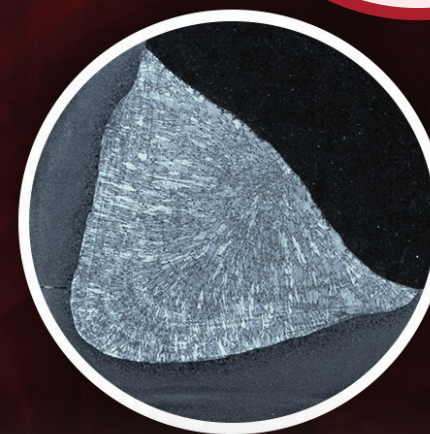


**INCREASE TRAVEL SPEEDS
UP TO 67%**



**HYPERFILL[®] RA AUTOMOTIVE
TWIN WIRE GMAW SOLUTION**

INTRODUCING HYPERFILL® RA FOR AUTOMOTIVE APPLICATIONS

The automotive welding industry just got faster with the all-new HyperFill® RA. Experience HyperFill®, Lincoln Electric's patented and licensed twin-wire solution. Paired with the industry-leading Rapid Arc® waveform, HyperFill® RA delivers a shorter and more focused arc, resulting in faster travel speeds.

- » **Increased travel speeds** - Achieve up to 67% increase in travel speeds compared to traditional solutions.
- » **Reduced cycle times** – Boost welding efficiency of up to 40% reduction in cycle times.
- » **Increased productivity** – HyperFill® RA maximizes productivity with reduced cycle times and higher deposition rates.
- » **Higher Savings** – Reduce capital expenditure by using less overall equipment to process a line while maintaining weld quality.



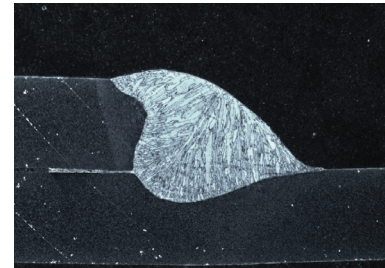
HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

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



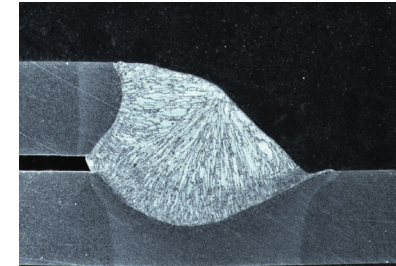
2F 1/8 in. 3 O'CLOCK LAP @
15° DOWNHILL



Travel Speed: in/min

65

Single Wire RapidArc®



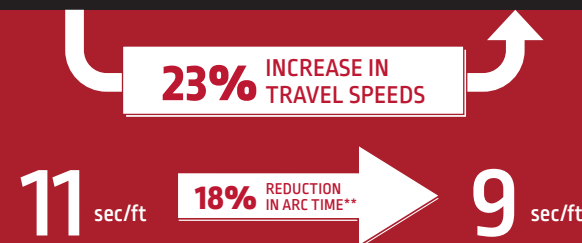
Travel Speed: in/min

80

HyperFill® RA

*Typical results for 2F 1/8 in. 3 o'clock lap welds @ 15° downhill using HyperFill® RA.

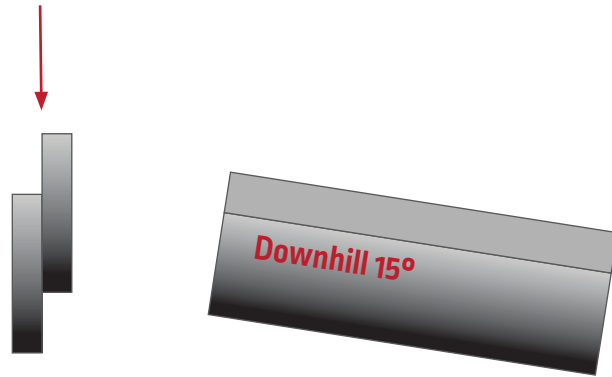
**Welding arc time study: Time to complete one foot of weld joint.



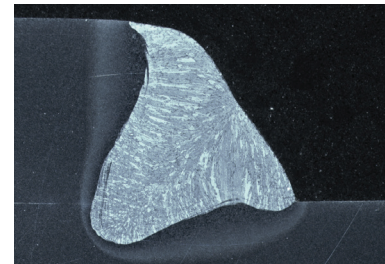
HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

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PRODUCTIVITY COMPARISON



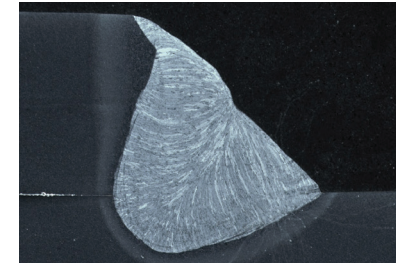
2F 1/4 in. 3 O'CLOCK LAP @
15° DOWNHILL



Travel Speed: in/min

40

Single Wire RapidArc®



Travel Speed: in/min

60

HyperFill® RA

50% INCREASE IN TRAVEL SPEEDS

18 sec/ft

33% REDUCTION IN ARC TIME**

12 sec/ft

*Typical results for 2F 1/4 in. 3 o'clock lap welds @ 15° downhill using HyperFill® RA.

**Welding arc time study: Time to complete one foot of weld joint.

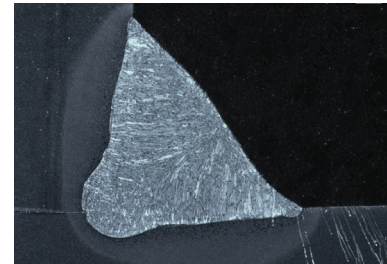
HyperFill™ Waveform Activation Capability with Power Wave® and PIPEFAB™ Systems

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PRODUCTIVITY COMPARISON



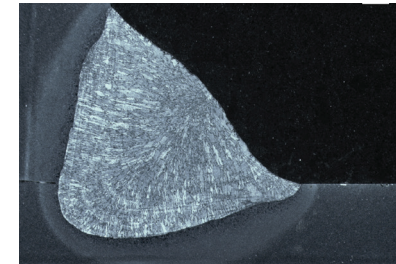
2F 1/4 in. FILLET



Travel Speed: in/min

18

Single Wire RapidArc®



Travel Speed: in/min

30

HyperFill® RA

67% INCREASE IN TRAVEL SPEEDS

40 sec/ft

40% REDUCTION IN ARC TIME**

24 sec/ft

*Typical results for 2F 1/4 in. fillet using HyperFill® RA.

**Welding arc time study: Time to complete one foot of weld joint.

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 automotive industry – achieve new levels of performance without the added complexity of advanced solutions.

MINIMAL COMPLEXITY:

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



Power Source / Wire Feeder

* Power Wave® S700 Advanced Process Welder and AutoDrive® 4R20 Wire Drive



Robotic Torch / Water Cooler

* Magnum® PRD 500A Water Cooled Torch, HyperFill® Tip (Contact Tip, Diffuser) and Cool Wave™ 20S

HyperFill® RA

TWIN WIRE AUTOMATED SOLUTION



The REVEAL Platform

The REVEAL Platform is an embedded software package that is integrated into all Lincoln Electric® Advanced Process Welding equipment. Using a simple scanning function via the Gateway pendant, the REVEAL Platform allows users to activate certain process-optimized solutions that use multiple Lincoln Electric components – such as a power source, specific weld mode, and consumable products – in order to maximize welding performance and deliver the true value of the solution. Click [here](#) for more information, terms & conditions.



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.