

LICEATCTM Welding Performance Management System

A reality-based recruiting, screening and training solution.

The Miller[®] LiveArc[™] welding performance management system is a new and innovative reality-based training system that utilizes a live welding arc, unlike other virtual training solutions. It's designed to recruit, screen, train, re-qualify and manage the performance of weld operators — **better, faster and more cost-effectively than traditional methods.**

Advanced motion-tracking technology provides the critical feedback required for improvement of baseline welding skills. With an easy-to-use touch screen interface, users can guide themselves through assignment selection and pre-weld feedback to acquire desired techniques before moving to actual live arc training experiences.

The system also gives welding instructors the ability to configure assignments and technique parameters. It stores the detailed performance history of each operator. LiveArc is a powerful teaching tool that allows instructors to better manage their time, reduces the cost of teaching materials and accelerates student progress.

Industrial-quality construction for a real-world welding experience

The LiveArc[™] system is built to deliver a real-world, arc-on welding experience. Advanced motion-tracking cameras provide feedback on technique parameters during initial set-up and simulation modes as well as live arc training mode.

A **powerful industrial computer** at the heart of the system features solid-state technology and filterless, fanless cooling. Compatible with Miller[®] power sources.

The **SmartGun** is an industry-exclusive 400-amp MIG gun featuring built-in LEDs that are tracked by the system's cameras. The ergonomic soft-grip handle provides **tactile vibration feedback** that helps guide real-time performance adjustments, reinforcing optimal position and movement.



The SmartGun's **OLED display** provides initial visual feedback to guide proper gun positioning. Pushbuttons provide a convenient alternative to the touchscreen for navigation.



Angles CTWD Aim



New! SmartStinger extends training capabilities to the SMAW process. The LiveArc monitor guides pre-weld positioning with visual feedback.



Work angle and travel angle

Motion-tracking cameras provide feedback on gun parameters and accommodate flexible coupon placement.

The **touch screen monitor** works – with a gloved hand and features a 21.5-inch widescreen HD display. A **protective cover** disables welding when opened.

Includes **multi-pass groove and fillet assignments** designed by Miller and the capability to develop customized assignments based on user applications.

LiveArc PC software is available for free installation on a separate PC. Data can be transferred to and from PC for reviewing student progress and managing assignments/users.

English and Spanish translations are available on all LiveArc systems.

The rugged **ArcStation™ base** features a 1/2-inch reversible steel table top and ships complete with drawers, gun holder, quick-release clamps and heavy-duty casters for mobility.

LiveArc GMAW/FCAW/SMAW 907714001 shown.

The **welding positioning arm** allows for training in out-of-position GMAW, FCAW and SMAW applications.

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Specifications	(Subject	to change without notice.)	
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Processes	Positions	Multi-Pass	Input Power	Rated Output	Electrode Diameter	Computer	Monitor	Dimensions	Net Weight
GMAW GMAW-S GMAW-P FCAW-G	2F 3F 4F 1G 2G	Groove and fillet up to 1 in. (25 mm) plate	120 V, 60 Hz Note: Compatible with Miller power sources	SmartGun: 400 A at 60% duty cycle (mixed gases)	SmartGun: Up to 5/64 in. (2.0 mm)	Intel core i7, 128 GB SSD, fanless cooling, HDMI port supports most secondary monitors (not included)	21.5 HD LCD touch screen display	H: 77.5 in. (1,969 mm) W: 46 x (1,168 mm)	GMAW/FCAW System: 480 lb. (218 kg) GMAW/FCAW/ SMAW System: 527 lb. (239 kg)
SMAW	3G 4G	Limited groove applications		SmartStinger: 250 A at 60% duty cycle	SmartStinger: Up to 1/8 in. (3.2 mm)			(707	

Intuitive user interface that guides and engages

Guided by an easy-to-understand interface with graphical icons and instructional pop-ups, users will find navigation intuitive with a quick learning curve. Scoring and performance feedback engage and foster independent self-improvement through repetition.







Assignment selection screen

- Guides the user through a range of targeted exercises.
- Includes a library of assignments designed by Miller for immediate use, while also allowing instructors the flexibility to configure customized assignments.
- Offers assignment completion status, history summary and easy access to detailed performance history data.

Welding procedure specifications (WPS) screen

- Guides the user through proper selection and preparation of materials.
- Provides correct power source and wire feeder settings.
- For GMAW/FCAW, screen provides target values and limits for work angle, travel angle, travel speed, contact-tipto-work distance (CTWD) and aim.
 - For SMAW, screen provides target values and limits for work angle, travel angle, arc length and travel speed.
- Assignment parameters can be configured to suit the skill level (and scoring potential) of the user.
- Displays instructor-determined target score and assignment completion criteria.

Post-weld feedback screen

- Data is provided following tests in both simulation and live arc modes.
- For GMAW/FCAW, performance feedback on work angle, travel angle, travel speed, CTWD and aim is provided.

For SMAW, performance feedback on work angle, travel angle, arc length and travel speed is provided.

Data captured allows for monitoring and evaluation. All test performance history is stored and can be retrieved and reviewed at any time to monitor ongoing development.

LiveArc Welding Performance Management System



The LiveArc[™] system is warranted for one year, parts and labor.





Better training

- Utilizes live arc Intuitive system promotes user independence
- Provides objective, quantitative feedback on key performance parameters
- Miller-designed assignments included with ability to customize
- Flexible for recruiting, screening, training and performance management



Faster results

- Independent usage accelerates personal development
- Accelerated training times put trainees in production lines faster
- Shorter educational periods allow trainees to focus on additional learning opportunities



More cost effective

- Trainers and educators have more time to focus on other tasks
- Reduces poor-quality welding and defects. rework and downtime
- Pre-weld simulation saves money on coupons, wire and gas (GMAW/FCAW only)



AugmentedArc[™] augmented reality welding system -the industry's most realistic welding simulation blends real-world and computer-generated images into a unique, augmented reality environment. Use it together with LiveArc to provide students with a natural progression from classroom welding simulation to laboratory live arc welding.

LiveArc equipment ordering information

LiveArc GMAW/FCAW with Welding Positioning Arm 907714

Comes complete with: • SmartGun with 15 ft. (4.6 m) cable (277826)

- Calibration tool (278115)
- (2) Table clamps (257285)
- Arm assembly (270727)
- C-clamp assembly (270725) • Removable arm extension for right- and left-hand applications (270728)

Plus extra Tregaskiss consumables:

- (5) .035 in. contact tips (403-20-35-05) • (5) .045 in. contact tips (403-20-45-05)
- (5) .052 in. contact tips (403-20-52-05)
- (1) Heavy-duty 5/8-bore 1/8-stickout nozzle (401-87-62-02)
- (1) Heavy-duty 5/8-bore 1/8-recess nozzle (401-6-62-02)
- (1) Heavy-duty 5/8-bore flush nozzle (401-48-62)

LiveArc GMAW/FCAW/SMAW with Welding Positioning Arm 907714001

- Includes above plus: SmartStinger with 15 ft. (4.6 m) cable (277824)
 - Router box (275484)
 - Software update for SMAW applications

LiveArc SMAW Module 301391



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