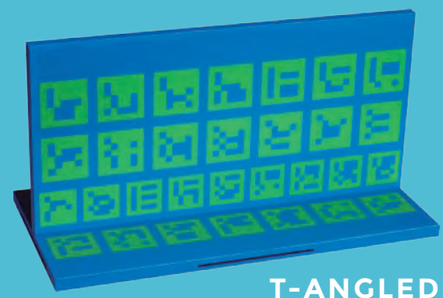
COUPONS



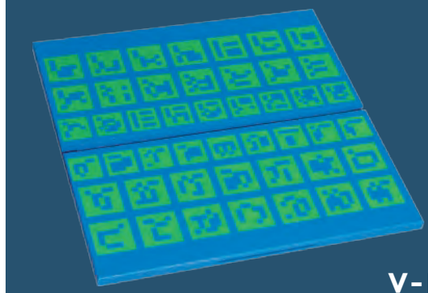
V-BUTT 6” PIPE



OVERLAPPED PLATE



T-ANGLED PLATE



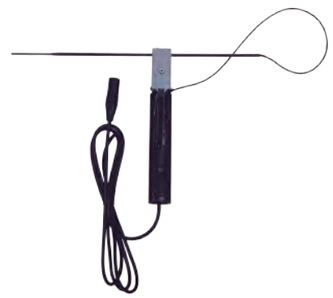
V-BUTT PLATE

T-ANGLED 6” PIPE TO PLATE

*Cutomized workpieces on request.

TORCHES

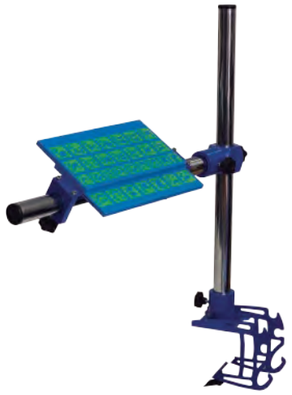
GMAW
(MIG/MAG)
ABICOR BINZEL®



ELECTRODE
(MMA)

GTAW
(TIG)
ABICOR BINZEL®

SOLDAMATIC
AUGMENTED TRAINING TECHNOLOGY FOR WELDING



OPTIONAL COMPONENTS

WORK STAND

Stainless Steel, iron and aluminum holder for the simulator welding coupons. You can adapt the work stand to different welding positions according to ISO 6947:2011 AND ANSI/AWS A3.0M/A3.0:2010 standards.

SERVER

ALU mid-tower case made of a high-quality material for a durable and lightweight chassis, with perfect no-sharp safe edges.

Server components:

- Motherboard
- Microprocessor i3
- HDD 500Gb
- RAM Memory 4Gb DIMM DDR3
- Network card PCI Express 1000Mbps
- Power supply 550 W

FLIGHT CASE

Secure transport case for the simulator and its accessories. Specially designed for Soldamatic, it is divided into two parts and has four wheels to facilitate its transport. The upper case contains Soldamatic and the Augmented Reality Helmet and the lower is for the accessories (torches, electrode, coupons, etcetera).

HW PARTS

COMPONENTS	STANDARD	OPTIONAL
SOLDAMATIC POWER SOURCE	X	
AUGMENTED REALITY MASK	X	
WELDING TORCHES:		
SMAW (ELECTRODE)	X	
GMAW (MIG/ MAG)	X	
FCAW	X	
GTAW (TIG)	X	
AR ELECTRODE STICK	X	
AR FILLER ROD (FOR TIG)	X	
WORK PIECES (COUPONS):		
T-ANGLED PLATE	X	
OVERLAPPED PLATE	X	
V-BUTT PLATE	X	
V-BUTT PIPE 6"	X	
T-ANGLED 6" PIPE TO PLATE	X	
SOLDAMATIC SERVER FOR CLASSROOM CONFIGURATION		X
WIFI ROUTER	X	
ACCESORIES:		
WELDING GLOVES	X	
WORK STAND		X
SECURE TRANSPORT FLIGHTCASE		X

04 WELDING FEATURES

Soldamatic includes by default and free the Carbon Steel package in its software configuration (all kinds of electrode sticks, wires and filler rods). The Stainless Steel and Aluminum packages are available on request.

