LINCOLN ELECTRIC

HYPERFILL™

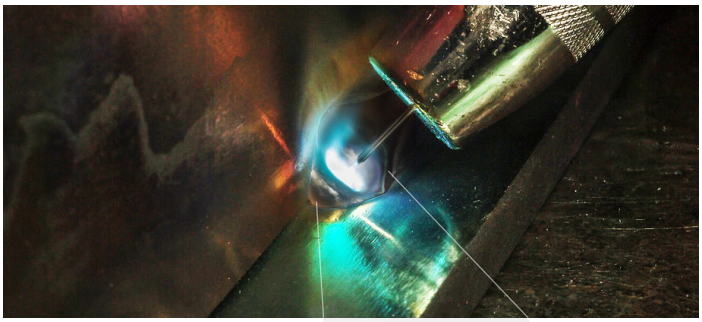
HIGH DEPOSITION, LOW DIFFICULTY

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

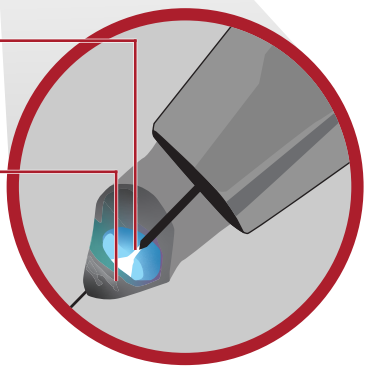
Single Wire

E70C-6M .052 IN (1.32 MM)

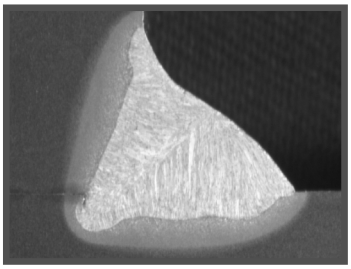


Generates a deep, narrow arc cone

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



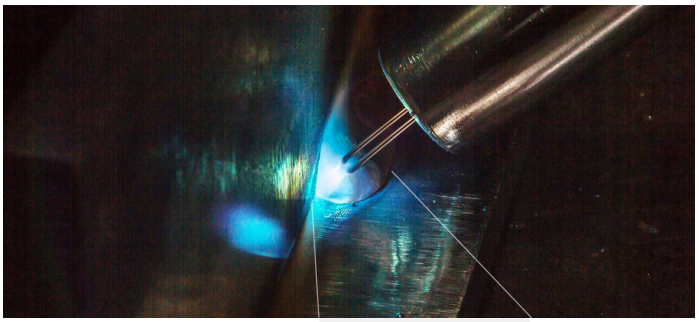
Narrow arc cone, narrow penetration profile. Increased risk of weld defects at higher deposition rates.



vs.

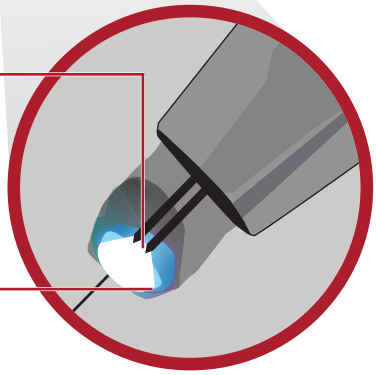
HYPERFILL

SuperArc® .040 IN (1.0 MM)

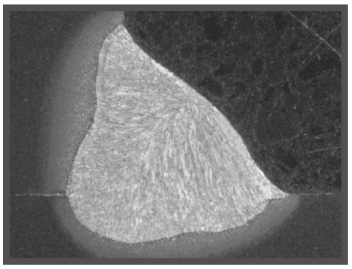


Generates a wide, evenly-distributed arc cone

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.



