



VRTEX[®] 360
COMPACT

LINCOLN
ELECTRIC

VRAW™

VRTEX[®]
weld green

VRTEX[®] 360 COMPACT
MAKES VIRTUAL WELDING TRAINING
SMARTER, FASTER & MORE EFFICIENT

LINCOLN[®]
ELECTRIC

THE SMARTEST WAY TO A REAL WELDING & CUTTING EXPERIENCE

Discover virtual welding training in a new, compact size

Lincoln Electric's VRTEX® 360 Compact is a new, small Virtual Reality Welding Simulator for mobile-use in multiple environments. It provides a flexible, powerful, cutting-edge solution for cultivating welding talent quickly and resourcefully. The cost-effective small-sized solution offers superior graphics, which creates the most realistic and responsive welding puddle available and it convinces with accurate sounds and movements. With the new VRTEX® 360 Compact, virtual welding training can seamlessly transfer into real-world, hands-on welding training.

The first virtual welding trainer with optional cutting mode

The VRTEX® 360 Compact offers welding training and optional thermal oxyfuel cutting training in one virtual device. This unique feature enables students to also experience torch cutting in a virtual environment. Every aspect of the thermal oxyfuel cutting feature is designed to address real-world cutting applications – from setting up the torch to executing the cut.



Smarter

Compact size, small footprint, mobile use, intelligent software features.



Efficient

High training quality, rapid training progress, faster fit for real welding, fast set-up, just plug-in & train.



Safer

No metal, sparks, heat, gas and fume. Less risks and accidents, remote learning capabilities via video streaming, optional hygienic training approach.



Multi-use

Flexible use and different welding training modes, Thermal Oxyfuel Cutting as add-on feature.

VRTEX® 360 COMPACT VIRTUALITY MEETS MOBILITY

3 YEAR
WARRANTY
PARTS & LABOUR
PERFORMANCE PLUS PROTECTION



VIRTUAL WELDING ALL ABOUT EFFICIENCY

Five good reasons for VRTEX® Training

Virtual welding helps save not only time and costs, it offers also new opportunities in performance-linked training lessons. The VRTEX® 360 Compact supports learning at different levels – from fundamental skills for beginners to advanced skills for professionals. You just pick the right individual level and start your virtual welding experience. Via the VRTEX® Weldometer™, you can see immediately what you save per lesson, day and year, compared to real welding training sessions.

