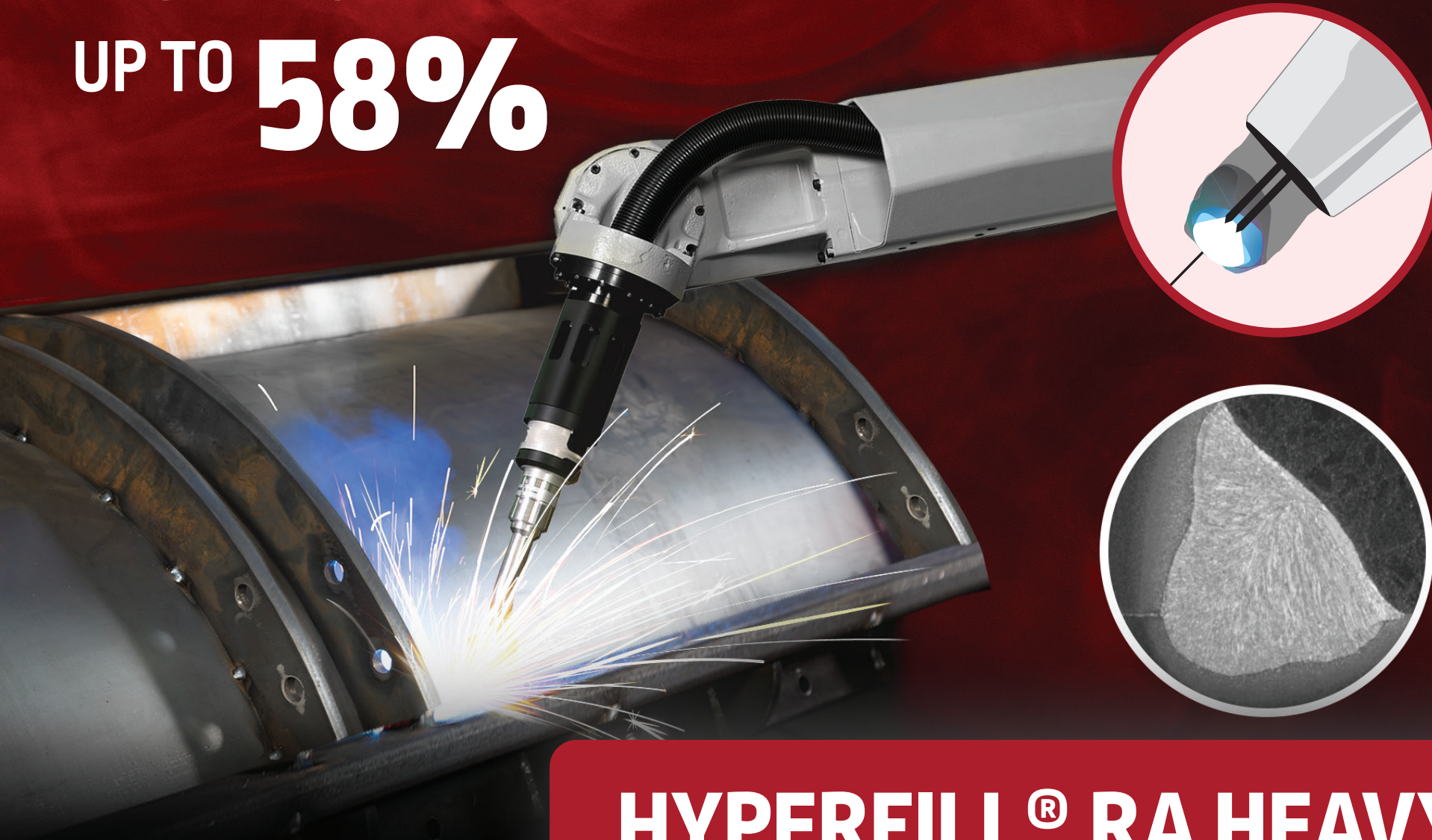


**INCREASE TRAVEL SPEEDS
UP TO 58%**

**LINCOLN
ELECTRIC**



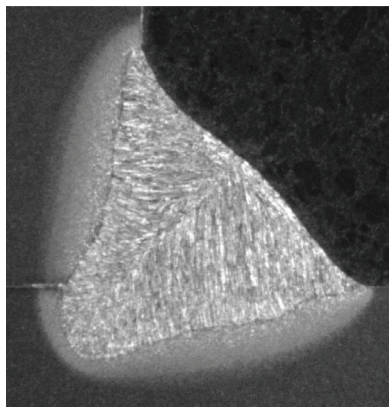
**HYPERFILL[®] RA HEAVY FAB
TWIN WIRE GMAW SOLUTION**

INTRODUCING HYPERFILL® RA FOR HEAVY FAB APPLICATIONS

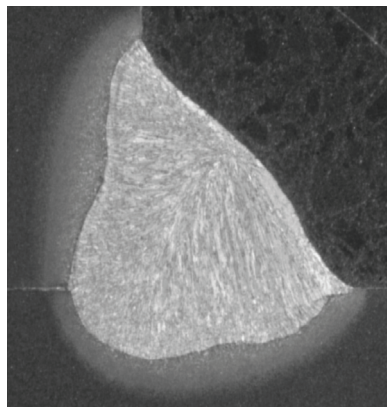
The HyperFill® solution portfolio just got better with the addition of HyperFill® RA. Achieve tighter, more focused arcs, expanding the bounds of the HyperFill® twin-wire process. Enjoy increased travel speeds of up to 58% compared to traditional CV single wire applications and even higher with 2-axis positioning.

- » **High deposition rates** – HyperFill® RA allows for deposition rates up to 23 lbs/hr without added system complexity.
- » **Increased travel speeds** – Achieve more than 58% increase in travel speeds compared to traditional robotic welding solutions.
- » **Reduced cycle times** – Enjoy superior welding efficiency with up to 36% reduction in cycle times.
