



LINCOLN ELECTRIC

HYPERFILL™

HIGH DEPOSITION, LOW DIFFICULTY

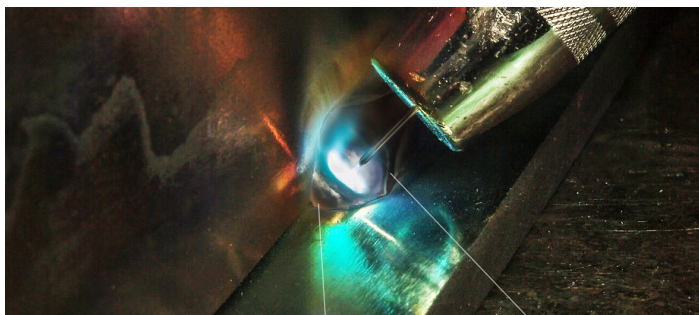
Designed to revolutionize heavy fabrication productivity, the patent-pending HyperFill twin wire MIG solution allows for increased deposition rates without compromising puddle stability or weld quality. Utilizing a single power source, a single wire feeder, and a single tip, this innovative twin wire design delivers a wide, smooth arc cone that allows for deposition rates above 18lbs/hr | 8.2 kg/hr. (24 lbs/hr. | 10.9 kg/hr robotic) without added system or operator complexity.



PROCESS COMPARISON - 5/16 IN | 8 MM FILLET AT 18 LBS | 8.2 KG / HR

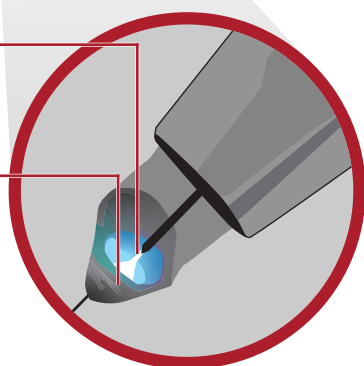
Single Wire

E70C-6M .052 IN (1.32 MM)

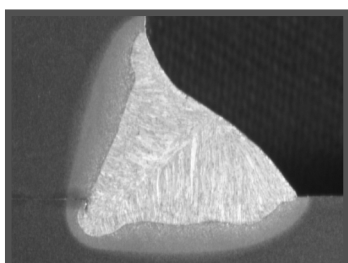


Generates a deep, narrow arc cone

Arc stability deteriorates at higher wire feed speeds making process more difficult to use

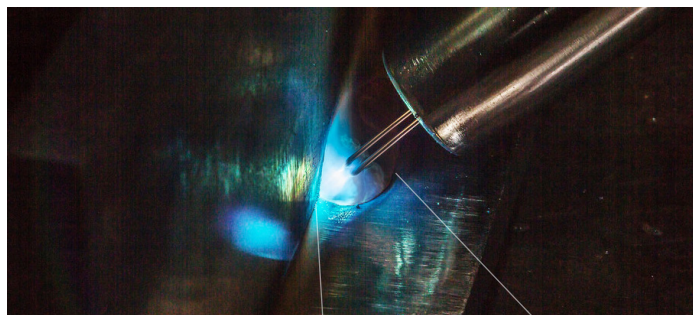


Narrow arc cone, narrow penetration profile. Increased risk of weld defects at higher deposition rates.



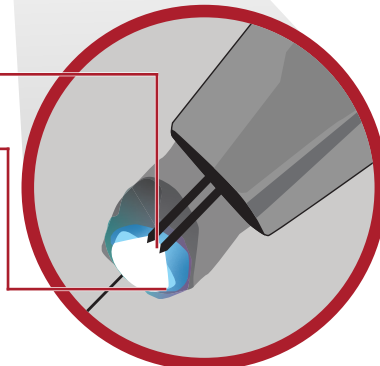
HYPERFILL

SuperArc® .040 IN (1.0 MM)

