




SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

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

POWERED BY **AUGMENTED REALITY**





CONTEXT

GLOBAL SHORTAGE OF WELDERS



is **well documented** and **increasing**, it **requires** the need to recruit the future generation of welders

TRADITIONAL WELDING TRAINING



is **inefficient**, risky, costly and **polluting the environment**

NEW GENERATIONS



demand modern and engaging training solutions



HyperReal-SIM ®

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



Real welding mask and gloves



Welding bead quality & Settings



Real torches & gun with haptic technology



Remastered HD Welding Sound



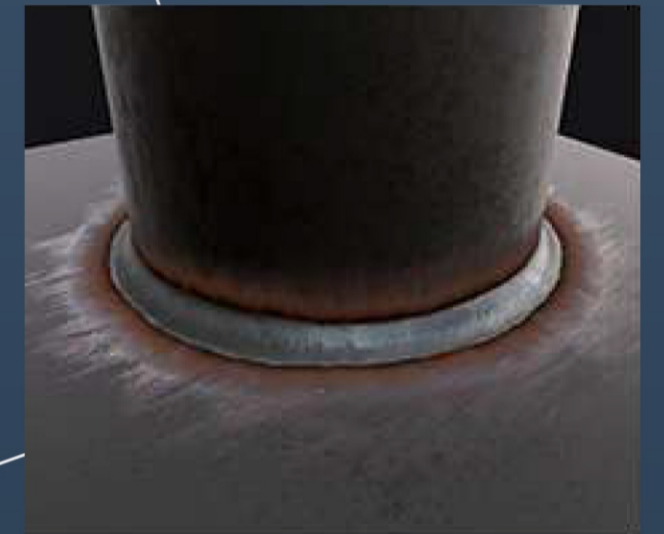
Welding Joints based on industry best practices



Precisely calibrated



Power source-like controls



Examples of Soldamatic's real time welding simulation

STATE OF THE ART TECHNOLOGY

Soldamatic is the world's leading simulated welding training with state-of-the-art, scalable, proven effective and proprietary, augmented reality-based training solution, training solution, created by welders for welders with standardized welding curricula and official certification content.

Soldamatic is being used in **80+ COUNTRIES**

Soldamatic is available in **33 LANGUAGES**



56%
decrease of real time in learning



68%
decrease of laboratory costs



GREEN TECHNOLOGY



84%
less accidents



34%
more certified welders than traditional methodology



ALL THE WELDING PARAMETERS, VISUALS AND SOUND HAVE BEEN **CALIBRATED AT THE REAL WELDING LAB**

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 capability
- 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

