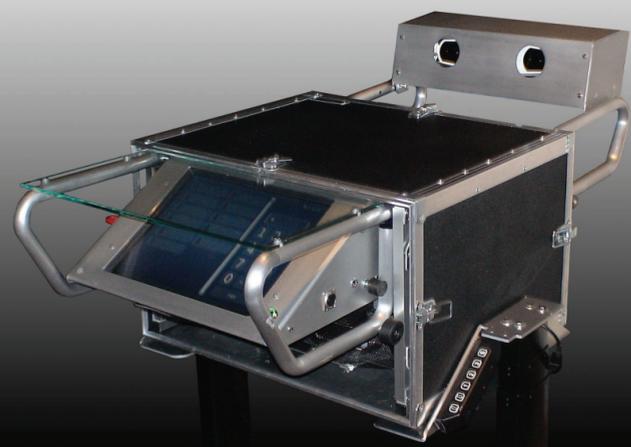


ARC+ Virtual Welding Simulator

Train welders faster, better, greener and cheaper!

ARC+ Welding Simulator simplify training and certification process for industries and training schools through 3D technology



Equipment

- 100% virtual welding station
- Adjustable platform
- 15" (38 cm) touch screen
- Motion tracking technology
- Welding mask with virtual reality components
- Universal adapters for real welding handles
- Portable and easy to set-up

First system to successfully emulate welding processes in aeronautic/car industries, including GTAW process

Cost savings

- Estimated payback per unit of 6-12 months, based on savings in welding equipment, consumables, plate preparation and supervision
- Green friendly technology



ARC+ Characteristics



Secured virtual class



Mode selection



Choice of base metal



Choice of welding process



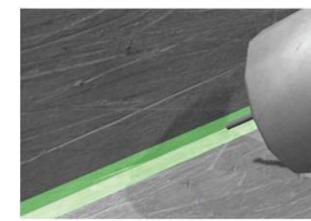
Choice of welding preparation



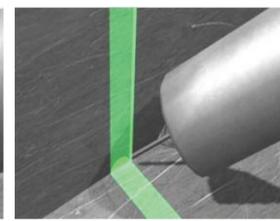
Choice of welding position

Manual dexterity guides

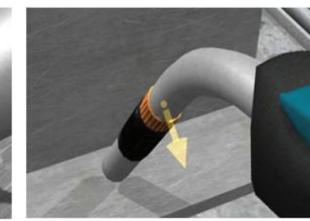
Results coming from 3 years of experience with more than 1000 tests. More than 100 welding procedures, allowing up to 25 exercises with 5 guides



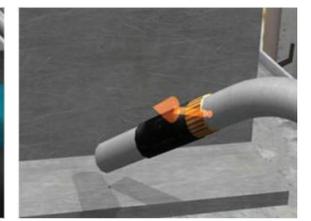
Motion straightness



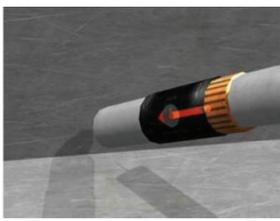
Arc speed



Travel angle



Work angle



Stick-out



Replays calendar



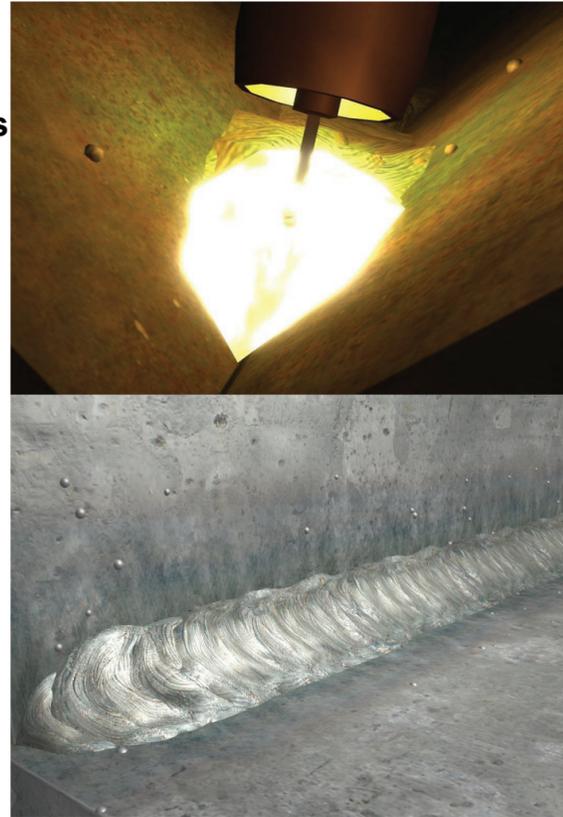
Replays list



Exercises list with results

ARC+ Specifications

- * Creates a weld bead in immersive 3-D with the motion tracking action of a real welding gun
- * Simulates smoke, sparks, weld pool, metal projections and realistic sounds
- * Detects travel, work angles, arc speed, and arc length/stick-out variations
- * Provides weld bead 3D reports
- * Renders instant replays, including complete image reconstitution with second-by-second digital updates
- * Generates diagnostic reports for student and instructor review
- * Offers ultra-quick set ups for multiple applications GMAW, GTAW, FCAW, MCAW and SMAW
- * Trains to International, AWS and European standard
- * Private network, Internet-ready or standalone



Benefits

- * Multi-pass possible for all plate thickness
- * Two hands welding for GTAW and thin materials
- * Virtual class management and savings on consumables
- * Eases annual internal recruitment for existing or future evaluations.
- * Fast feedback (Multilingual teaching, instant replays) and ergonomics via touch screen
- * Generates reports for monitoring student progress showing the effect of muscle memory and motion dexterity performance on weld properties
- * Provides convenient access to self-directed hands-on activities and learning as well as replays and demonstrations.
- * Built-in Learning Content Management System, and learner detailed reports generated for instructors. Speeds-up the process of certifying welders with its online access
- * Breakdown and reassembly of manual dexterity parameters using exercises
- * Retratability of tests with complete replay information
- * Welding datasheets customization with three levels of difficulty
- * Multiple exercises with performance evaluation
- * Visuals guides available for essential manual variables

123 Certification Inc.

1751 Richardson Street, #2.204
 Montreal, Quebec
 H3K 1G6
 Phone: (514) 932-7273
 Fax: (514) 932-1761
 Internet: www.123certification.com

Dimensions for transport:

* Main case: 24" X 23" X 14" (62 cm X 60 cm X 37 cm) 85# (38.5 kg)

* Aluminum and ABS ATA-300 case with roller wheels

Revision: June 2011

ARC+ Diagnostic

In the hiring process, the simulator helps to identify candidates with above average manual dexterity and to evaluate the welders skills for annual wage review.

Welding materials

- * Aluminum, Steel, Stainless steel
- * Exotic materials as options

Workmanship

- * Multi-pass, Multi-layer beads
- * Semi-automatic: GMAW, MCAW, FCAW
- * Manual: GTAW, SMAW

Normalized assemblies

- * Wide variety of choices
- * Replicate of welder certification assemblies according to prevailing welding codes

Diagnostic on demand

- * Manual dexterity rating
- * Weld quality rating (size, heat input, root penetration)
- * Print-out of welding datasheets with actual parameters

Multiple assembly types

- * Adapted for welding professional schools
- * All possible weld preparations
- * All welding positions (F, H, V, O) (1)

(1): Not all combinations are possible, contact us for more information.

