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– **SONNY WEEMS, ASSISTANT SUPERINTENDENT, ASSOCIATED PIPE LINE**



Q-GUNS AND CENTERFIRE CONSUMABLES GO THE DISTANCE ON CROSS-COUNTRY PIPELINE

Centerfire™ Consumables Provide Consistent Weld Quality, Durability

Cheyenne Plains Gas Pipeline Co recently constructed a new \$425 million natural gas pipeline south of Cheyenne, Wyoming to Greensburg, Kansas that will transport up to 1.7 billion cubic feet of natural gas per day—enough energy to power about 10 million homes. Associated Pipe Line, the contractors on the job, constructed the 380 miles of 36-inch pipe and 5 miles of 30-inch lateral pipe using uphill flux cored arc welding with Bernard® Q™-Guns and Centerfire™ Consumables.

Because pipelines must be built to last, the welding has to be of the highest standard. Associated Pipe Line inspected the pipeline with highly accurate, automated ultrasonic testing (AUT) equipment to

gather details on weld quality. Any weld with a defect longer than 25 mm had to be repaired or if a bad weld ran more than 25- percent of the circumference of the pipe, that section of pipe had to be completely cut and replaced, which could cost thousands of dollars in equipment and labor. Attaining a high level of quality correctly the first time was a critical component of success to this project.

To improve weld consistency and quality, Associated Pipe Line selected the Bernard 150-amp Q-Guns. The flex-neck design was the most popular choice, though a few welders preferred the 80-degree gun.

“When we got the Bernard flex-neck guns, everyone was pleased with their

performance,” said Sonny Weems, assistant superintendent, Associated Pipe Line. “The key to flux-cored welding quality in this application is the gun angle. It needs to be directed straight at the joint or perhaps angled slightly back toward the puddle to provide good gas coverage. The flex-neck design let the welders bend the nozzle and get more comfortable.”

Bernard’s Centerfire consumables also helped in the project. The Centerfire nozzle has a built-in spatter shield that completely protects the gas diffuser and removes turbulence from the gas flow, to extend consumable life and provide superior gas coverage. Most of the operators were able to avoid changing out tips during a whole shift by using Centerfire, a factor that helped lower costs and increase productivity.

“The Bernard flex-neck guns and Centerfire made the process more forgiving by allowing operators to access hard-to-hit areas of pipe”, says Weems “They could also position the head based on their individual welding styles.”

Dick Williams, project engineer with Associated Pipe Line, adds, “We were willing to look into any process or product that benefited the pipeline owners and enabled us to complete our work more efficiently. Companies like Bernard have served our needs here very well.”



Bernard’s Q-Guns and Centerfire consumables helped contractors improve productivity and quality on 380-ft. of pipeline.

INDUSTRY LEADING PERFORMANCE

QUICK CHANGEOVERS AND COST SAVINGS: BERNARD JUMP LINERS

Bernard's patented Jump Liners reduce downtime and labor costs associated with MIG gun liner changeover. The Jump Liners connect with standard liners at the base of a Q-Gun's rotatable neck and run through the most common wear point up to the contact tip. When a Jump Liner becomes worn or contaminated, just detach the Q-Guns neck from the handle, replace only the Jump Liner and reattach the neck.



Benefits include:

EASY LINER CHANGEOVER.

There is no need to replace or trim the entire gun liner when switching to a neck of different length. The Jump Liner can remain with the body tube and the main liner with the gun.

INCREASE PRODUCTIVITY.

Quicker changeovers mean more welding time and less downtime. Bernard's Jump Liner takes only minutes to change.

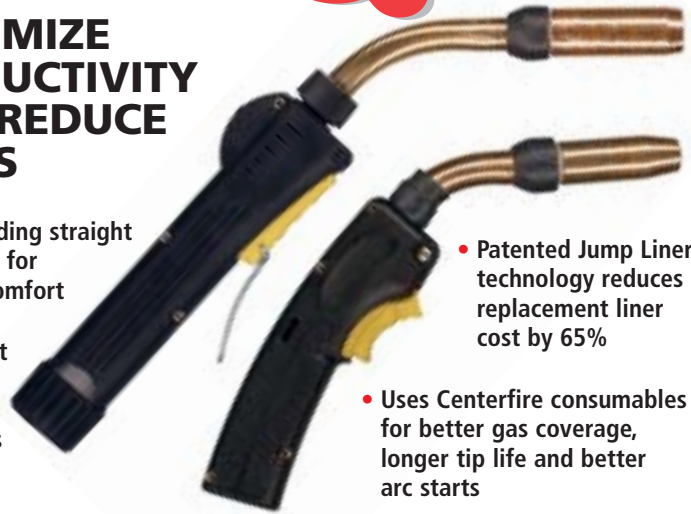
REDUCE PARTS COUNT AND INVENTORY COSTS.

Decrease the overall amount of MIG welding consumables in your inventory. With Bernard's Jump Liners, store only about 12-inches of liner compared to 15-feet or more.



MAXIMIZE PRODUCTIVITY AND REDUCE COSTS

- Patent pending straight handle gun for operator comfort
- 100 percent duty cycle with CO2 gas for less downtime
- Patented Jump Liner technology reduces replacement liner cost by 65%
- Uses Centerfire consumables for better gas coverage, longer tip life and better arc starts



Q-GUNS REDUCE LABOR AND CONSUMABLE COSTS

Because 85 percent of hand-held welding costs are labor related, Bernard designed its Q-Gun line to minimize welding downtime. Bernard restructured and improved the Q-Gun with new handles and trigger options. This increases operator comfort and lowers downtime, and both translate into more productivity and a bigger bottom line. Bernard offers five unique gun handles, rotating or fixed necks, to suit any hand-held, air-cooled industrial welding application.

The Q-Gun uses consumables that optimize performance, simplify parts management and minimize changeovers. For example, patented Jump Liner

technology allows the operator to change the highest wear portion of the liner, saving up to 65% on liner costs. In addition, all Q-Guns can be equipped with patent pending Centerfire Series MIG welding consumables. The revolutionary design of Centerfire series gas diffusers, contact tips and nozzles provides superior performance and reduces downtime. These contact tips "drop-in" the gas diffuser and lock in place by tightening the nozzle. Drop in contact tips require no tools for change over and are quicker to replace. In addition, built-in spatter shields protect the gas diffusers and provide smoother gas coverage.

BUILD YOUR Q-GUN WITH CUSTOMSELECT

Take advantage of Bernard's new CustomSelect ordering system to customize a Q-Gun to your industrial welding needs. The Q-Gun is available in 150 to 600 amp models, multiple trigger and switch options and five unique gun handle designs. Visit www.bernardwelds.com and follow the selection process to increase your bottom line today! Visitors can also sign up for MIG Tips, Bernard's quarterly newsletter, which offers advice on how to improve weld station quality and performance by highlighting success stories and product innovations.



OPTIMIZE WELDING PERFORMANCE WITH THE Q-GUN AND CUSTOMSELECT.

The Q-Gun and Centerfire consumables provide better gas coverage, faster changeovers and reduce downtime. Take advantage of Bernard's CustomSelect ordering system to customize a Q-Gun to match your MIG welding needs.



MIG-MAN'S TIP