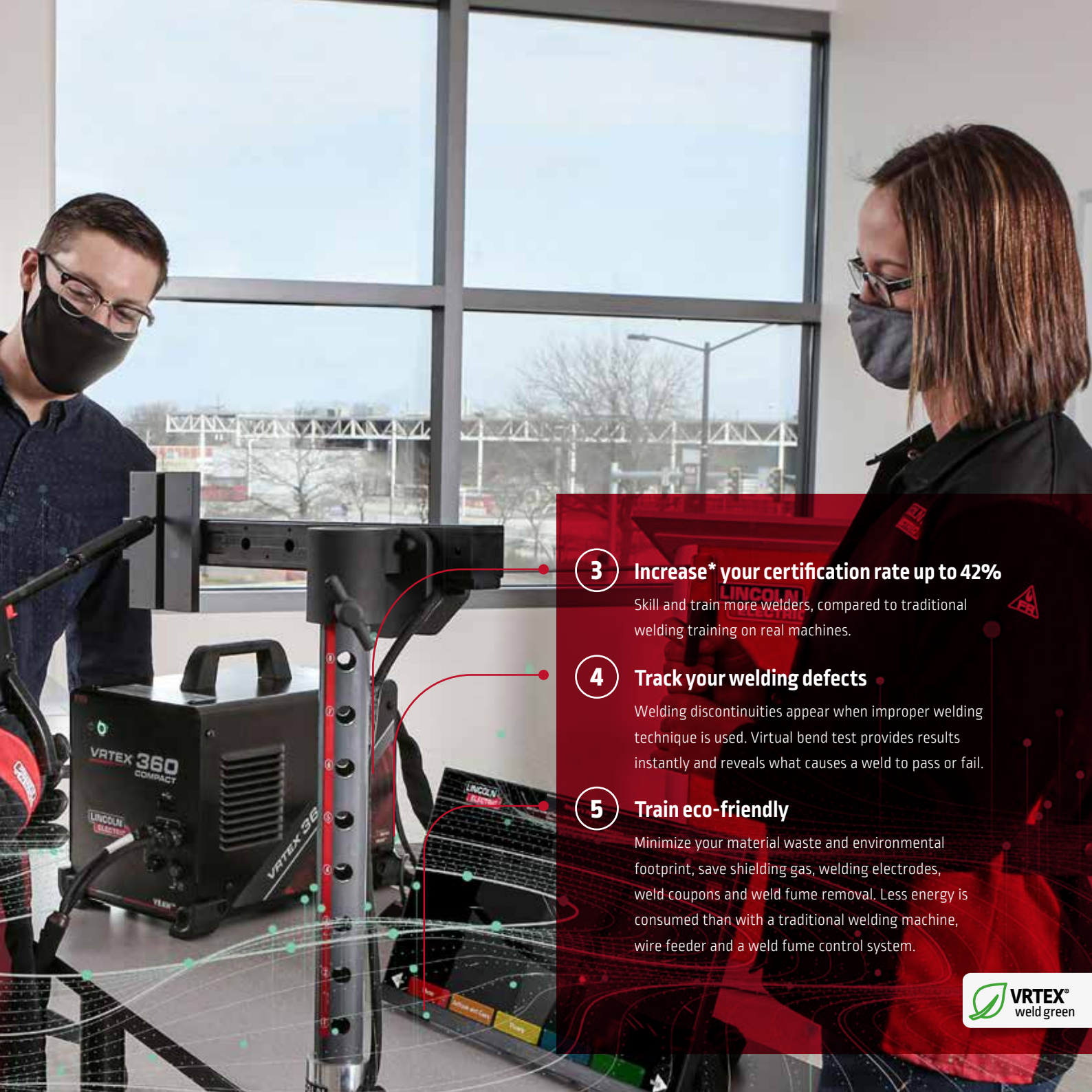
1 Reduce your training costs

Save on equipment, material, consumables and energy. Benefit from a cost-efficient compact device.

2 Reduce your training times

Achieve faster training success. Get more efficient results with less training time on real welding machines.





3 Increase* your certification rate up to 42%

Skill and train more welders, compared to traditional welding training on real machines.

4 Track your welding defects

Welding discontinuities appear when improper welding technique is used. Virtual bend test provides results instantly and reveals what causes a weld to pass or fail.

5 Train eco-friendly

Minimize your material waste and environmental footprint, save shielding gas, welding electrodes, weld coupons and weld fume removal. Less energy is consumed than with a traditional welding machine, wire feeder and a weld fume control system.

ALL FEATURES AT A GLANCE

1 Compact size, mobile & remote use

- Small footprint
- Dimensions*: 38.2 cm height, 46.2 cm length, 29.4 cm width
- Easy to transport
- Optional pelican cases available
- Appropriate learning in small groups
- Option to utilize without headset to reduce shared tools
- Remote learning: stream VRTEX use (video conference software)

2 Virtual welding simulations

- Simulated processes: GMAW (Short Circuit, Spray, Pulse), GTAW (with Filler, Pulse with Filler, without Filler), FCAW (Gas Shield, SelfShield), SMAW (E7018, E 6010, E60139)
- Realistic simulated base materials: Mild Steel, Stainless Steel, Aluminium – with realistic look & feel, with the individual welding sound
- Filler material: Stick Electrode, included E6010, E6013, E7018, MIG Wire, included 0.035" ER70S-6, 0.045" ER70S-6, 0.052" ER70S-6, ER4043, ER308L, Flux Core, included E71T-1, E71T-8

3 Purchase add-ons

- Oxyfuel Cutting feature with simulated torch
- Large welding stand

STAND

SMAW DEVICE

GTAW DEVICES

GMAW DEVICE

OXYFUEL ASSEMBLY

3

*Dimensions in inch: height 15.1, length 18.2, width 11.6

VRTEX[®]