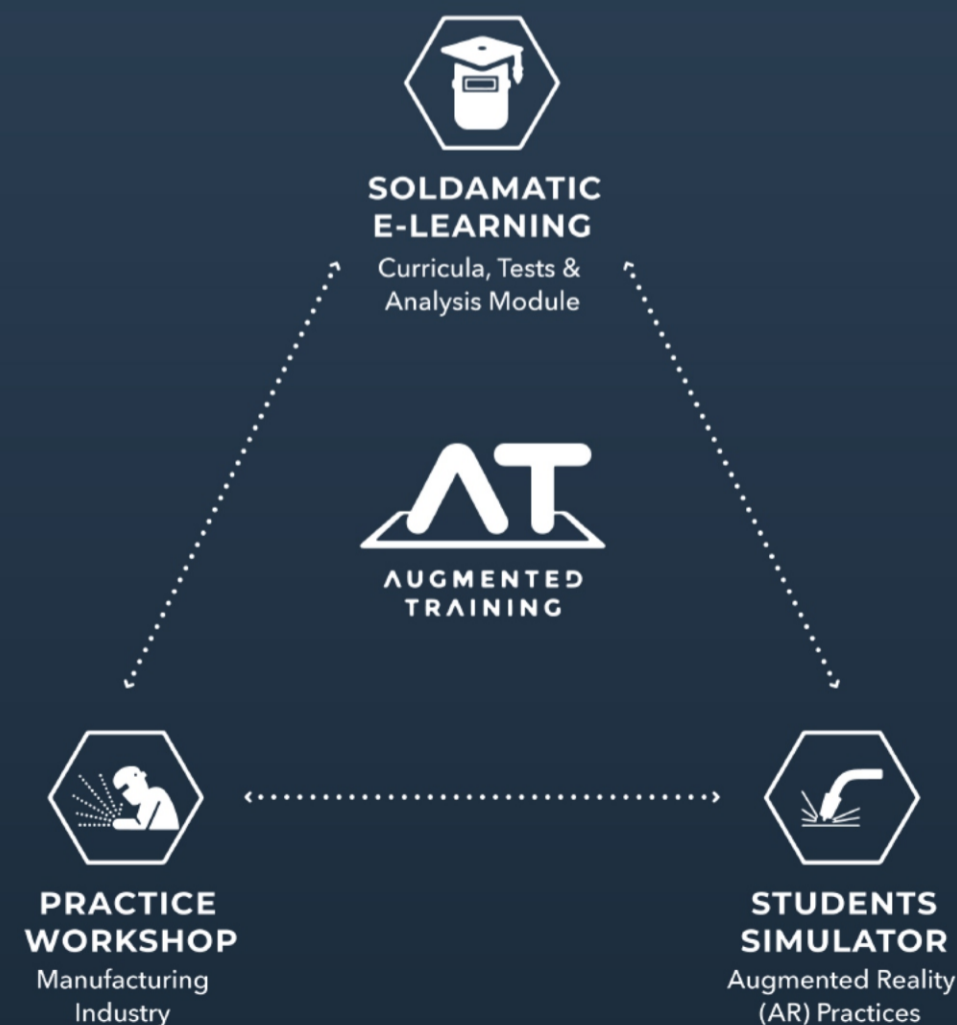
- New educational paradigm
- Combine AR simulation with real welding practice
- Allows instructors to manage numerous courses and students



Soldamatic



Real Welding



AUGMENTED LAB

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, until they acquire the abilities and skills necessary to move to a real environment.

Augmented Lab Real Workshop



Content by International Publishers



High quality welding curricula developed by international experts to be performed with Soldamatic IE.



