Making A Crucial Link - Marine Welders Boost Productivity With New Inverter Technology

On average, Brownsville Marine Products launches a new barge every two days.

At Brownsville Marine Products (BMP), situated on the banks of Pennsylvania's Monongahela River, a new barge hits the water every two days. This quick production schedule can't hold up to productivity losses or quality issues.

These workers, who build 100+-foot barges each day, spend a great deal of time working deep in confined spaces, such as hulls, doing out-of-position welding. In the process, they frequently find themselves 100 feet or more away from their welding power source

Traditionally, crews must climb up and down ladders to access the power source and make adjustments. Or, they would need to use a special, separate (and often expensive) control cable that adds extra clutter to an already tight work area. In doing this, they racked up down time and potentially sacrifice productivity, quality and safety.

"There's pretty much a wire leading everywhere here," says Christopher Hawk, supervisor at Brownsville Marine Products. "If you're working outside, it might be at least 100 to 120 feet from where you need to be."

As one welder at BMP noted, it often takes a welder working alone 10 to 12 minutes to leave the work area, go to the power source, make adjustments and return to the work site.

"We were losing a lot of time," Hawk says.

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When the company heard that Lincoln Electric was expanding its simple, reliable and flexible Flextec® family of multi-process inverters, the welding crew decided they were ready to try something new. They began testing the Flextec® 350X with CrossLinc™ technology. This smaller version of other Flextec inverters delivers great arc characteristics in extreme temperatures – something the welders at BMP face in Pennsylvania's tough winters and hot summers.

Lincoln Electric engineers also designed the rugged Flextec 350X to solve a particular jobsite welding issue: the ability to adjust voltage at the wire feeder without the need to leave the work area or use multiple cables. It achieves this through the integration of new CrossLinc technology, a new communication protocol. The X in the Flextec 350's name stands for this.

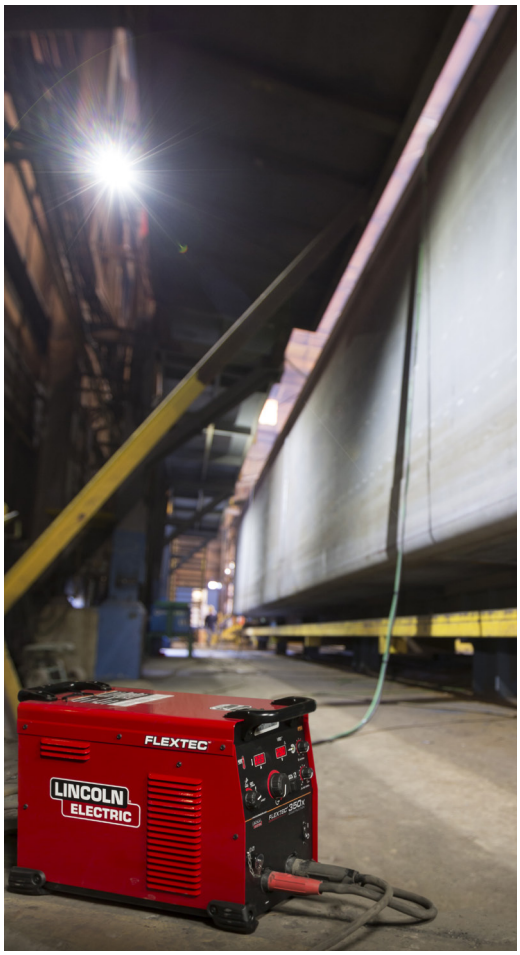
From the depths of a barge or even hundreds of feet off the ground, this new technology puts welding operators in charge, allowing them to communicate voltage control to the power source through a single, common weld cable. The result? Instant, reliable communication between the feeder and the welder. Operators can make correct adjustments without dragging another cable or leaving the site.

"CrossLinc technology is going to make jobs safer. Operators don't need to walk around; they can stay in a safer position with less clutter," notes Matt Albright, senior product manager at Lincoln Electric. "It also will improve quality. If customers can adjust procedures at point of use, they are going to use the right settings all of the time. And, it will improve their productivity. Workers don't have to climb out of a hull or down off a structure to go back to their machine and change settings. They can stay behind the arc."

CrossLinc™ Technology provides voltage control at the point of use without a bulky and expensive control cable.

The welding team at Brownsville Marine Products noticed the difference almost immediately once they started using the Flextec 350X machines.

"You move a lot faster, and we're able to meet better, higher demands for production," Hawk says. "Having the controls right at your fingertips, right in your work area, sets the bar high and will help keep us competitive in the marketplace."



With CrossLinc™ Technology, operators can reduce the number of trips back to the power source hundreds of feet away to make welding parameter adjustments.

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