360 COMPACT

TOUCHSCREEN

VR HEADSET

VRTEX[®] 360
COMPACT

5

1

COUPONS

4 Hardware

- Retractable SMAW stick stinger, GMAW/FCAW gun and GTAW TIG torch, filler metal and adaptive foot pedal devices realistically simulate the look, feel and action of actual welding guns and torches
- Practice flat, horizontal, vertical and overhead 5G and 6G
- Included foot amp control

5 Software

- Welding theory included
- Embedded lessons on safety and measurement

6 Curriculum & training

- GMAW, SMAW & FCAW curriculum books on an usb stick
- Free training available
- Welding procedure specification booklet to replicate proper machine set-up

CURRICULUM

6



REALISTIC VIRTUAL WELDING ENHANCED LEARNING RESULTS

The VRTEX® 360 Compact helps you to build confidence, reduce mistakes and train to weld in a variety of situations and orientations. The virtual simulator creates a safe welding environment and enables practicing repetitive welding without the time needed to tack plate and toss scrap. To optimize the teaching and training experience for the whole class, 3 screens are viewable by the audience: the helmet view, the scoring screen and the instructor view.

Life-like welding environment

- Realistic puddle and actual welding sound help welders learn to respond and adjust welding technique
- Simulation of sparks, slag, grinding and weld cooling
- Welding discontinuities appear when improper welding technique is used
- Virtual bend test provides results instantly and reveals what causes a weld to pass or fail

Reinforcement for students

- Demos of successful welds
- Replicates proper machine set-up using a welding procedure
- Specification: Students must select gas type, process, gas flow, amperage/voltage and wirefeed speed
- Tracks and scores key weld parameters including work angle, travel angle, travel speed, distance and position

All instructions in 15 different languages



EN



ES



DE



FR



NOR



RU



PT



PL



JP



CN



TR



FI



IT



KR



SE



VIRTUAL CUTTING TRAINING

Thermal Cutting as add on feature

- Designed to address real-world cutting applications
- From setting up the torch to executing the cut

Cutting & Analysis

- Similar to VRTEX® welding, each cutting exercise allows users access to visual cues to assist with aim, angle, distance and speed
- Feedback is provided on the laser scoring screen with each single line of data on the chart representing the performance parameter of individual technique

Cutting set-up procedures

- Select quick connect valves & fuel pressures in proper safety sequence
- Fuel choices include Propane or Acetylene
- Step-by-step torch lightening sequence follows safety protocols and reinforces the importance of reading the flame



ACCELERATE YOUR TRAINING SUCCESS

The new VRTEX® 360 Compact is a perfect example of how Lincoln Electric supports you to attract the next generation of welders. We try to engage welders, both those in schools/universities and those in industry, through smart virtual training devices, curriculum and our complete welding education solutions. The new VRTEX® 360 Compact is an important part, and often a welder's first access to our global education spectrum.



Benefits in education

- Train the next generation of welders **smarter and faster**
- Educate **more students** with the existing lab infrastructure
- Increase arc-on times, **reduce lab training times**
- Helps achieve a **higher certification rate**, up to 42%*
- **Reduce costs, consumable and material waste**
- Prepare your students for competitions, certifications and industry



Benefits in industries

- **Helps close the skills gap** between education and industry
- **Helps reduce training times** & failure rates, improve productivity
- Skill-up your welders **internally**
- **Reduce cost**, consumable and material waste
- Book **customer specific trainings**, also on-site and for upscaling.



QUALIFIED SUPPORT FOR WELDING INSTRUCTORS

The Lincoln Electric Curriculum includes SMAW Welding Training, GMAW Welding Training, project lesson guides for students and instructors. Beyond that we provide consumables, after sales service and the latest in training and teaching tools.



Benefits in training

- Weldometer™ for virtual **material and gas usage tracking**, calculates the cost savings of VR Training
- **Demo mode** for easy teaching & demonstration
- **Replay mode to zero** shows immediately what went wrong or well
- View and rotate the coupon during welding to **check for proper angles**
- Special **lesson mode** including safety & welding standards, measurement and principles of welding
- **Demo book for schools** to skill-up welders



Virtual welding training allows for a more consistent feedback than traditional training. The intuitive software program is designed to bridge welding curriculum with hands-on training in a perfect way.

