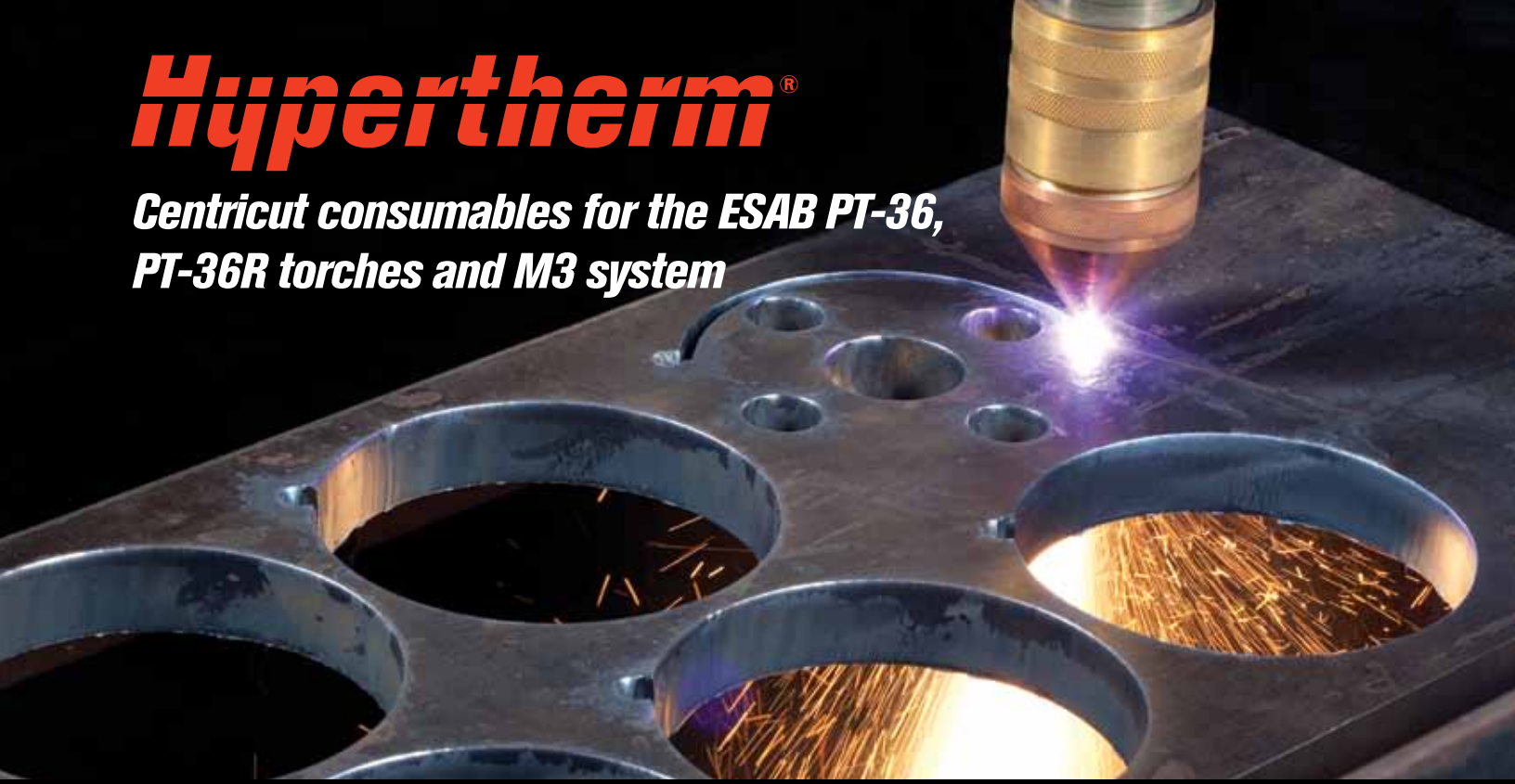


Hypertherm®

**Centricut consumables for the ESAB PT-36,
PT-36R torches and M3 system**



TECHNOLOGY UPDATE

CENTRICUT VS OEM

Upgrade to Centricut performance consumables to lower operating costs without sacrificing cut quality and productivity.