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

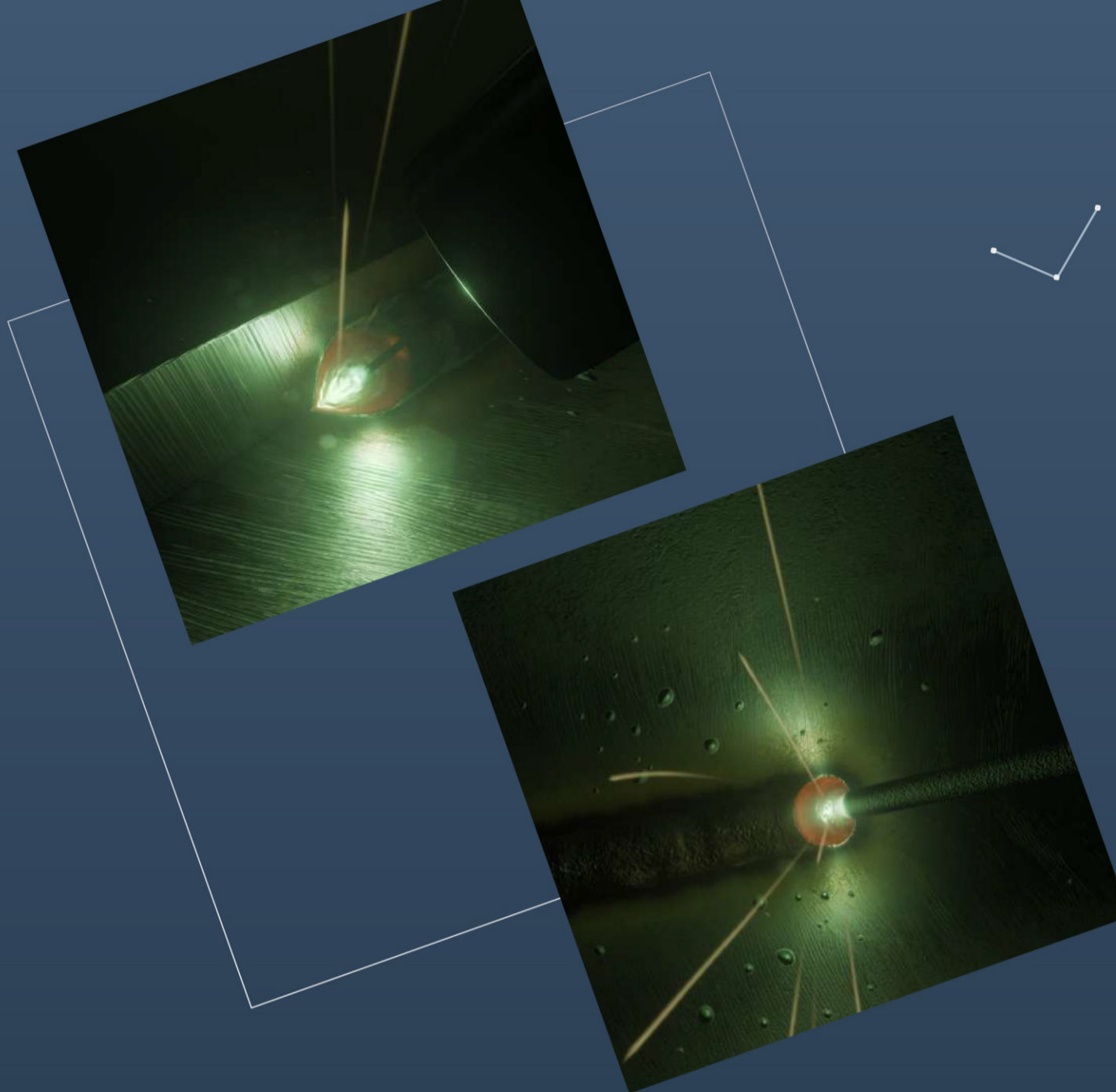
- Create and manage courses: Theory, practice and tests
- Review exercises and generate statistics and reports
- Share exercises, review the virtual classroom and chat live
- Students have their own access to their courses, contents, practices and reports



WHAT'S NEW

HIGH REALISM GRAPHIC BASED ON PBR

The graphics are based on photorealism and physical rendering (PBR), which uses realistic shading and lighting models along with measured surface values to accurately represent real-world materials.



ADVANCED TORCHES

- New Advance Torches with - New AWM
 - > New camera added to the tip to show a new point of view on the part for complex positions
 - > Accuracy of solution improved due to use of multiple cameras
 - > Icons have been added to the simulation to show detailed detection
 - > SMAW electrode holder can be rotated to accommodate better to different welding positions
- Focus on TIG/GTAW Advance Torches : Patented New Advanced GTAW rod that simulates dipping technique



METALS

CARBON STEEL

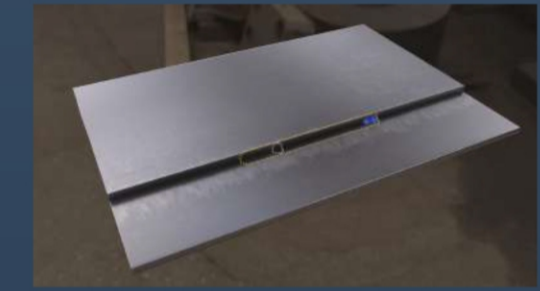
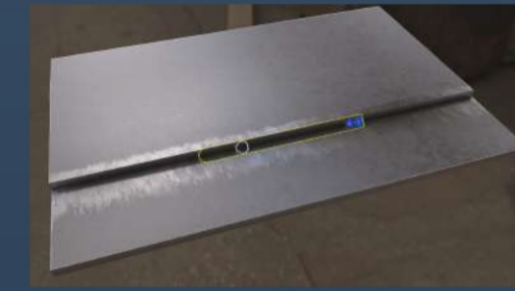
STAINLESS STEEL