David Landon, Manager, Welding Engineering, Vermeer Corporation
2015 President, American Welding Society
2020-2023 President, International Institute of Welding



Track your savings

with the Lincoln Electric
Weldometer™



Get instant feedback

on the scoring screen



Use the replay mode

on multiple views



Teach via lesson mode

to train on the
same device

COMPLETE EDUCATION SOLUTIONS FOR WELDING, CUTTING & AUTOMATION

Lincoln Electric offers the broadest Welding & Cutting Education Portfolio, from products to trainings, all the way up to complete education solutions. We provide equipment, curriculum, customized trainings, certifications, apprenticeships and consulting to help you set up the right infrastructure for your success. Trust in our competencies and our portfolio.



Our educational offerings reflect our company's experience serving every industry segment with advancing technology. We deliver total welding & cutting education solutions to the right people at the right time, enabling your success.

CLOSE YOUR SKILLS GAP WITH LINCOLN ELECTRIC

Our vision is it to create a unique welding education universe to train welders anywhere at any time at the highest standards. As a global innovation leader and largest solution provider in welding & cutting we run advanced training centers and service all industry segments with the latest technology, equipment and skills training.



Professional & Skill Development

We offer seminars and classes for welders and instructors at every level and help students master welding faster with detailed and immediate feedback provided by advanced welding training systems. In addition, our LEEPS™ Program can help to lead to a Welding Certification in Partnership with NC3.



Welding & Cutting Curriculum

Welding and cutting equipment, advanced training systems and robotic cells are closely aligned with our U/LINC® curriculum for easy program integration. Here we provide up-to-date curriculum materials and instructors can select a pre-built curriculum or customize their own with more than 18,000 pages of materials from lesson plans and student handouts, to lab activities and PowerPoint® presentations.



Welding Training Systems

With our broad range of VRTEX® Welding Training Simulators, we allow for virtual training with real results, no matter if you choose the VRTEX® Transport, VRTEX® Engage, VRTEX® 360 or now the new VRTEX® 360 Compact. They are all available for single or dual users and offer a virtual welding experience. And if it comes to a guided real welding practice, we also offer REALWELD® Welding Training System.

WHATEVER YOU NEED WE KNOW HOW TO EDUCATE

Lincoln Electric has been educating welders since 1917. This makes us one of the most experienced partners globally. We deliver relevant solutions in welding and education. Be it for 3D Printing, Automation & Robotics or Virtual Welding & Cutting Training, no matter if in automotive, heavy fabrication, infrastructure or processing industries. Just trust in our experience – today and in the future.



Comprehensive Welding Education

- Country and customer specific training programs
- Train-the-trainer programs
- Welding school design
- Customizable trainings
- Equipment and partner for welding competitions
- Welding safety
- Certifications & apprenticeships
- Welding Education Consulting



However you need to train. We provide traditional to advanced technologies. We support you in upskilling and provide global welding education excellence.

Jason Scales, Business Manager, Education at Lincoln Electric

Become part of our global education program, including Virtual Welding Training and trust in our upskilling competences.



Join us now

**EDUCATING
EXCELLENCE
IN WELDING.**



FIVE REASONS TO PARTNER WITH US

1

We've got over 100 years of welding training experience

With more than 100 years of welding knowledge we know-how to weld and skill-up at any time.

2

We offer the broadest welding education portfolio

Lincoln Electric is your one-stop-shop for equipment, training & complete solutions.

3

We provide leading welding & cutting technology

Visit our over 40 advanced education and training centers, globally and benefit from our state-of-the-art R&D labs.

4

We are your global partner in welding, cutting & automation

With more than 11,000 employees in over 160 countries we are partnering with governments, schools and industry customers all over the world.

5

We are engaged

Our close cooperation with global welding associations and our exclusive partnership with WorldSkills International underlines our strong commitment.



EDUCATING EXCELLENCE IN WELDING

125+
YEARS OF EXPERIENCE

325+
GLOBAL R&D TEAM

11 000
EMPLOYEES WORLDWIDE

38
SOLUTION CENTERS



LOCATIONS

- Global Headquarters
- Solution Centers

**CONTACT US
NOW!**

Get in touch with our experts:
VRTEX@lincolnelectric.com

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, cutting equipment, and educational products. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and 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. For more information about Lincoln Electric and its products and services, visit the company's website at:

education.lincolnelectric.com

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