- » **Increased productivity** – HyperFill® RA maximizes productivity with reduced cycle times and higher deposition rates, generating savings.

2F 1/4 in. FILLET WELD COMPARISON

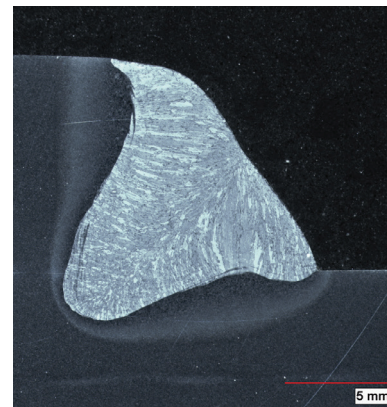


CV 0.045 in. Single Wire

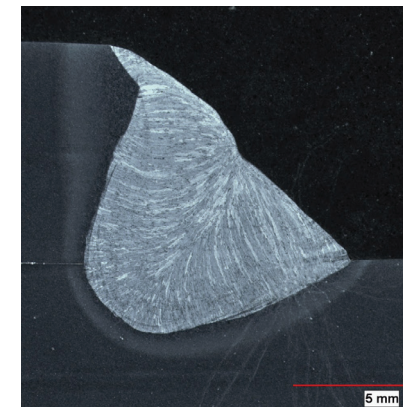


HyperFill® RA

LAP JOINT 1/4 in. WELD COMPARISON - 15° DOWNHILL



CV 0.045 in. Single Wire



HyperFill® RA

HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

Your purchase of a Lincoln Power Wave Welding System comes with (i) a license to use Lincoln Electric standard Power Wave waveforms, and (ii) HyperFill waveform capability, which requires a separate license. Without the separate license, the HyperFill waveform is not available for use on these machines, and only the standard Power Wave waveforms are usable. For more information, please see the REVEAL/HyperFill Supplemental Terms and Conditions [here](#).