	APPLY TO WELDING PROCEDURE					STANDARD	OPTIONAL
	MMA	GMAW		FCAW	GTAW		
	SMAW	MAG	MIG		TIG		
JOINTS							
GROOVE:							
PLATE V-BUTT	✓	✓	✓	✓	✓	X	
PIPE V-BUTT	✓	✓	✓	✓	✓	X	
FILLET							
PLATE T-ANGLE	✓	✓	✓	✓	✓	X	
PIPE TO PLATE T-ANGLE	✓	✓	✓	✓	✓	X	
LAP							
PLATE OVERLAPPED	✓	✓	✓	✓	✓	X	
WELDING POSITIONS (STANDARDS ISO 6947:2011 AND ANSI/AWS A3.0M/A3.0:2010)							
GROOVE WELDS							
PA-1G, PC-2G, PF/PG-3G, PE-4G, PF-5GHL045/JL045-6G	✓	✓	✓	✓	✓	X	
FILLET WELDS							
PA-1F, PB-2F/2FR, PF/PG-3F, PD-4F, PF-5F	✓	✓	✓	✓	✓	X	
POWER SOURCE FEATURES							
AC/DC	✓				✓	X	
DC+/DC- (POLARITY)	✓			✓		X	
VOLTAGE		✓	✓	✓		X	
AMPERAGE	✓	✓	✓	✓	✓	X	
WIRE SPEED		✓	✓	✓		X	
ELECTRIC-ARC STRIKING MODES							
SCRATCHING - LIFT ARC	✓				✓	X	
HIGH FRECUENCY		✓	✓	✓	✓	X	
SHIELDING GASES							
CO2				✓		X	
ARGON-CO2		✓	✓			X	
ARGON					✓	X	
CO2		✓	✓				X
ARGON-O2		✓	✓				X
ARGON-CO2				✓			X
BASE MATERIALS							
CARBON STEEL	✓	✓	✓	✓	✓	X	
STAINLESS STEEL	✓	✓	✓	✓	✓		X
ALUMINUM	✓	✓	✓	✓	✓		X
THICKNESSES							
3MM - 1/8IN.	✓	✓	✓	✓	✓	X	
6MM - 1/IN.	✓	✓	✓	✓	✓	X	
10MM - 3/8IN.	✓	✓	✓	✓	✓	X	

