Welding training simulator using AR

Hani Daniel| 2023

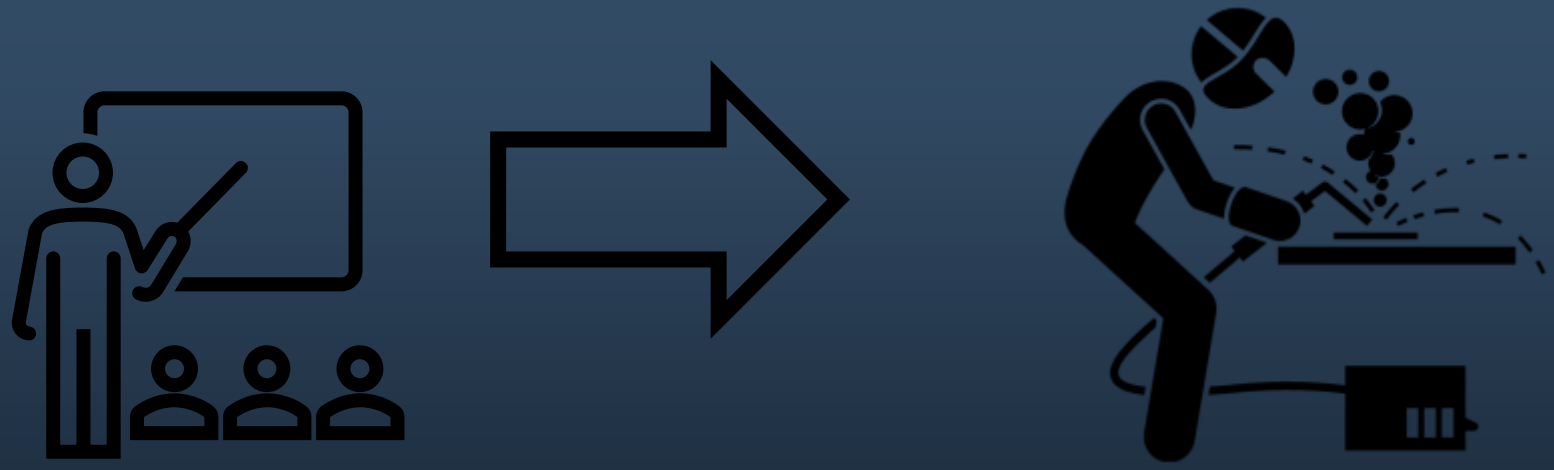
World Shortage in Welders

>375,000

>2,000

Young people in Industry
Investment in technical education

Current Training model



Classroom	Practice

New Training model

Simulator Classroom	Practice
Classroom	Practice

The new model of training

80+
COUNTRIES

THOUSANDS OF CUSTOMERS
WORLDWIDE

Miller

ABB

Volkswagen

JOHN DEERE

ALSTOM
· mobility by nature ·

Mercedes-Benz

2023 New release overview

Professional digitalization in Germany and cooperation with the German Welding Institute (DVS)

+500 training centers

+1,300 simulators

DVS GERMAN WELDING SOCIETY


INSIDE AMG
WERK BREMEN
Mercedes-AMG


ALSTOM

SOLDAMATIC®

AUGMENTED TRAINING FOR WELDING

Most realistic welding training experience aside from actual welding.

- more engagement
- 68% less costs
- 34% more certified welders
- 84% less accidents
- environment friendly

Robotic Welding

ABB ROBOTICS

COMAU

FANUC Robotics

KUKA

YASKAWA

HIWIN®

STÄUBLI

FRANKA EMIKA

Industrial Services

Market segments and solutions

Higher Education (TVET, Polytechnics, Universities, Industrial Academies)

SOLDAMATIC®
MANUAL TRAINING

SOLDAMATIC®
ROBOTICS

Industrial Production Departments

SOLDAMATIC®
INDUSTRIAL SERVICES

What's New in 2023?

High realism graphics-based Photorealism and Physical Rendering (PBR)

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

GMAW steel

GMAW Alu

GTAW Alu

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.

New!