ALUMINUM

Real Piece



New Soldamatic



WELDS

SMAW

GMAW

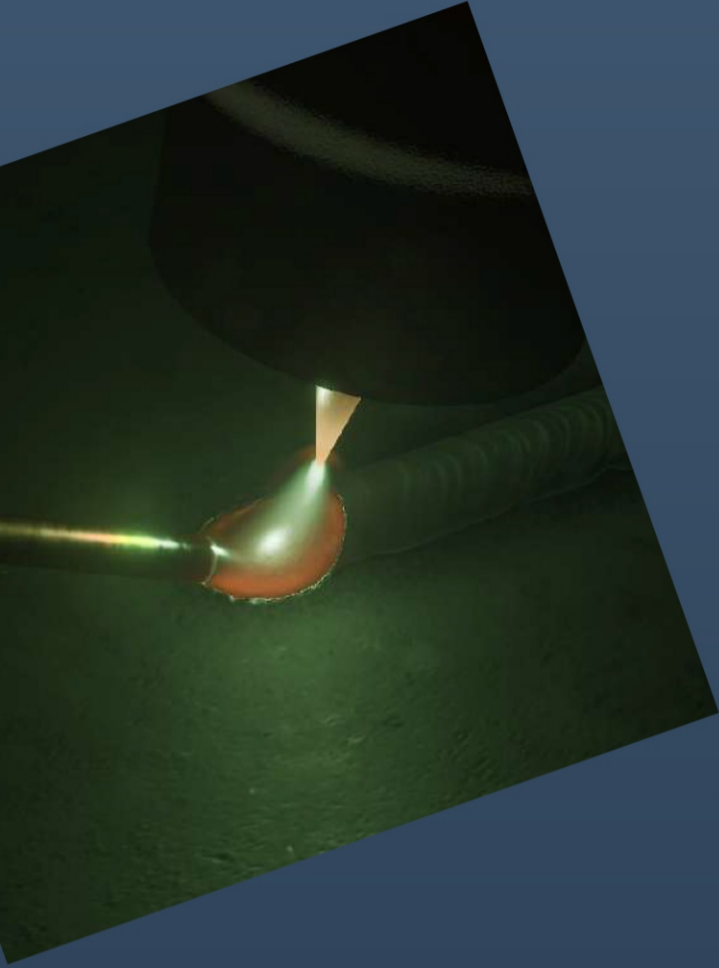
