

VRTEX 360 NEW LESSONS IN ARC WELDING

The Lincoln Electric New Lessons in Arc Welding Curriculum for the VRTEX is based on AWS EG 2.0 (Guide for the Training of Welding Personnel: Level – Entry Welder). The curriculum is designed to offer an enhanced method of learning using traditional welding training projects and virtual reality welding projects. Instructors have the flexibility to implement the curriculum in their lesson and training programs.

The curriculum contains a spiral bound manual accompanied by a series of supplemental videos to complement the learning process (SMAW only).

THE VRTEX SYSTEM CURRICULUM CONTAINS:

- Welding safety practices
- Detailed lesson plans with objectives, welding procedure specifications, virtual and traditional lab work assignments including additional exercises for advanced learning, and review questions
- Quick facts and resources for each lesson including video demonstrations
- Complete answer key for instructors

VRTEX PROJECT BASED LESSONS

Project Based Lessons books for VRTEX Trainers are student workbooks containing many lessons or projects that can be implemented with your welding program. The projects are designed to support a blended training approach combining traditional hands-on welding with virtual welding for more effective training results.



Sign up for the First Pass™ Newsletter at www.VRTEX.com:

See upcoming events, customer highlights, Lincoln Electric activity, updates and tips and tricks to help with your implementation of virtual reality welding training in your environment.

twitter.com/VRTEX

Interact with us on Twitter® and let us know how, where and when you are using your VRTEX welding training products.

facebook.com/VRTEX

Join us online and hear what others are saying. Interact and like posts and updates that you find exciting and interesting.

We'd be happy to hear from you.

- Contact us with comments or questions vrtext@lincolnelectric.com
- Online Tips and Tricks (www.vrtext.com)
- Warranty and Service Support
- FREE Train-the-Trainer programs held regularly in facilities or on-site training and set-up can be purchased.

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice.

Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.



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VRTEX® VIRTUAL REALITY WELDING TRAINERS

Helping You Train the Next Generation of Welders



LINCOLN ELECTRIC'S VIRTUAL EXPERIENCE

VRTEX Virtual Reality Arc Welding systems are computer-based training tools that enable students to practice welding technique in a simulated environment. VRTEX systems promote the efficient and effective transfer of skills from the virtual training environment to the weld booth. They also reduce waste and energy consumption associated with traditional welding training.

VIRTUAL REALITY WELDING TRAINING IS IDEAL FOR:

- High schools
- Trade schools
- Vocational schools
- Community colleges
- Union training facilities
- Prison and correctional facility training
- Workforce development training programs
- Industry training programs

VRTEX WELDING SIMULATORS:

- Reduce training time
- Increase certification rates
- Attract and engage students
- Learn through repetition
- Measure and record real-time results
- Enhance welding training programs
- Reduce energy consumption, waste and scrap
- Create tangible savings
- Promote correct welding safety practices

VRTEX ENGAGE

The highly interactive VRTEX Engage gives students their very first exposure to welding. It emphasizes safety, delivers an introduction to basic welding principles and lays the foundation for future learning.

VRTEX MOBILE

VRTEX Mobile our next step up, more closely matches real welding with the help of a virtual-reality helmet that immerses the user in the sights and sounds of the welding experience.

VRTEX 360

Lincoln Electric's most advanced welding simulator system, with a full size welding stand, supports all position welding as well as pipe welding.

VRTEX 360 EXTENSIONS UPGRADE PROGRAM

The Extensions Upgrade Program assures your VRTEX 360 system will grow as your program develops. Through the Upgrades, add bend testing or stainless and aluminum welding. Add Demo Mode, which demonstrates optimal angles, speed and direction for every type of weld. Add Replay Mode to play back any student or instructor weld from a variety of camera angles, including the student's helmet view, allowing the instructor to see what the student viewed during welding.

LINCOLN ELECTRIC'S VRTEX SIMULATED WELDING TRAINING SOLUTIONS



	VRTEX ENGAGE	VRTEX MOBILE	VRTEX 360
SUMMARY	Basic and Introductory Portable Welding Training Simulator for use in exploratory exposure to career pathways	Intermediate Welding Simulator with Immersive Welding Environments for use in any training program	Full Featured, Advanced and Scalable Welding Simulator with Multiple Immersive Welding Environments for use in any training program
WELDING PROCESSES	SMAW, GMAW, FCAW-G and FCAW-S are standard with the unit	SMAW, GMAW, FCAW-G and FCAW-S are standard with the unit	SMAW, GMAW, FCAW-G and FCAW-S are standard with the unit
JOINT CONFIGURATIONS	<ul style="list-style-type: none"> · Flat Plate · Tee Joint · Groove Joint 	<ul style="list-style-type: none"> · Flat Plate · Tee Joint · Groove Joint 	<ul style="list-style-type: none"> · Flat Plate · Tee Joint · Groove Joint · 6 in. (152 mm) Dia. Schedule 40 Pipe · 2 in. (51 mm) Dia. XXS Pipe · Lap Joint (Optional with Upgrade 5) · Pipe-on-Plate (Optional with Upgrade 6)
POSITIONS	1G, 2F, 2G, 3F, 3G	1G, 2F, 2G, 3F, 3G	1G, 2F, 2G, 3F, 3G, 4F, 4G, 5G, 6G
USABILITY	Self-contained portable case	Tabletop multi-position stand with arm rest	All position stand, including overhead
FUNCTIONALITY	GMAW / FCAW gun	Universal gun - Standard unit includes GMAW and SMAW attachments	GMAW gun and retractable SMAW stinger (45° / 90° angle adjustment)
ADDITIONAL FEATURES	<ul style="list-style-type: none"> · Video Replay · Demo Mode · Theory 	<ul style="list-style-type: none"> · Video Replay · Demo Mode · Theory 	Add Capabilities with the Upgrade Program, including: <ul style="list-style-type: none"> · Advanced Scoring Module (ASME/D1.1) · AWS Bend Test and Panning View · GMAW Aluminum, Video Replay, Learning Levels · GMAW Stainless, Demo Weld, 0.052 in. (1.3 mm) solid wire and SMAW on thinner materials · Lap Joint on all materials, Surface Build-up, additional GMAW-P modes · Pipe-on-Plate coupon, WPS and curriculum, and advanced scoring on weld tie-ins