



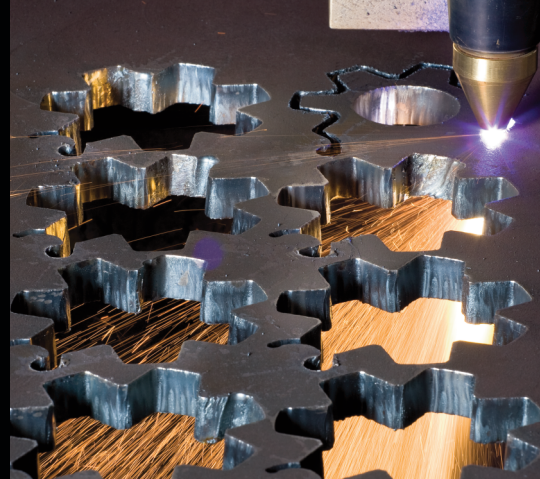
## CoolFlow™ and SilverLine® technologies improve process life!

Patent-pending CoolFlow nozzles and patented SilverLine electrodes improve cut quality and life – so you can cut more metal with one set of consumables. Follow the instructions on our quick set up card. The more you cut the more you save!

Centricut product for Kjellberg

# FineFocus 800 Plus

## Quick Set-up



### To achieve maximum consumable life

A fully used SilverLine electrode will have a pit depth of 1,5 mm. This is deeper than the recommended pit depth of 0,75 mm for standard parts.

**Properly tighten the nozzle cap:** Make sure the nozzle cap is sealed tightly against the nozzle to maintain a proper seal and prevent leaking.

**Purge torch:** After each parts change purge the torch for at least 30 seconds to remove residual moisture.

**Leak check:** After purging the torch make sure all o-ring and metal-to-metal seals are working as designed.

**Adjust gas flows:** Plasma gas flow rate is critical. High flow will cause rapid electrode wear and hard starting. Low flow will cause uncontrolled arcing. (See cutting tables in your owner's manual.)

**Pierce at correct height:** Piercing too low causes molten metal (spatter) to hit the swirl gas cap and nozzle. This is the most common cause of premature nozzle failure. Piercing too high can cause slow arc transfer and misfires.

**Adjust arc voltage:** As the electrode wears, the torch will get closer to the plate. To maintain optimum cutting height, increase arc voltage in 2-volt increments, up to 10 volts higher than the initial setting.

**Avoid arc stretching:** This can occur during rip cutting off the plate or when the lead out is improperly programmed. This shortens consumable life.

**Clean the nozzle and swirl gas cap:** Periodically clean the nozzle and swirl gas cap to remove spatter. This will prevent double arcing which shortens consumable life.



Reference number	Article number	Description	Centricut number
1. T012	.11.836.921.300	SilverLine electrode	C117-1300
2. T101	.11.836.921.153	Gas guide	C117-153
3. T2120	.11.836.921.420	CoolFlow nozzle, 200 amp	C117-420
T2125	.11.836.921.425	CoolFlow nozzle, 250 amp	C117-425
T2127	.11.836.921.427	CoolFlow nozzle, 300 amp	C117-427
4. T3045	.11.836.901.164	Nozzle cap	C117-164
5. T521	.11.836.901.271	Swirl gas nozzle	C117-271
6. V501	.11.833.101.261	Protective cap	C53-261
7. V4335	.11.833.101.155	Swirl gas cap	C117-155
V4345	.11.833.101.157	Swirl gas cap	C117-157

## CoolFlow technology



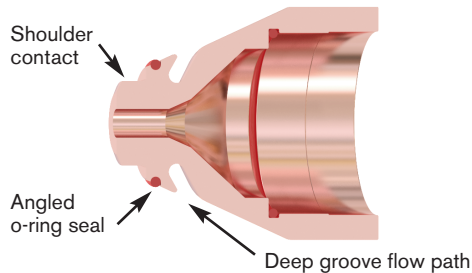
### CoolFlow nozzles are designed to optimize cut quality and speed

CoolFlow nozzles are designed to optimize cut quality and speed while providing long service life. State-of-the-art computer modeling is used to analyze cooling water flow and heat transfer to optimize the design. CoolFlow nozzles are tested extensively in the lab and field and produced to exacting quality standards.

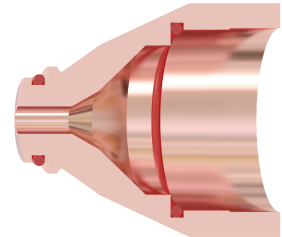
Key features of this nozzle design include:

1. Deep groove curved flow path – designed to provide coolant flow to the hottest area of the nozzle, eliminating stagnation and maximizing convection cooling.
2. Angled o-ring seal – positioned away from the nozzle hot zone to eliminate failures.
3. Shoulder contact – reliably positions nozzle cap and provides conduction cooling of the nozzle.

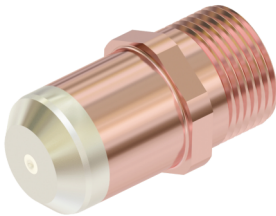
### Centricut CoolFlow nozzle



### OEM nozzle



## SilverLine technology

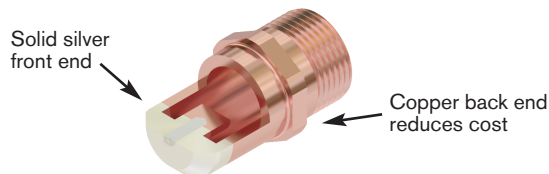


### SilverLine technology involves fusing a silver front-end onto a copper electrode base. Inserting the hafnium emitter into an all-silver front end creates several advantages.

1. The hafnium-silver bond is stronger, allowing a deeper pit depth in the hafnium as the electrode is used.
2. By diffusing more heat during use, silver slows the rate of hafnium wear.
3. Cost/performance is optimized since silver is only used where it provides a benefit.

All of these benefits combine to prolong electrode life and lower the cost of cutting.

### Centricut SilverLine electrode



### OEM electrode

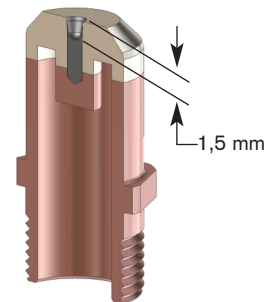
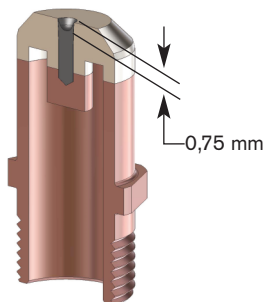


### Partially-used electrode

This SilverLine electrode is only partially consumed. The pit in the center of the part measures 0,75 mm. Electrodes are often removed prematurely due to cut quality deterioration related to nozzle failure. Additional life can be achieved by replacing the nozzle and leaving the electrode in place.

### Fully-used electrode

This SilverLine electrode has provided full use. The pit depth is 1,5 mm. The operator increased the arc voltage in 2-volt increments up to 10 volts from the first cuts made with this electrode to the last. This maintains a constant distance between the torch and the work-piece through the life of the electrode.



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