FCAW

New Soldamatic

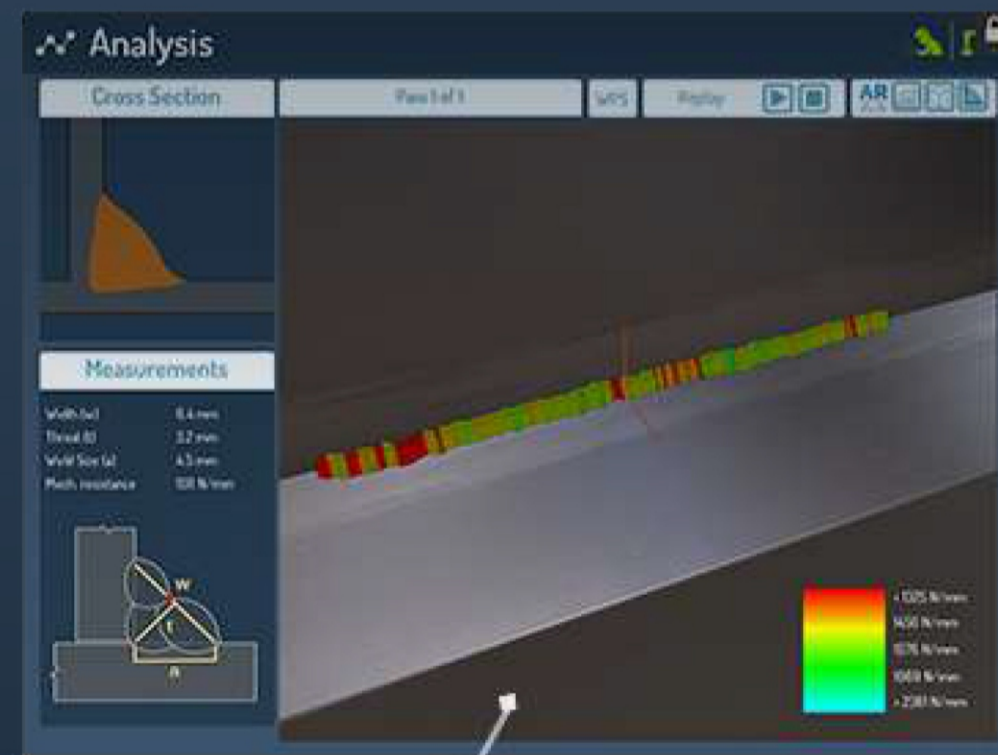
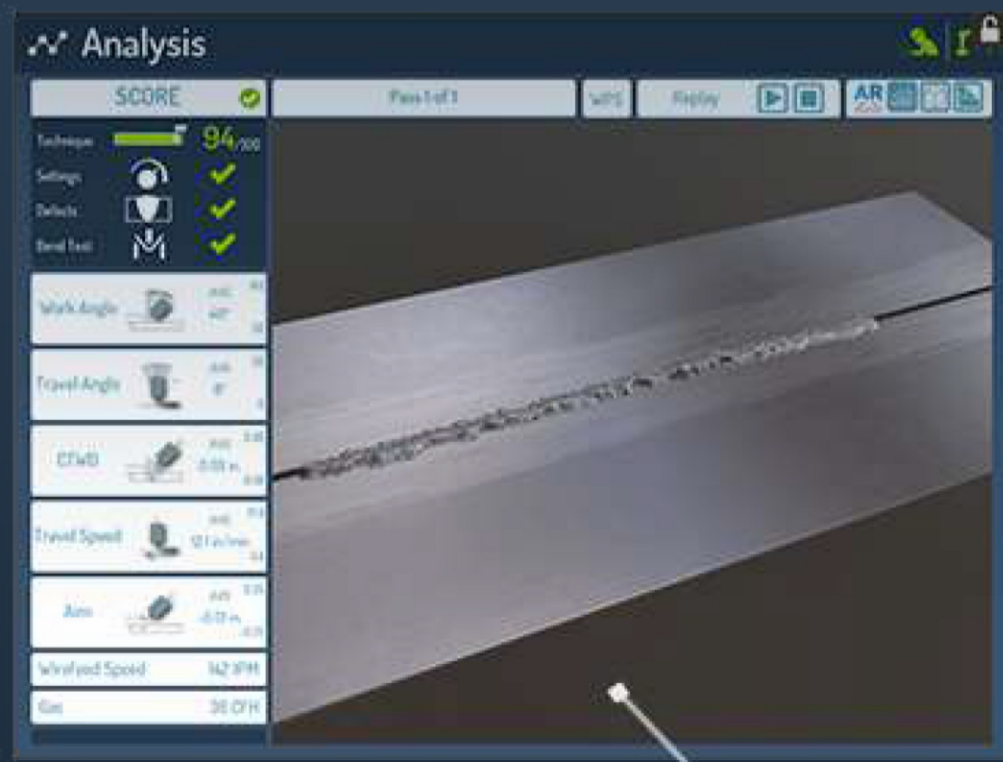