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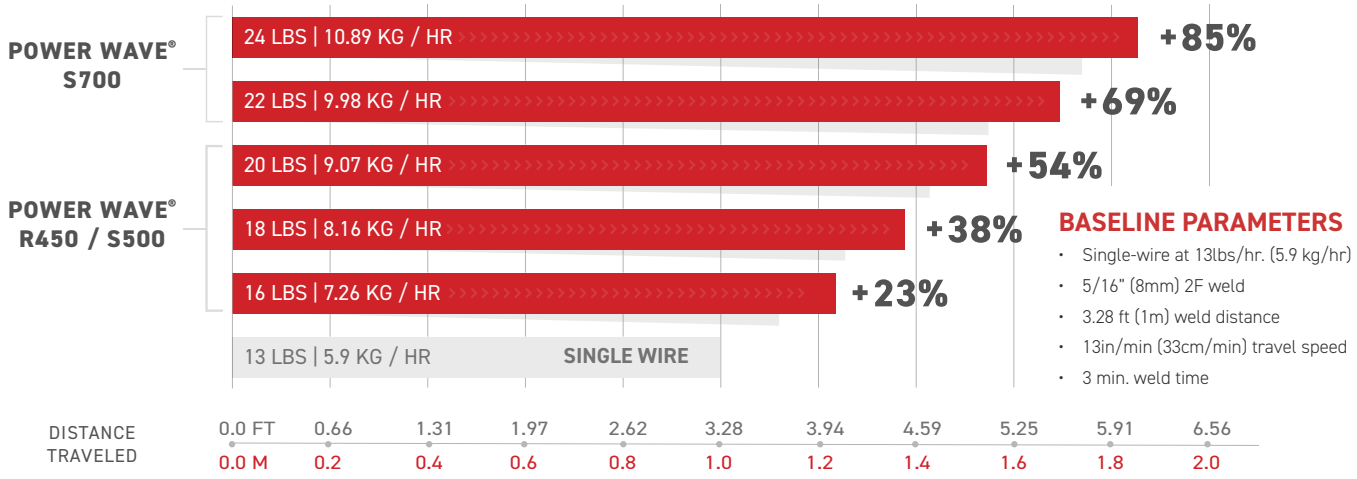
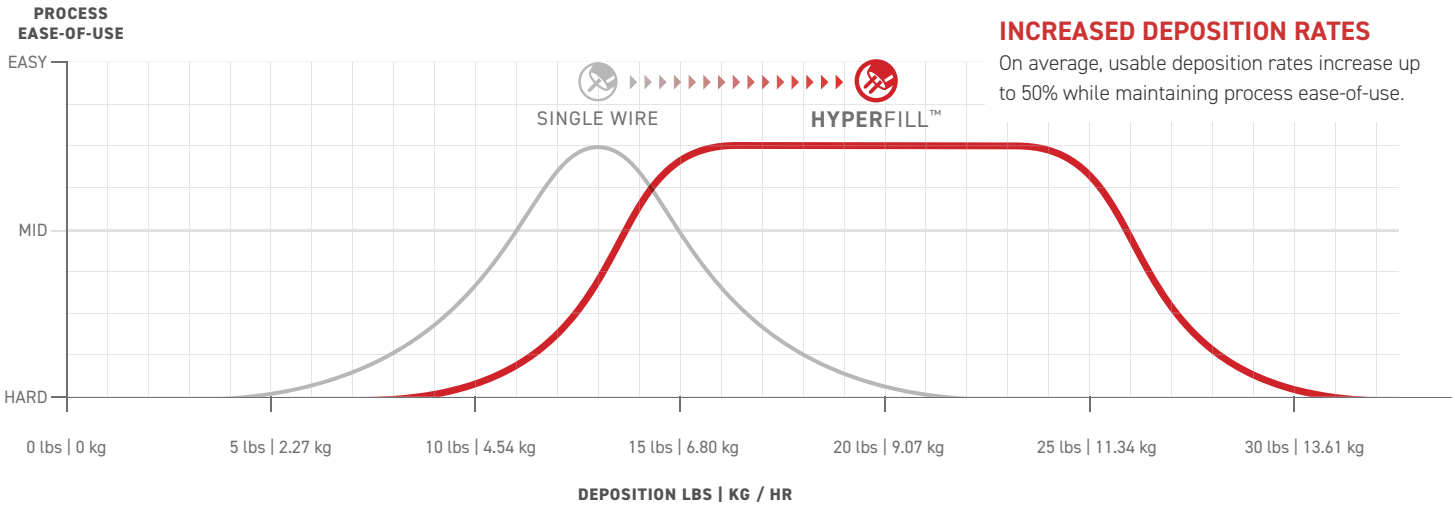
PRODUCTIVITY INCREASE - SINGLE WIRE VS.HYPERFILL



BASELINE PARAMETERS

- Single-wire at 13lbs/hr. (5.9 kg/hr)
- 5/16" (8mm) 2F weld
- 3.28 ft (1m) weld distance
- 13in/min (33cm/min) travel speed
- 3 min. weld time

PROCESS COMPARISON - DEPOSITION RANGE



INCREASED DEPOSITION RATES

On average, usable deposition rates increase up to 50% while maintaining process ease-of-use.

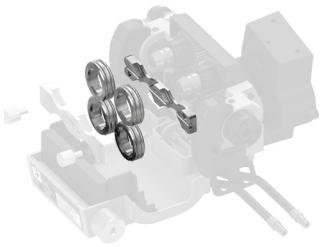
SOLUTION COMPONENTS

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