WELDING FEATURES			APPLY TO WELDING PROCEDURE					STANDARD	OPTIONAL
			MMA	GMAW		FCAW	GTAW		
			SMAW	MAG	MIG		TIG		
FILLER MATERIALS									
ELECTRODE STICKS									
CARBON STEEL	BASIC	2,50MM - 0.098IN.	✓					X	
	BASIC	3,25MM - 0.127IN.	✓					X	
	BASIC	4,00MM - 0.157IN.	✓					X	
	RUTILE	2,50MM - 0.098IN.	✓					X	
	RUTILE	3,25MM - 0.127IN.	✓					X	
	RUTILE	4,00MM - 0.157IN.	✓					X	
	CELULOSIC	2,50MM - 0.098IN.	✓					X	
	CELULOSIC	3,25MM - 0.127IN.	✓					X	
	CELULOSIC	4,00MM - 0.157IN.	✓					X	
STAINLEES STEEL	316	2,50MM - 0.098IN.	✓						X
	316	3,25MM - 0.127IN.	✓						X
	316	4,00MM - 0.157IN.	✓						X
ALUMINUM	E5356	2,50MM - 0.098IN.	✓						X
	E5356	3,25MM - 0.127IN.	✓						X
	E5356	4,00MM - 0.157IN.	✓						X
WIRES									
CARBON STEEL	SOLID WIRE ER 70S-6	0,80MM - 0.031IN.		✓	✓			X	
	SOLID WIRE ER 70S-6	1,00MM - 0.039IN.		✓	✓			X	
	SOLID WIRE ER 70S-6	1,20MM - 0.047IN.		✓	✓			X	
	SOLID WIRE E71T1	1,00MM - 0.039IN.				✓		X	
	SOLID WIRE E71T1	1,20MM - 0.047IN.				✓		X	
	CORED WIRE E71T7	1,00MM - 0.039IN.				✓		X	
STAINLESS STEEL	SOLID WIRE ER 315LSI	0,80MM - 0.031IN.		✓	✓				X
	SOLID WIRE ER 315LSI	1,00MM - 0.039IN.		✓	✓				X
	SOLID WIRE ER 315LSI	1,20MM - 0.047IN.		✓	✓				X
ALUMINUM	SOLID WIRE ER 5356	1,00MM - 0.039IN.		✓	✓				X
	SOLID WIRE ER 5356	1,20MM - 0.047 IN.		✓	✓				X
FILLER RODS									
CARBON STEEL		2,00MM - 0.078IN.					✓	X	
		2,40MM - 0.094IN.					✓	X	
STAINLEES STEEL	316L	2,00MM - 0.078IN.					✓		X
	316L	2,40MM - 0.094IN.					✓		X
ALUMINUM	ALMG 5356	2,00MM - 0.078IN.					✓		X
	ALMG 5356	2,40MM - 0.094IN.					✓		X
TIG (GTAW) TUNGSTEN ELECTRODE:									
	TUNGSTEN - LANTHANUM ALLOY						✓	X	
WELDING SYSTEM:									
	2 TIMES			✓	✓	✓	✓	X	
	4 TIMES			✓	✓	✓	✓	X	
ANALYSIS AND DIAGNOSTIC:									
	ANALYSIS MODULE		✓	✓	✓	✓	✓	X	

05 AUGMENTED TRAINING

Augmented Training represents a new paradigm for vocational, technical and industrial training. An approach that combines innovative technology and education.

TEACHER SOFTWARE

Easy-to-use Teacher Software that manages the training process and allows teachers to develop their own content. It also enables the instructor to monitor in real time the activity of each student, assess it, and generate detailed reports.

E-LEARNING PLATFORM

For theoretical and multimedia learning contents. It is synchronized with the Teacher Software and allows teachers to perform tests and online tutoring. The platform can be accessed from any mobile device or PC.

06 LEARNING CONTENTS

Theoretical and practical contents compliant with the specifications and guidelines of the International Welder Program by the IWS, the Sense Program by the AWS, German DVS Media...

ALL TRAINING PROGRAMS ARE AVAILABLE IN ENGLISH AND SPANISH.