GTAW IMPROVEMENT

- Improved weld bead geometry and surface detail
- Overhauled weld puddle simulation for a more true-to-life TIG welding experience. See how the filler rod melts into the weld puddle
- Enhanced weld arc graphics representative of the real TIG welding process
- New real time guide to help students learn how to establish weld puddle and use filler rod to lay weld bead of uniform size
- New Advanced GTAW rod that simulates dipping technique

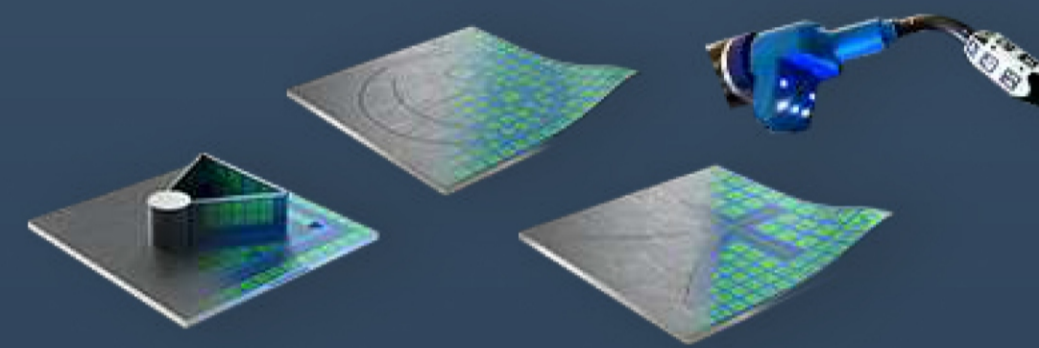


CROSS SECTION, MECHANICAL RESISTANCE AND BEND TEST



ROBOTICS

- Educational Partnership with COMAU & KUKA
- FANUC & ABB
- New Robotics Torches Options
 - 1) Robotic vision module
 - 2) Robotic educational
 - 3) Robotics advanced torch
- New robots connection (Hiwin, Staubli)
- New User interface improvements
- New I/O mapping signals
- New AWMs based on International Welding Association

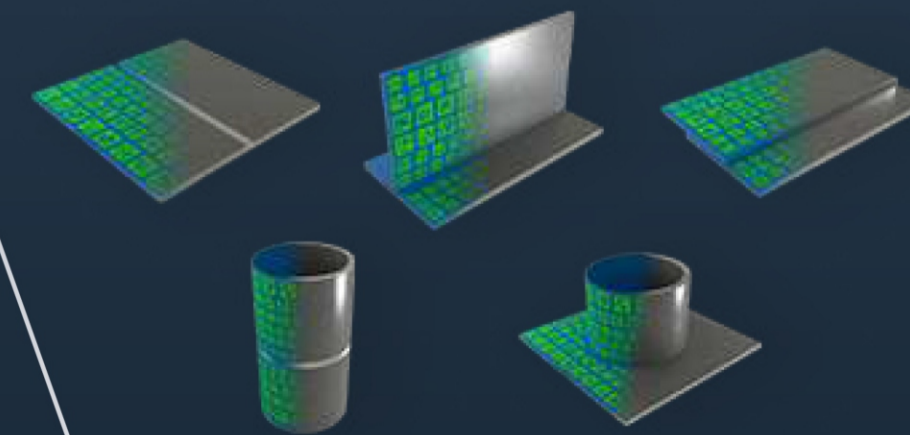


WELDING JOINTS

MOST COMPREHENSIVE AND ADVANCED WELDING TRAINING JOINTS TO TRAIN EVERY TYPE AND LEVEL OF WELDER, AND NEARLY EVERY WELDING PROCESS SEQUENCE

EDUCATIONAL WELDING JOINTS

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



INDUSTRIAL WELDING MULTIJOINTS

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



ADVANCED **WELDING MULTIJOINTS**

DESIGNED FOR VERTICAL SECTORS AND ADVANCED WELDERS.