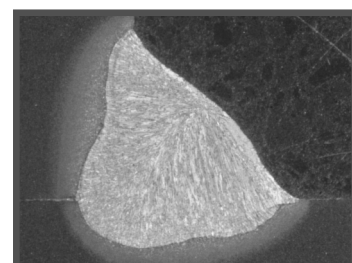


Generates a wide, evenly-distributed arc cone

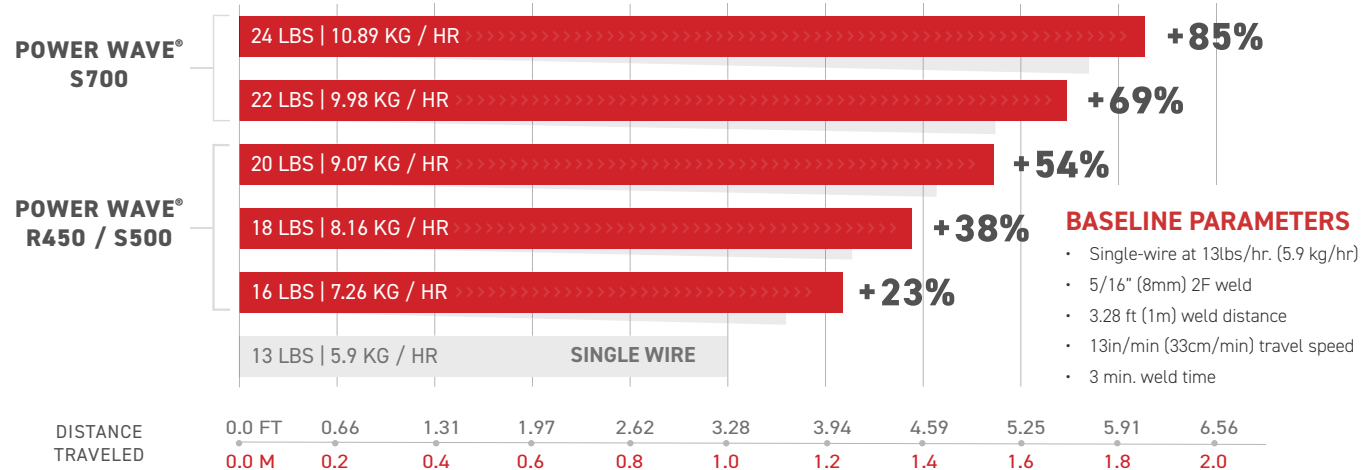
vs. Smooth, stable puddle is more favorable and makes process easy to use at higher deposition rates



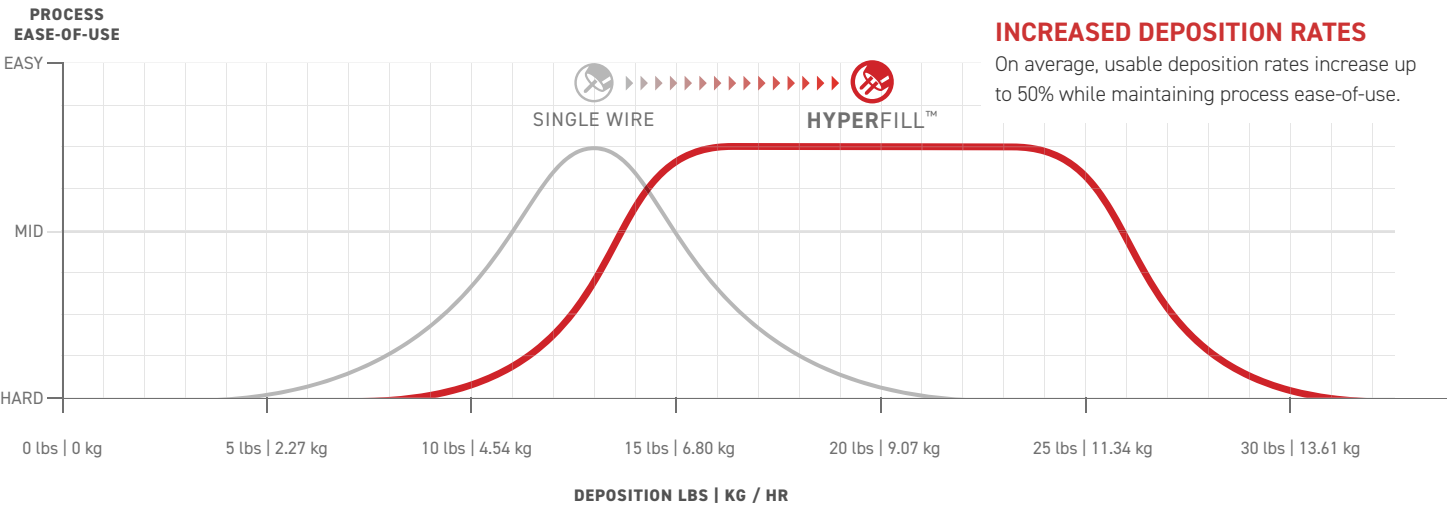
Wide arc cone leads to favorable, robust penetration profile and helps to improve weld quality at high deposition rates.



PRODUCTIVITY INCREASE - SINGLE WIRE VS.HYPERFILL



PROCESS COMPARISON - DEPOSITION RANGE



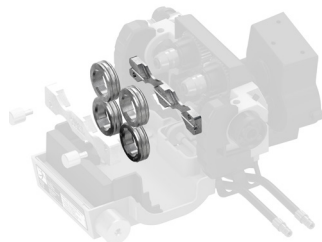
SOLUTION COMPONENTS



Power Source
Power Wave® S500
Power Wave® R450 / S700 (Robotic)
HyperFill™ Waveform
Cool Arc® 55 or 55S



Gun / Torch
Magnum® PRO 500A Water Cooled Gun
Magnum® PRO 500A Water Cooled (Robotic)
HyperFill™ Tip (contact tip, diffuser)



Wire Feeder
Power Feed® 84
AutoDrive® 4R 220 (Robotic)
HyperFill™ Drive Rolls (0.35 - 0.45)
HyperFill™ Inlet Bushing

Test Results Disclaimer
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 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.