01 International Fillet Welder.
Manual Metal Arc Welding (MMA). Carbon Steel. ISO STANDARDS

02 International Plate Welder.
Manual Metal Arc Welding (MMA). Carbon Steel. ISO STANDARDS

03 International Tube/Pipe Welder.
Manual Metal Arc Welding (MMA). Carbon Steel. ISO STANDARDS

04 International Fillet Welder.
Metal Active Gas Welding (MAG). Carbon Steel. ISO STANDARDS

05 International Plate Welder. Metal Active Gas Welding (MAG).
Carbon Steel. ISO STANDARDS

06 International Tube/Pipe Welder.
Metal Active Gas Welding (MAG). Carbon Steel. ISO STANDARDS

07 International Fillet Welder.
Flux Cored Arc Welding (FCAW). Carbon Steel. ISO STANDARDS

08 Soldador Internacional de uniones a tope.
Procedimiento hilo tubular (FCAW). Acero al carbono. ISO ESTANDAR

09 International Plate Welder.
Flux Cored Arc Welding (FCAW). Carbon Steel. ISO STANDARDS

10 International Tube/Pipe Welder.
Flux Cored Arc Welding (FCAW). Carbon Steel. ISO STANDARDS

11 International Fillet Welder.
Tungsten Inert Gas Welding (TIG). Carbon Steel. ISO STANDARDS

12 International Plate Welder.
Tungsten Inert Gas Welding (TIG). Carbon Steel. ISO STANDARDS

13 International Tube/Pipe Welder.
Tungsten Inert Gas Welding (TIG). Carbon Steel. ISO STANDARDS

DVS MEDIA (GERMANY)

01 DVS aligned GMAW-Curriculum - EN

02 DVS angelehntes MAG-Curriculum - DE

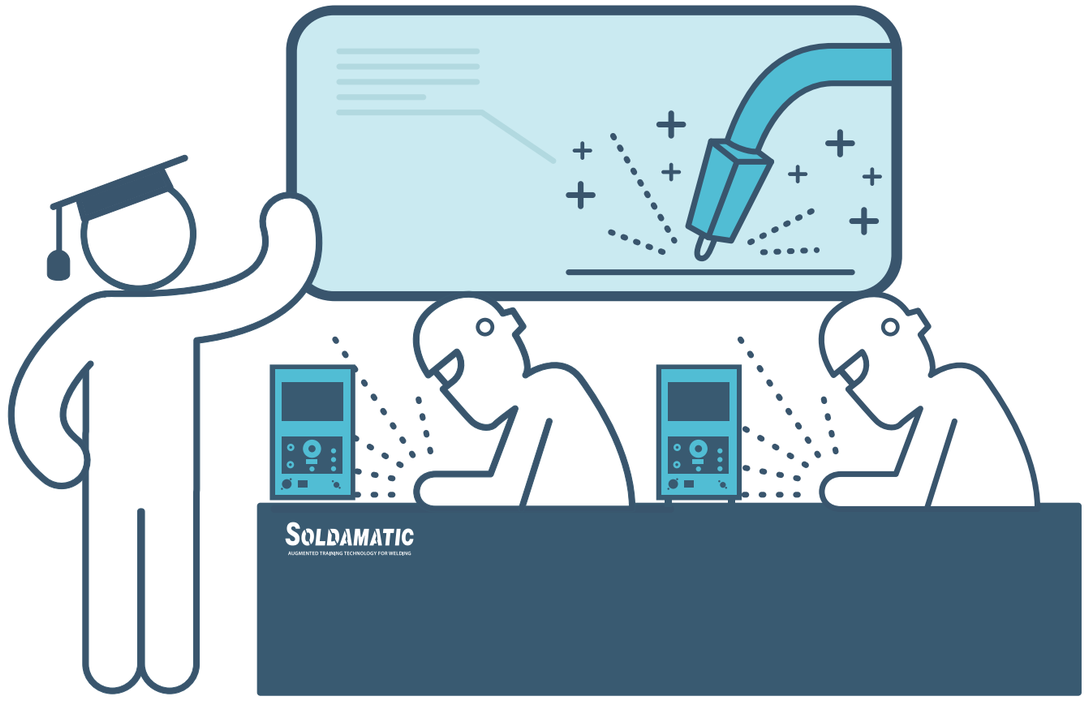
LUDO BREEMANS (BELGIUM)