PRODUCTIVITY COMPARISON



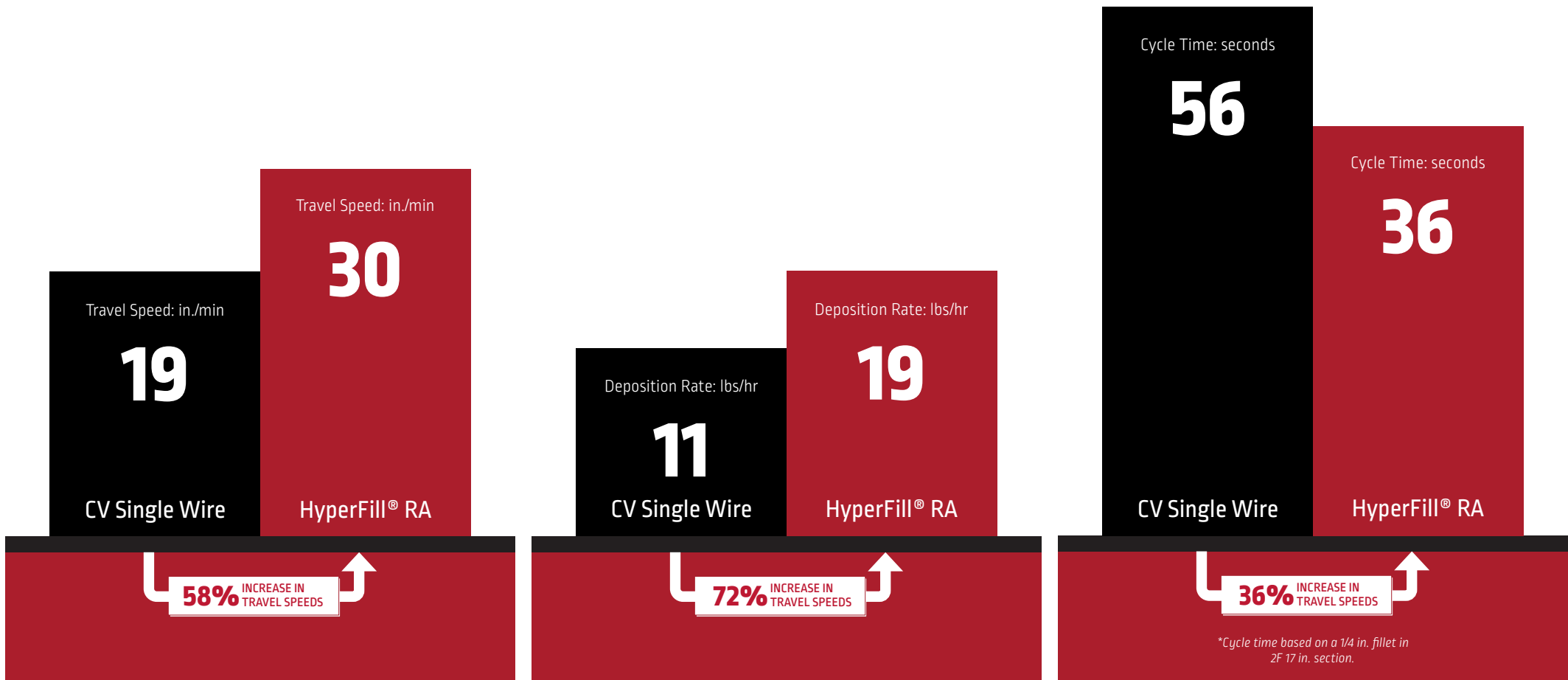
2F 1/4 in. FILLET WELD COMPARISON

*Typical results for a 2F 1/4 in. fillet weld comparison between RapidArc®(RA) and HyperFill® RA using Merit-6 0.045in. (ER70S-6) wire.

TRAVEL SPEED

DEPOSITION RATE

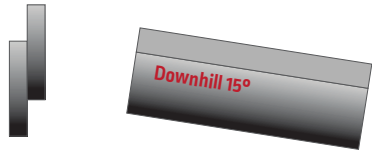
CYCLE TIME



HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

Your purchase of a Lincoln Power Wave Welding System comes with (i) a license to use Lincoln Electric standard Power Wave waveforms, and (ii) HyperFill waveform capability, which requires a separate license. Without the separate license, the HyperFill waveform is not available for use on these machines, and only the standard Power Wave waveforms are usable. For more information, please see the REVEAL/HyperFill Supplemental Terms and Conditions [here](#).