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

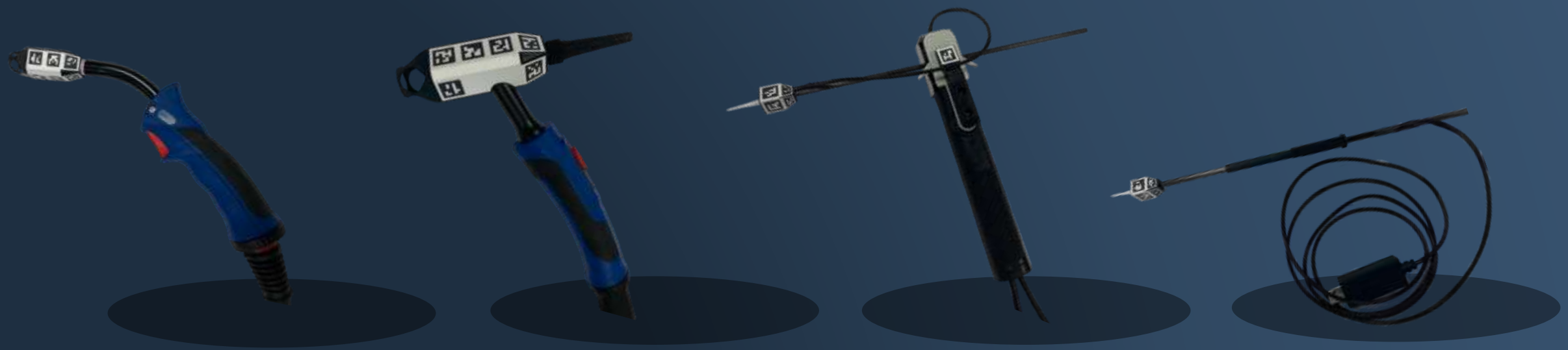
GTAW improvement

- 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

New!

Advanced torches with Haptics vibration

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING



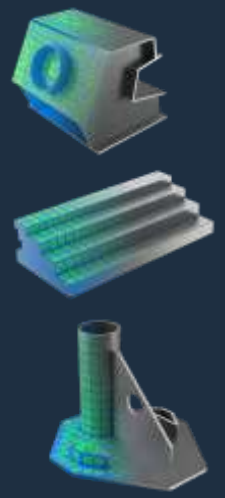
New!

Extended welding multi-joint catalogue

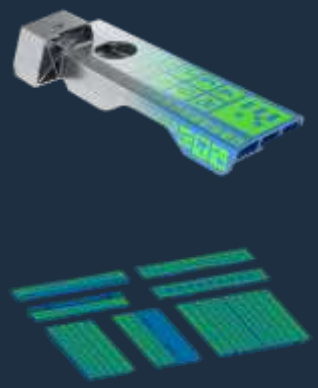
SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

- 20+ Advanced welding multi-joints offering thousands of exercises
- Manual & Robotic welding training & coupons available
- Ability to train specific welding sequences for multiple verticals