01 GMAW

02 SMAW

03 MIG MAG

04 EMBE



07 DATA SHEET

SUPPORTED WELDING PROCESSES	GMAW, FCAW, SMAW and GTAW
WELDING COUPONS	V-butt 6" pipe; Overlapped plate; Tangled plate; V-butt plate and T-angled 6" pipe to plate
WELDING POSITIONS (ANSI/AWS A3.0M/A3.0:2010)	1F, 2F, 3F, 4F, 1G, 2G, 3G, 4G, 5G, 6G
ORIENTATIONS	Flat, horizontal, vertical, 45°, overhead and pipe
VOLTAGE SELECTION	YES
INTENSITY (AMPERAGE) SELECTION	YES
POLARITY SELECTION	YES
SHIELDING GAS SELECTION	YES
WIRE SPEED SELECTION	YES, in GMAW and GTAW
CURRENT SELECTION	YES. Alternating Current/Direct Current
COUPON MATERIAL SELECTION	STANDARD: carbon steel OPTIONAL: stainless steel, aluminum
COUPON THICKNESS SELECTION	YES
ELECTRODE STICK SELECTION	STANDARD: base, rutile optional: celulosic, etc
ELECTRODE STICK DIAMETER SELECTION	YES
FILLER ROD SELECTION	YES
ANALYSIS MODULE	YES
HELP MODE FOR STUDENTS	YES
VISION TECHNOLOGY	Augmented Reality
POWER SUPPLY	100-240V
DIMENSIONS (WITHOUT ACCESORIES)	400 x 230 x 440 mm (15,75 x 7,9 x 17,3 in.)
WEIGHT (WITHOUT HELMET)	12 Kilograms (26.4 lbs)
WEIGHT (WITH HELMET)	13 Kilograms (28.6 lbs.)
ACCESORIES INCLUDED	STANDARD: Augmented Reality Helmet, cables. OPTIONAL: Work stand, flight case and server.
PROCESSOR	Intel Core® i7 ultimate generation 3.6 GHZ Speed Cache 8MB
CHIPSET	Intel® H81 Express Chipset
RAM	4GB (2x2048Mb) DIMM DDR3
GRAPHIC CARD	2048 MB GDDR5
HARD DISC	Solid State | 60 GB SSDNow |SATA2 2.5"
AUDIO	Realtek® ALC887 8-Channel | High Definition Audio
OPERATING SYSTEM	Seabery Operating System optimized for Soldamatic v.2.4
DISPLAY SIZE	9,7''
DISPLAY RESOLUTION	HD LCD 1024x768 XGA

PORT FOR EXTERNAL DISPLAY/PROJECTOR	VGA
AR VISION MODULE RESOLUTION	HD LCD 5.6" VGA Display input up to 1024X768 Ultra-low video distortion 24-bit True Colour | Similar to viewing a 67- inch screen from a distance of 10 feet (3 metres)
CAMERAS RESOLUTION (X2)	752 x 480 a 60 fps.
CAMERAS POWER SUPPLY	5 V
OPERATING TEMPERATURE	0 - 45°
HUMIDITY	10 - 80%
REMOTE MAINTENANCE AND UPGRADES	YES
MASTER SOFTWARE: MINIMUM HARDWARE REQUIREMENTS	Windows Vista 7/8/10 | Processor 32 bits (x86) 2.2GHz 3MB | RAM 2GB | Graphic 512MB DirectX 9.0c compatible. NVidia GeForce GT440 or higher ATI Radeon HD5000 or higher | HDD | 250MB
SERVER HARDWARE	Processor Intel i3 ultimate generation| 3.7 GHZ | RAM 4 GB
SPECIFIC CUSTOMER ADAPTATIONS ON DEMAND	YES
REGULATIONS	CE and FCC
CERTIFICATIONS	ISO 9001 Quality Management System ISO 14001 Environmental Management System

Seabery

RELEASE YOUR TALENT

Seabery is a global technological company pioneering the development of Augmented Reality applied to professional training.

Soldamatic is the first AR welding simulator worldwide, which together with the Learning Management System (LMS) based on the concept of Augmented Training allows training future qualified welders in a more sustainable and efficient way.

SEABERY.ES

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More info at
SOLDAMATIC.COM

SPANISH WELDING ASSOCIATION

worlddidac

Auggie Awards

SILICON STROLL BOOTCAMP