Lower overall cost

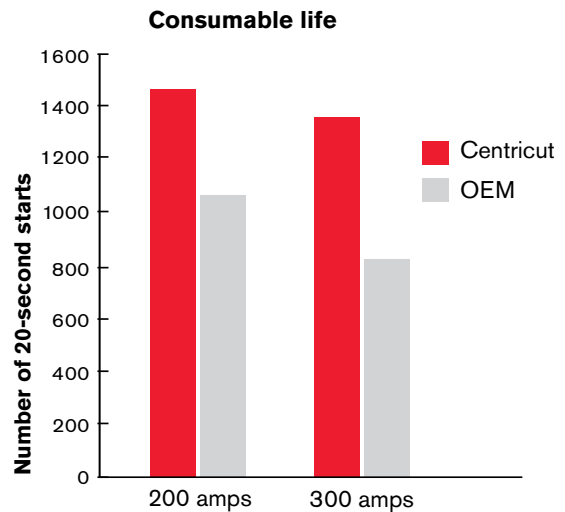
- Centricut consumables last up to twice as long as the OEM.
- Cut consumables usage in half and reduce system downtime.
- Full line of consumables are competitively priced compared to the OEM.

Hypertherm patented technology

- Highly engineered designs deliver excellent performance to your cutting operation.
- SilverLine and CoolFlow consumables set the standard by which other manufacturers measure themselves.
- SilverLine electrodes and CoolFlow nozzles deliver exceptional cut quality and fast cutting speeds over the full life of the consumables.

Quality, consistency, and reliability

- Hypertherm's precision manufacturing assures consistent consumable performance – provides reliability to your cutting process.
- Designed with critical-to-function tolerances that deliver the best quality product every time.
- Easy to use – no special system set-up required.



“The cut quality is better than what we get with the OEM and the parts last a lot longer.”
– Construction Machinery Manufacturer

Centricut consumables for the ESAB PT-36 torch deliver value to your plasma cutting process.

- **Longer life**
- **Exceptional cut quality**
- **Fast cutting speed**
- **Consistent product quality**
- **Competitive prices**
- **Covers all cutting processes**
- **Plug and play – no special set-up**



FEATURES AND BENEFITS

SilverLine electrode technology

- A solid silver front end maximizes cooling and minimizes hafnium wear.
- Flow ridges improve starting performance and extend life.
- Advanced coolant flow design reduces the temperature of the electrode and maximizes life.
- Robust welded copper/silver interface delivers consistent performance.

CoolFlow nozzle technology

- Computer-designed contours optimize the coolant flow in the nozzle and substantially lower the operating temperature.
- Thicker nozzle walls dissipate heat away from the orifice more efficiently, leading to cooler operation.
- Cooler nozzle operation directly translates into longer life of all consumables.

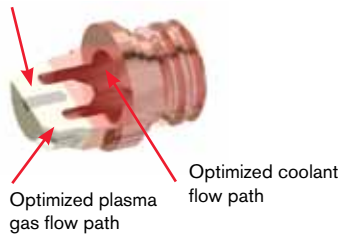
Cooling comparison

Analysis of electrode and nozzle cooling through the use of Computational Fluid Dynamics allows Hypertherm engineers and material scientists to optimize Centricut consumables to the highest levels of performance.