GMAW (MIG/MAG)
Carbon Steel
Positions: PB & PF

Foundational Ambidex

AWM-001



GMAW (MIG/MAG)
Carbon Steel
Positions: PB, PF, PD & PH

Foundational Complex Sequence

AWM-002



GMAW (MIG/MAG)
Carbon Steel
Positions: PB, PF, PD & PA

Heavy Industry Specific Practices

AWM-003



GMAW (MIG/MAG)
Carbon Steel
Positions: PB

Automotive Chassis Assembly

AWM-004



GMAW (MIG/MAG)
Carbon Steel
Positions: PA, PB, PC, PD, PE, PF

Automotive Thin Plates

AWM-005



GMAW (MIG/MAG)
Carbon Steel
Positions: PF

Shipbuilding Open Root

AWM-006



GMAW (MIG/MAG)
Carbon Steel
Positions: PF

Shipbuilding Backing Strip

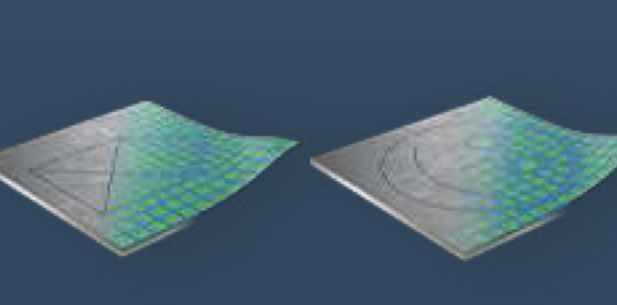
AWM-007



GMAW (MIG/MAG) & FCAW
Carbon Steel
Positions: 6G

Pipeline 6' Schedule 80

AWM-008



GMAW (MIG/MAG)
Carbon Steel
Positions: PA

Robotic Foundational "House" Robotic Foundational "Face"

AWM-009 /AWM-10



GMAW (MIG/MAG)
Carbon Steel
Positions: 6G

Pipeline 6GR

AWM-011



GMAW (MIG/MAG)
Carbon Steel
Positions: 6G

Pipeline Monster Coupon

AWM-012



GMAW (MIG/MAG)
Aluminium
Positions: PA

Open root with V-Groove

AWM-013



GMAW (MIG/MAG)
Carbon Steel
Positions: PA

Foundational Multilap

AWM-014



GMAW (MIG/MAG)
Carbon Steel
Positions: PA

Robotic Foundational Assembly

AWM-015



GMAW (MIG/MAG)
Carbon Steel
Positions: PB, PF, HLO45

Robotics Foundational Complex Sequence

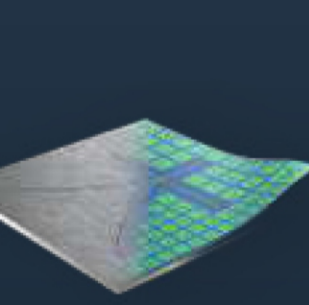
AWM-016



GMAW (MIG/MAG)
Carbon Steel
Positions: pb, pf

Robotics AWS CRAW

AWM-017



GMAW (MIG/MAG)
Carbon Steel
Positions: PA

Robotics Foundational "Chinese character - 大"

