



State of the Art,  
Turnkey, Scalable  
and effective  
welding training  
solution powered by  
Augmented Reality



# Data Sheet <sup>4.0</sup>



A SEABERY SOLUTION

DIMENSIONS (WITHOUT ACCESSORIES)	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			
OTHER WELDING POSITIONS IN AWMS	6GR in AWM011 (Pipeline 6GR)			
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			
ADDITIONAL WELDING JOINTS AVAILABLE	YES, 15 Additional Advanced Welding Multijoints available			
REAL WELDING TORCHES	YES, by Abicor Binzel			
WELDING SOUNDS	Recorded in a real welding lab			
ACCESSORIES	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, 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			
PLUG WELDING	YES, in AWM005 (Automotive Thin Plates)			
COUPON MATERIAL SELECTION	Education: carbon steel Education+, Advanced and Industry: carbon steel, stainless steel, aluminium			
GAS COMPOSITION	MATERIAL	GMAW	GTAW	FCAW
	Carbon Steel	Argon - Co <sup>2</sup> , CO <sup>2</sup>	Helium*	Argon - Co <sup>2</sup> , CO <sup>2</sup>
	Aluminium	Argon	Argon	-
	Stainless Steel	Argon - O <sup>2</sup>	Argon	-
COUPON THICKNESS SELECTION	YES: 3mm, 6mm, 10mm			
OTHER THICKNESSES AVAILABLE IN DIFFERENT AWM	1mm, 8mm, 9.5mm, 11mm, 15mm, 16mm, 20mm, 25mm			
POSSIBILITY TO USE OTHER THICKNESSES	YES: On demand for IWM Projects			

ELECTRODE STICK /FILLER ROD DIAMETER SELECTION	GMAW: carbon and stainless steel: 0.8mm 1mm 1.2 mm aluminium: 1 mm 1.2mm SMAW: carbon and stainless steel: 2.5 mm 3.25mm 4mm GTAW: carbon steel, stainless steel and aluminium: 2mm 2.4 mm 3.2 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
OPEN ROOT WELDING	YES, in AWM006 (Shipbuilding open root) and AWM013 (Open root with v-groove)
CERAMIC BACKING PLATE WELDING	YES, in AWM007 (Shipbuilding Backing Strip)
TRANSFERENCE MODES	Short circuit, globular, spray, pulsed-arc*
DEFECTS ANALYZED	Porosity, spatter, slag inclusion, burnthrough*
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
INTERNATIONAL PUBLISHERS CONTENT	YES, DVS, CESOL, Ludo Breemans, International Welder Course, Welder Homologation Courses
PREDEFINED WELDING EXERCISES	YES, 57 practices

\* Feature available in AWMs

LMS APPLICATION	YES, Soldamatic E-Learning: manage students, create curricula and exercises and monitor the training and virtual classroom in real time within the same training centre or online, live chat
LMS APPLICATION: STUDENTS ACCESS	YES, Visualize contents, progress, take tests, live chat
LMS APPLICATION: LIVE CHAT	YES, available for teachers and students
LMS APPLICATION: SHAREVIEW	Teachers can see what the students see in real time in their laptop, either within the same classroom or online
REMOTE TRAINING / DISTANCE LEARNING	YES, synchronous and asynchronous options. Teachers can monitor students from different training centers online, seeing in real time their progress and the welders' point of view while welding
STUDENT PERSONALIZED PROFILE	YES, practices report and progression
CUSTOMIZED PRACTICES	YES, customized in Soldamatic E-Learning
ON DEMAND TAILOR MADE COUPONS	YES, including the physical workpiece
POSSIBILITY TO TRY DIFFERENT SETTINGS DURING THE EXERCISE AND THEIR EFFECTS IN THE WELDING BEAD	YES
VISION TECHNOLOGY	Augmented Reality
POSSIBILITY TO CONNECT THE UNIT TO A ROBOTIC ARM	YES, for more information on the robots available, contact us
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	100-240V
PROCESSOR	Intel® Core™ i5 10 <sup>th</sup> gen
CHIPSET	Intel® Q470E
RAM	16 GB (2 x 8GB Dual-Channel) DDR4 2400Mhz
GRAPHIC CARD	GTX 1050Ti
HARD DISK	M.2 SSD 64GB
AUDIO	Realtek High Definition Audio
OPERATING SYSTEM	Seabery Operating System optimized for Soldamatic IE 4.0
DISPLAY SIZE	9.7"
DISPLAY RESOLUTION	HD LCD 1024 x 768 XGA
BACK PANEL PORTS	Screen: HDMI/Display Ports USB: 4 x USB 3.2 Gen 1 Connection: 2x LAN 2x Antennas Intel® WiFi6 Dual Band Audio: Microphone & speakers ports Others: Robotics port

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	0 - 45°
HUMIDITY	10 - 80%
SUBSCRIPTION OPTIONS	YES: Anual or Lifetime
UPDATES	YES, online and offline Software updates and bugfixing (Same version) included in the license with no additional cost New system versions included in the anual license with no additional cost
REMOTE MAINTENACE	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

#### SOLDAMATIC SERVER

RAM MEMORY	4GB DDR4 2400MHz
MOTHERBOARD	ASUS H110M-D
MICROPROCESSOR	Intel Core I3-7100
POWER SUPPLY	550W 100-240Vac
HARD DISK	1TB SATA3
NETWORK CARD	Gigabit Ethernet PCIe 10/100/1000Mbps

#### SOLDAMATIC E-LEARNING REQUIREMENTS

- WINDOWS 64 BITS	OS 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 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	Graphic Card: NVIDIA Geforce 320M 256MB

#### LANGUAGES AVAILIABLES

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) / SINGHALESE (SI) / KAZAKH (KZ) / SWEDISH (SV) / DANISH (DA) / LITHUANIAN (LT)

MADE IN SPAIN