CENTRICUT TECHNOLOGY VS OEM

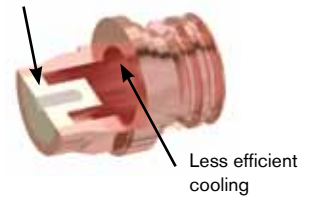
SilverLine electrode

Solid silver front-end



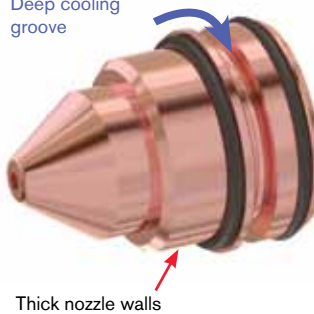
OEM electrode

Silver insert



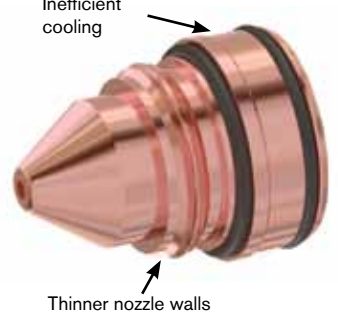
CoolFlow nozzle

Deep cooling groove



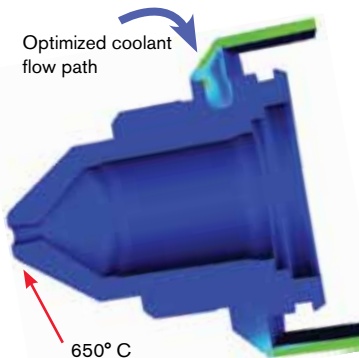
OEM nozzle

Inefficient cooling



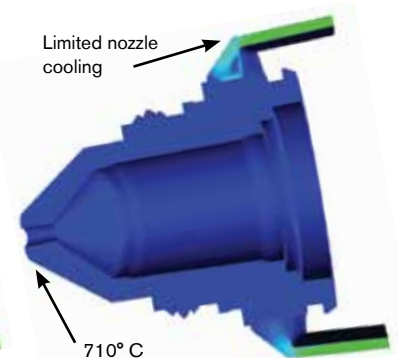
CoolFlow nozzle

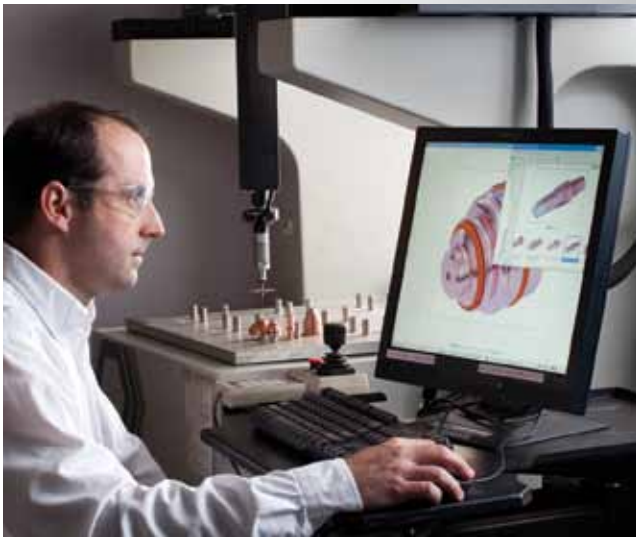
Optimized coolant flow path



OEM nozzle

Limited nozzle cooling





Hypertherm

Cut with confidence™

Centricut products are backed by Hypertherm – the global leader in plasma cutting technology

- Hypertherm patented consumable technologies deliver measurable performance improvements
- Hypertherm lean manufacturing and Six Sigma methods provide quality, consistency and reliability
- Hypertherm and its network of distributors are committed to providing the best service and support available



The Centricut replacement torch for PT-36 combines Hypertherm innovation and reliability

A robust torch body that features a unique threaded and glued sleeve-to-shell design

- Improved long-term alignment of torch components
- Reduced risk of leaking
- Extended overall torch service life
- Fully compatible with Centricut and OEM consumables

To achieve maximum consumable life

Use electrode to full life: A fully used SilverLine electrode will have a pit depth of .120" (3.0 mm). This is deeper than the recommended pit depth for standard parts of .090" (2.3 mm).

Properly tighten the nozzle retaining cup: Make sure the retaining cup is sealed tightly against the nozzle to 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 seals are tight and there are no torch coolant leaks.

Adjust plasma gas pressure: Plasma gas flow rate is critical. High flow will cause rapid electrode wear and hard starting. Low flow will cause uncontrolled arcing.

Adjust shield gas pressure: Refer to the cut chart for optimum shield gas pressure. Having the correct start shield flow provides protection to the nozzle and shield during the piercing process.