AWM-018



GMAW (MIG/MAG)
Carbon Steel
Positions: PB, PF

Robotics AWS CRAW

AWM-019



GMAW, FCAW, SMAW, GTAW
Carbon Steel
Positions: PA, PB, PC, PD/PE

AWS EDU coupons

AWM-020



SOLDAMATIC ROBOTICS

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

SOLDAMATIC ROBOTICS IS CONNECTED TO A **ROBOT ARM**



Training operators in robot programming for specific welding routines



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



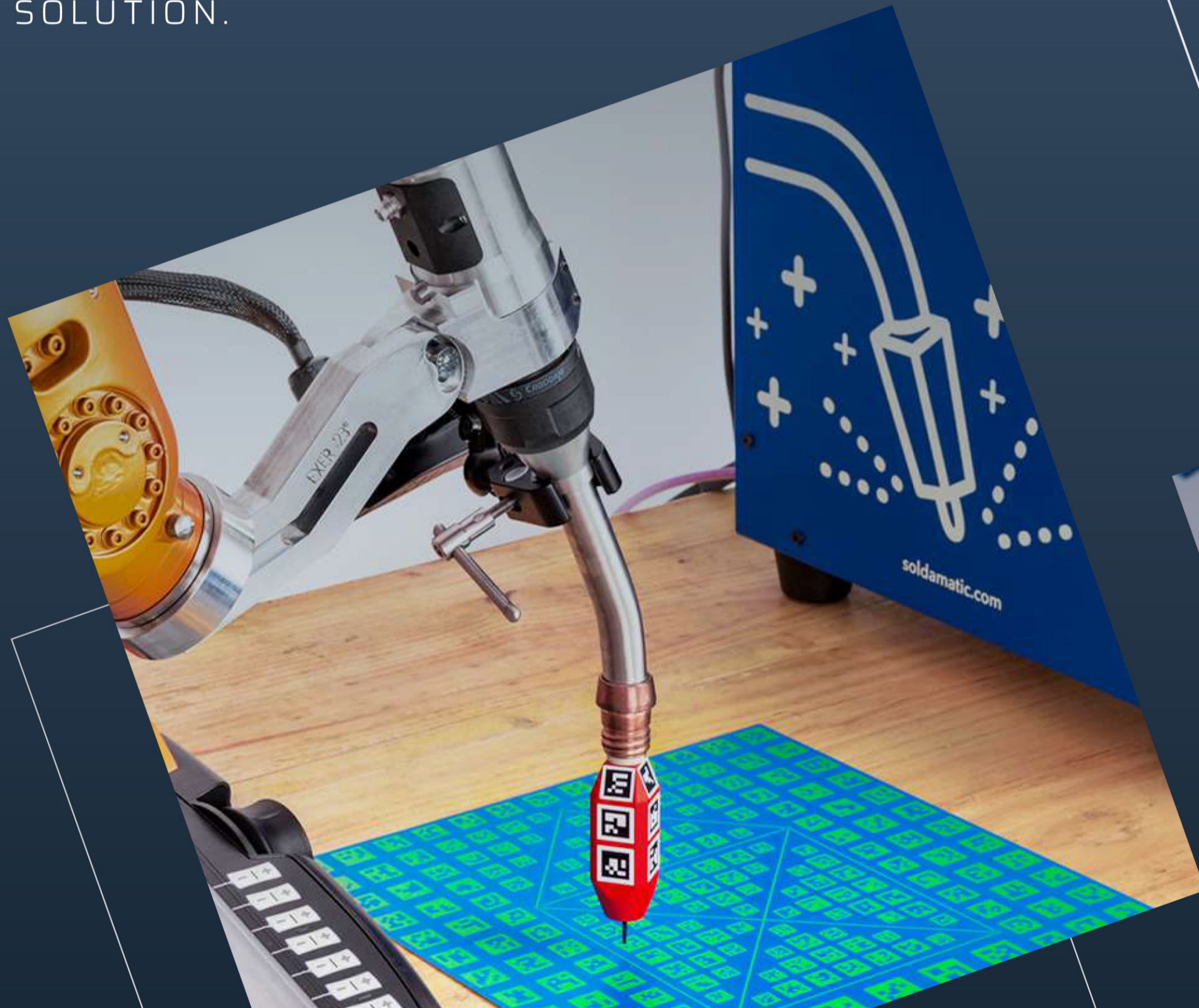
Augmented Reality technology allows the use of the teach pendant of a real robot, thus reducing consumption and risk



Soldamatic Robotics software works with almost any robot on the market



It incorporates different welding parts based on real market practices



- > Tested content with **hundreds of practices available.**
- > **Remote access**, from any place and any time.
- > It can be **integrated in almost any robot** in the actual market.

THANKS!

Do you have any questions?

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SOLDAMATIC 
AUGMENTED TRAINING TECHNOLOGY FOR WELDING

A SEABERY SOLUTION