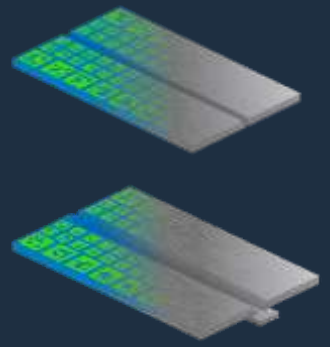
Foundational



Automative

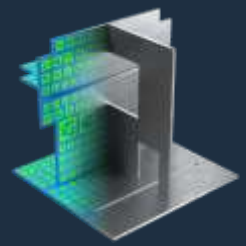


Shipbuilding

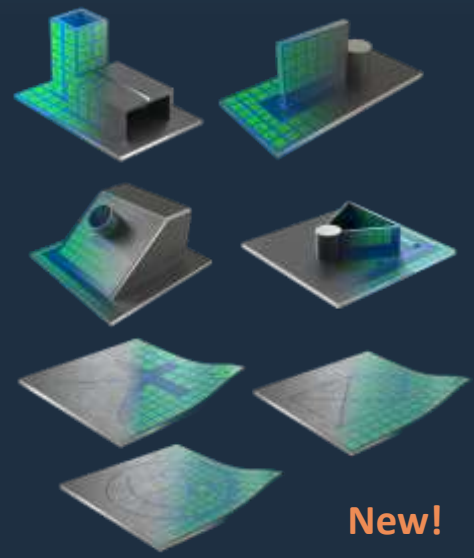


Pipeline

Railway



Robot Welding

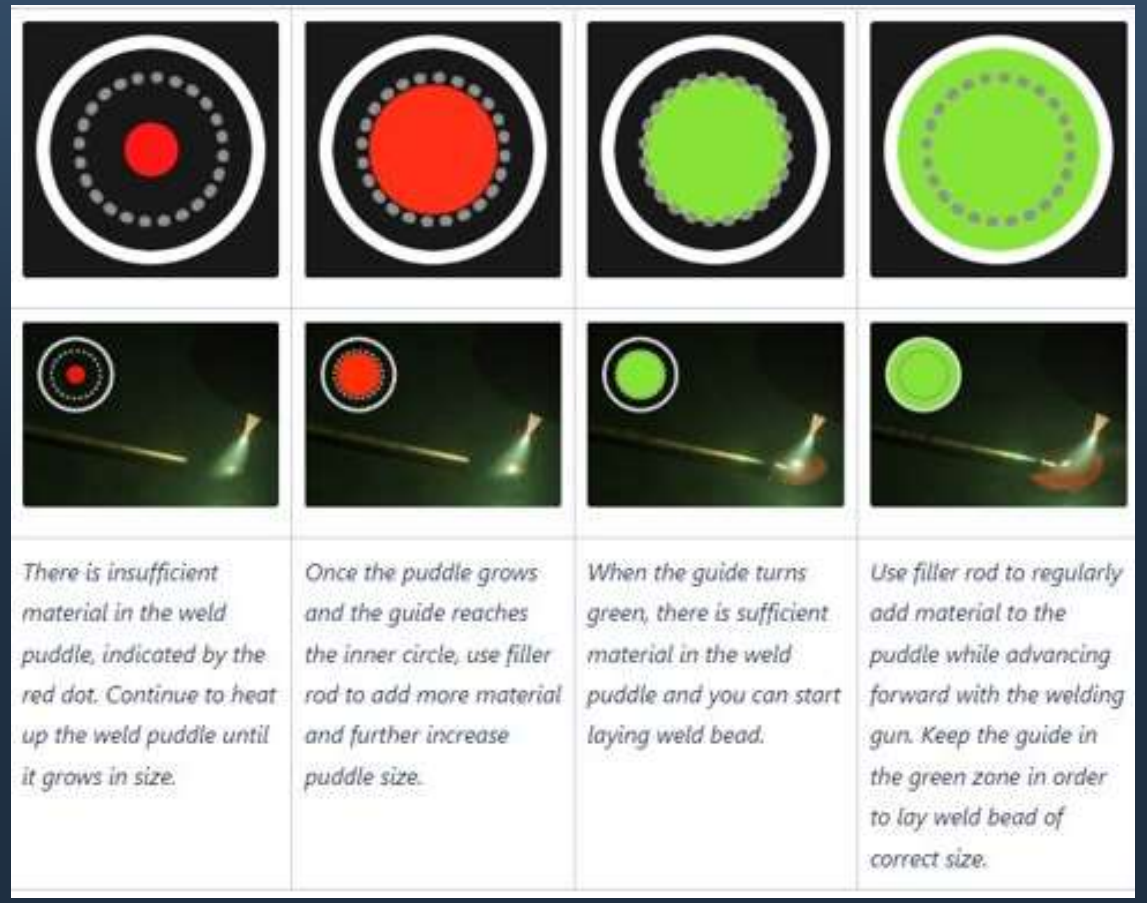


New!