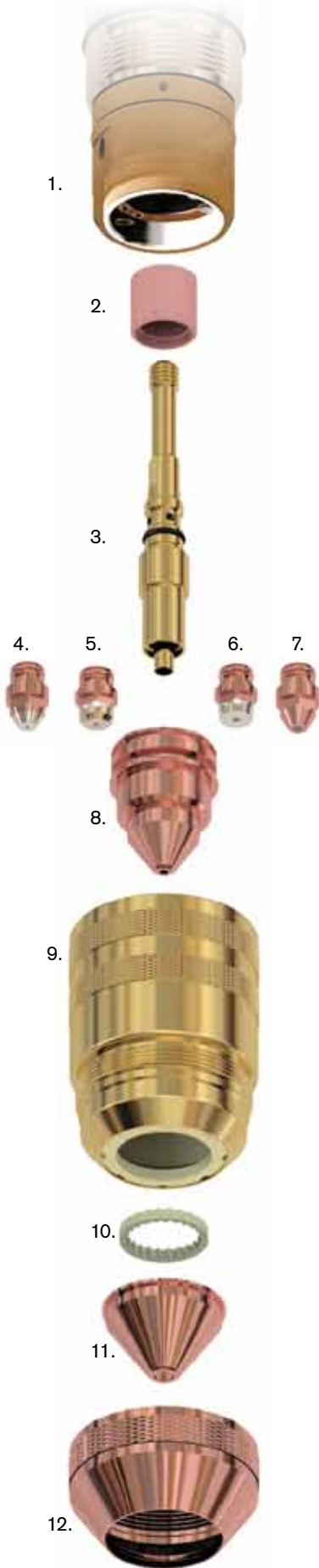
Pierce at correct height: Refer to the cut chart for optimum pierce (initial) height. Piercing too low causes molten metal (spatter) to hit the shield and nozzle – the most common cause of premature nozzle failure. Piercing too high can cause misfires and nozzle damage.

Adjust arc voltage: As the consumables wear, the torch will get closer to the plate. To maintain optimum cutting height, increase arc voltage in 5-volt increments, up to 20 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 shield: Periodically clean the nozzle and shield to remove spatter. This will prevent double arcing which shortens consumable life.

Centricut consumables for the ESAB PT-36 torch deliver value to your plasma cutting process through long life and exceptional quality.



PARTS LIST

Centricut number	Reference number	Description
1. C122-804	0558003804	Torch body
C10-483	0558001626	Torch sleeve
C47-071	0558003858	Contact ring
C47-073	37073	Screw, contact ring
2. C122-457	0558005457	Gas swirl baffle, 4X.022, 35 – 70 amp
C122-533	0558002533	Gas swirl baffle, 4X.032, 100 – 280 amp
C10-660	0558001625	Gas swirl baffle, 8X.047, 300 – 600 amp
C122-530R	0558002530R	Gas swirl baffle, 8X.047, Rev, 360 – 450 amp
3. C122-924	0558003924	Electrode holder
4. C122-1059	0558005459	SilverLine electrode, O ₂ , 50 amp
5. C122-1014	0558003914	SilverLine electrode, O ₂ , 100 – 300 amp
6. C122-1091	0558007791	SilverLine electrode, O ₂ , 360 – 450 amp
7. C122-928	0558003928	Electrode, SS/Al, 600 amp
8. C122-908	0558006908	CoolFlow nozzle, .08 mm, 35 amp
C122-8010	0558008010	CoolFlow nozzle, 1.0 mm, PR, 45 – 55 amp
C122-6010	0558006010	CoolFlow nozzle, 1.0 mm, 50 amp
C122-014	0558006014	CoolFlow nozzle, 1.4 mm, 100 amp
C122-018	0558006018	CoolFlow nozzle, 1.8 mm, 130 amp
C122-020	0558006020	CoolFlow nozzle, 2.0 mm, 200 amp
C122-023	0558006023	CoolFlow nozzle, 2.3 mm, 280 amp
C122-025	0558006025	CoolFlow nozzle, 2.5 mm, 300 amp
C122-030	0558006030	CoolFlow nozzle, 3.0 mm, 360 amp
C122-036	0558006036	CoolFlow nozzle, 3.6 mm, 450 amp
C122-041	0558006041	CoolFlow nozzle, 4.1 mm, 600 amp
9. C47-082	37082	Nozzle retainer cup
10. C47-944	21944	Diffuser
L47-796	21796	Diffuser, 50 amp
11. C122-624	0558007624	Shield, 2.4 mm, 45 – 55 amp
C122-130	0558006130	Shield, 3.0 mm, 35 – 50 amp
C122-141	0558006141	Shield, 4.1 mm, 70 – 280 amp
C122-166	0558006166	Shield, 6.6 mm, 290 – 450 amp
C122-199	0558006199	Shield, 9.9 mm, 360 – 600 amp
12. C47-081	37081	Shield retainer
L122-616	0558004616	Shield retainer, insulated

Contact Hypertherm to locate a distributor near you.

Hypertherm®

Centricut consumables for ESAB

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