PRODUCTIVITY COMPARISON



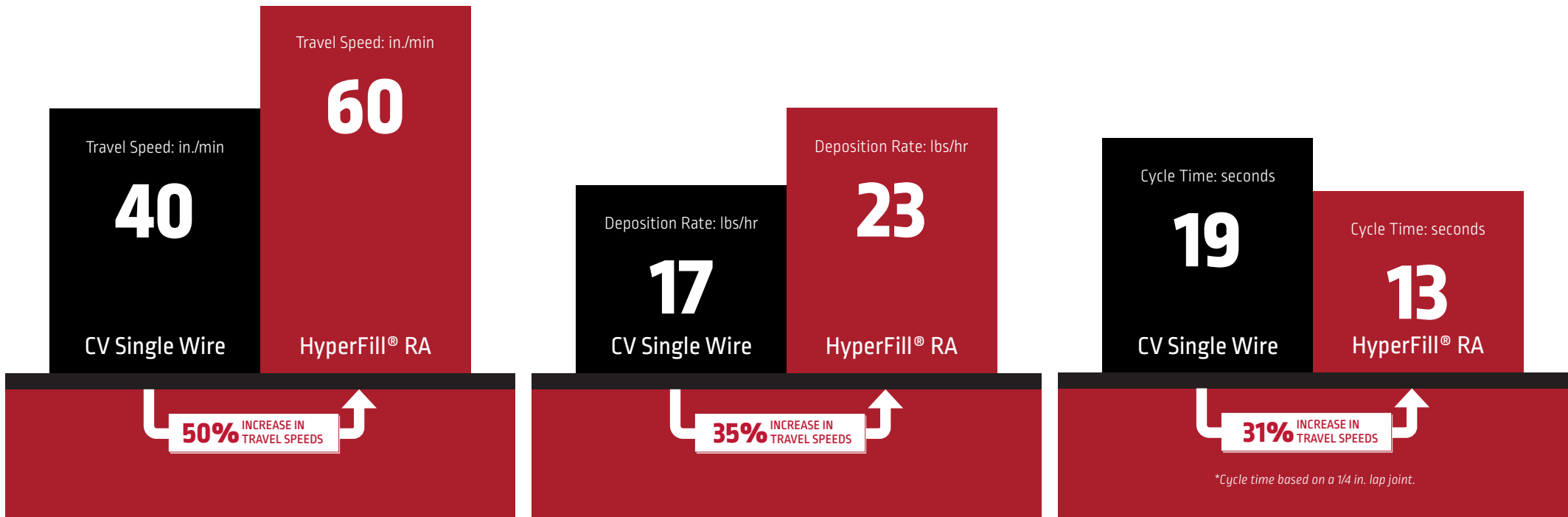
LAP JOINT 1/4 in. WELD COMPARISON - 15° DOWNHILL

**Typical results for a lap joint 1/4 in. - 15° downhill weld comparison between RapidArc®(RA) and HyperFill® RA using Merit-6 0.045in. (ER70S-6) wire.*

TRAVEL SPEED

DEPOSITION RATE

CYCLE TIME



HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

Your purchase of a Lincoln Power Wave Welding System comes with (i) a license to use Lincoln Electric standard Power Wave waveforms, and (ii) HyperFill waveform capability, which requires a separate license. Without the separate license, the HyperFill waveform is not available for use on these machines, and only the standard Power Wave waveforms are usable. For more information, please see the REVEAL/HyperFill Supplemental Terms and Conditions [here](#).

HYPERFILL® RA CAN INCREASE YOUR PRODUCTIVITY

HYPERFILL® RA for the heavy fab industry – achieve new levels of performance without the added complexity of traditional tandem MIG processes.

MINIMAL COMPLEXITY:

- » Single power source
- » Single feeder
- » Single gun liner
- » Single contact tip



Power Source / Wire Feeder

* Power Wave® 5700 Advanced Process Welder and AutoDrive® 4R220 Wire Drive



Magnum® PRO Water Cooled Robotic Torch

HyperFill® RA

TWIN WIRE GMAW SOLUTION

Waveform Control Technology®

Advanced software-driven hardware architecture allows for Lincoln Electric exclusive welding processes such as STT®, Rapid X®, HyperFill® and Low Fume Pulse®. For a full list of available welding processes and waveforms as well as requirements and software update details for Power Wave® advanced process welding systems, please visit our [website](#).



THE LINCOLN ELECTRIC COMPANY

Founded in 1895 by John C. Lincoln, the Lincoln Electric Company is the world leader in the design, development and manufacture of arc welding products, robotic arc welding systems, plasma and oxyfuel cutting equipment and has a leading global position in the brazing and soldering alloys market. Headquartered in Cleveland, Ohio, Lincoln Electric has a global network of manufacturing, distribution, sales and technical support covering more than 160 countries.

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

"The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. 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 or application. 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."