


“We lost valuable production time in the welding process due to changing out contact tips and nozzles an average of three times per machine, per shift. Believing we could improve this, we contacted our welding supplier. He recommended we try the Centerfire™ tip from Bernard. Totally compatible with our existing guns, the Centerfire tip, diffuser and nozzle, cut our downtime in half. The new Bernard consumables also enhanced gas coverage. They not only helped us regain lost production time, they raised weld quality.”

— TONY HACKNEY, PLANT MANAGER, CIMARRON TRAILERS, INC.



## ALUMINUM TRAILER MANUFACTURER CUTS DOWNTIME IN HALF

### Switching to Bernard® Centerfire™ Series Consumables Improves Productivity

 Cimarron Trailers, located in Chickasha, Okla. is committed to producing custom-built aluminum horse, stock and cargo trailers that are well engineered and well constructed at extremely competitive prices. Cimarron, which is part of CM Trailers, provides the best possible value to customers who care about quality, craftsmanship and outstanding service. The company depends on its welding equipment to maintain high quality, high volume production. Unfortunately, they were experiencing several issues with their existing push-pull MIG aluminum system. This included poor gas coverage, inconsistent arc starts, excess rework and high tip usage.

With the help of Bernard MIG specialist Steve Burger, Cimarron initiated a trial of Centerfire™ series consumables. During the demonstration, Cimarron welding operators and managers immediately realized arcs started very softly and lit instantly — no big pop or stutter before arc initiation, which was typical with their previous consumables. After several welds, Cimarron welders were convinced that Centerfire improved arc starts, which in turn would lead to less spatter and more consistent weld quality. Further, Centerfire eliminated the black soot indicative of poor gas coverage with MIG aluminum. As a result of improved weld quality, Cimarron realized it could spend less on clean-up operations and free workers for other activities.

However, the biggest improvement came after a three-day demonstration. A welding operator who previously used an average of 10 contact tips a day — an operator who otherwise would have been on his 30<sup>th</sup> tip — was still using the original Centerfire tip that Burger installed.

Eight months later, Cimarron Trailer has converted all 30 of its MIG aluminum guns to Centerfire series consumables and reports that the average downtime for tip change-outs has been reduced by 50 percent. With the economy rebounding and sales of luxury items such as horse trailers on the rise, it's important for a company such as Cimarron to improve production as much as possible, as fast as possible, while minimizing operating costs.

Companies such as Cimarron Trailer believe that Centerfire series consumables deliver a substantial productivity payback — something that other consumables simply can't provide.



“Day in and day out, Bernard Centerfire tips and nozzles hold up to our demands for quality and help us increase production,” says Tony Hackney, Cimarron plant manager.

# INDUSTRY LEADING PERFORMANCE

The Centerfire gas diffuser is designed with a tapered seat. The non-threaded contact tip is locked into the diffuser by hand tightening the threaded nozzle.

Production benefits include:

**EASY CONVERSION** to Centerfire series consumables from other guns, including all Bernard guns, Miller XR-Edge and those from Tweco, Tregaskiss and Lincoln.

**MINIMIZED DOWNTIME** through a quick, no-tools contact tip change if a burn-back occurs. Simply unscrew the nozzle, pull the trigger and the burnt tip comes out along with the wire.

**REDUCED WEAR & DAMAGE PREVENTION.** Eliminating the need to thread contact tips in and out reduces diffuser wear and prevents damage due to over-tightening or cross-threading the tip.

**EXTENDED TIP WEAR.** Operators can rotate the tip 360 degrees within the diffuser to create a new wear surface (tips generally wear out egg-shaped hole from the curve in the welding wire.) If used properly, this technique can double tip life over standard threaded tips.

**IMPROVED ARC STARTS & PROLONGED TIP LIFE.** A large diameter tip base and tapered seat provide more mass for electrical conductivity and better heat dissipation.