New TIG Welding Training

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

- GTAW rod that simulates the dipping technique
- New real time guide to help students learn how to establish weld puddle and use filler rod to lay weld bead of uniform size
- 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
- Improved weld bead geometry and surface detail



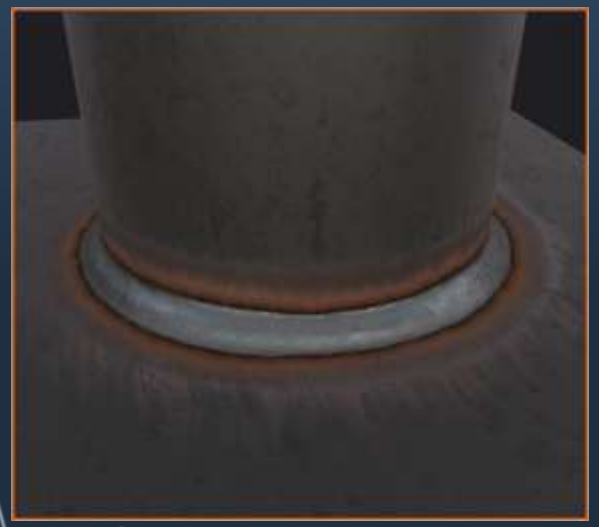
There is insufficient material in the weld puddle, indicated by the red dot. Continue to heat up the weld puddle until it grows in size.	*Once the puddle grows and the guide reaches the inner circle, use filler rod to add more material and further increase puddle size.*	*When the guide turns green, there is sufficient material in the weld puddle and you can start laying weld bead.*	*Use filler rod to regularly add material to the puddle while advancing forward with the welding gun. Keep the guide in the green zone in order to lay weld bead of correct size.*

New!

HyperReal·SIM®

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING

High realism graphics based on PBR



Soldamatic

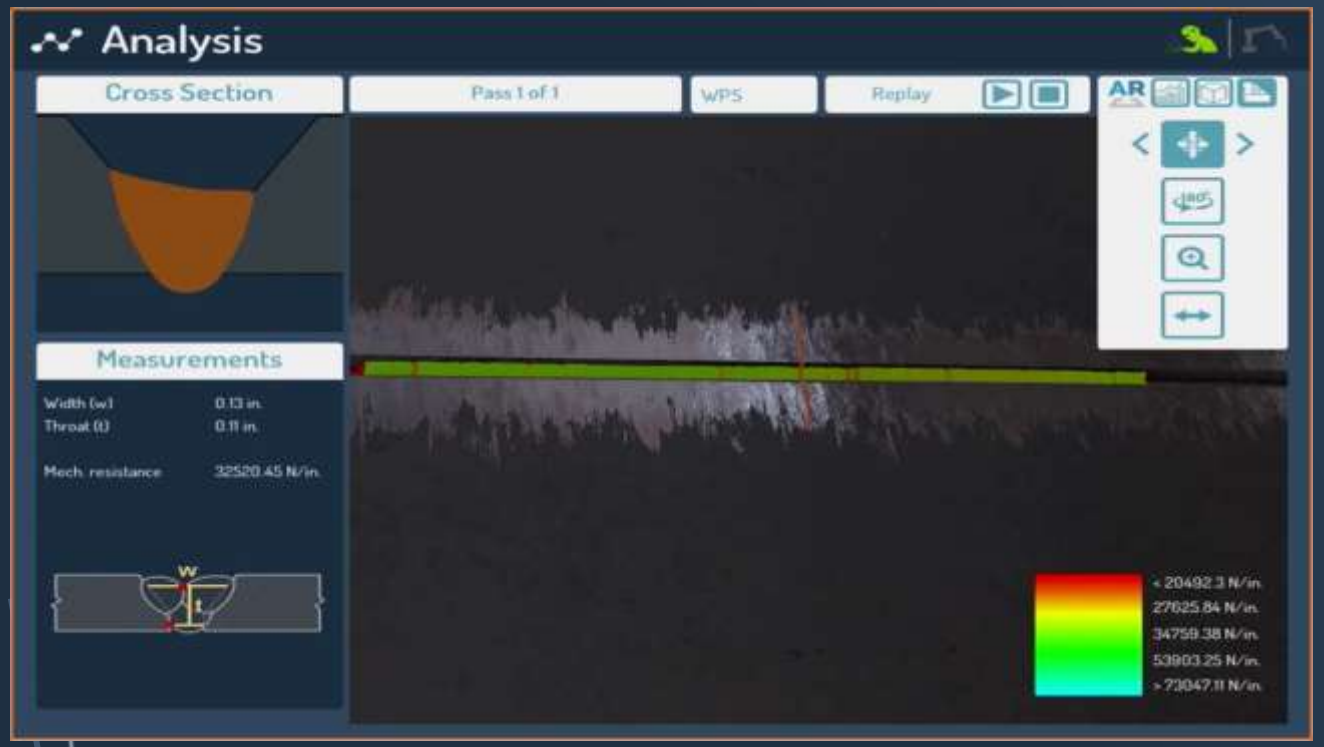
Soldamatic

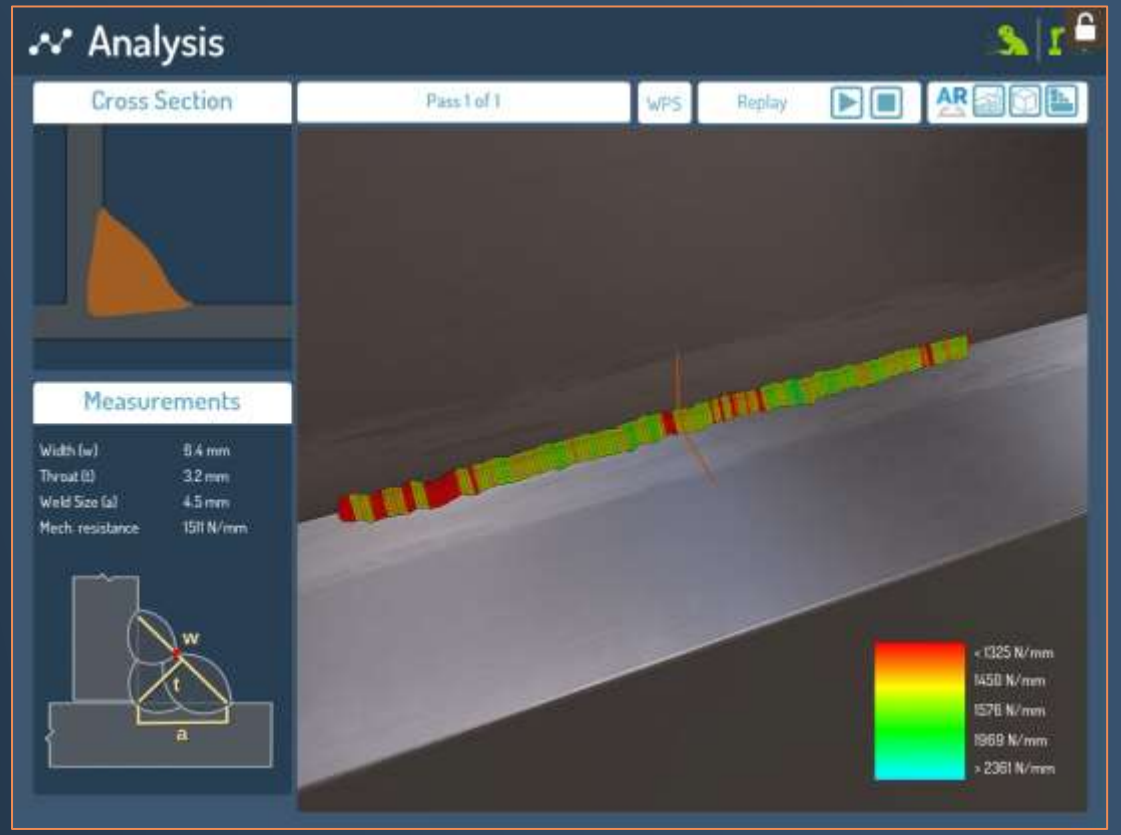
Soldamatic

Real piece

- Cross Section
- Mechanical Resistance
- Bend Test

NEW!





For more information:

Itzik Ben-Shlush

itzik@holisticEHS.com

+972-54-6635334

holisticEHS.com

SOLDAMATIC®
AUGMENTED TRAINING FOR WELDING