**MADE IN THE USA.** All Centerfire components are manufactured in America.

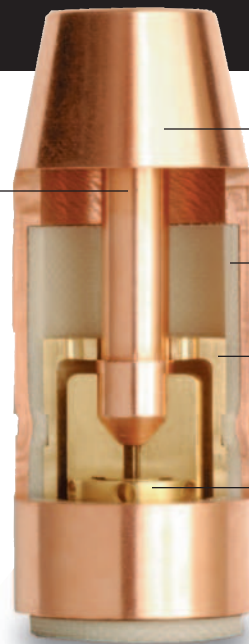
Non-threaded contact tip with tapered base and large diameter seat for good heat dissipation.

Threaded nozzle keeps contact tip centered for better weld placement and less spatter.

Ceramic insulator extends life, withstands heat and abuse.

Built-in spatter shield protects diffuser, improves gas flow.

Diffuser mates securely with contact tip for better conductivity.



## INNOVATIVE DESIGN FOR PRECISE PERFORMANCE

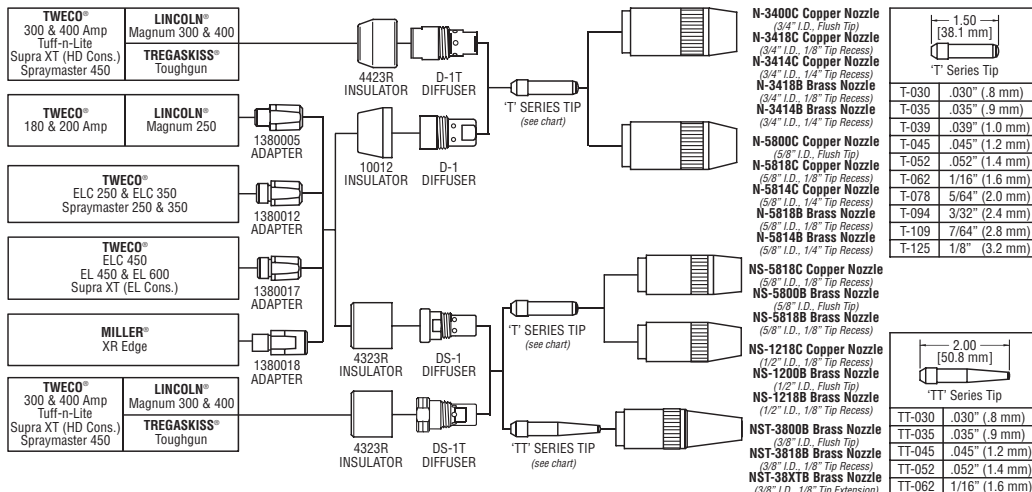
Shown here is Centerfire “cut” open to demonstrate the unique design elements that provide better gas coverage, longer tip life and better arc starts.

## SMART NOZZLE, BETTER WELDS

Centerfire nozzles have a built-in spatter shield that completely protects the gas diffuser. This extends diffuser life and provides superior gas coverage of the weld pool. The design, which is similar to a TIG gas lens, “straightens out” gas from the diffuser so that it flows parallel to the contact tip (all other designs have turbulent, swirling flow). Centerfire series consumables can improve weld quality — such as eliminating the sooty black welds Cimarron experienced — and may alleviate porosity caused by fans or drafts.

Further, research shows that a higher concentration of argon gas helps initiate and stabilize the arc.

In addition, the nozzle’s screw-on design holds the contact tip fixed (choose from 1/4” or 1/8” tip recess, flush, or 1/8” stick out) and maintains a solid, concentric relationship between the tip and the nozzle. Centerfire series nozzles can withstand rougher treatment than slip-on nozzles and still keep the tip concentric for better weld placement and decreased spatter.



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Centerfire™ series consumables are sold through Bernard® authorized wholesalers and distributors. For more information or a location near you, call 800-946-2281 or visit [bernard-welding.com](http://bernard-welding.com)

**IMPROVE PERFORMANCE WITH EASY CONVERSION**

Centerfire series consumables can improve the performance of almost any MIG welding gun. Just find the gun you are currently using on the left and follow the chart to the right for the parts needed to upgrade.

**MIG-MAN'S TIP**