

## Upgrade to SilverLine® technology!

Patented SilverLine technology improves electrode and nozzle life so you can cut more metal with one set of consumables. To start saving with SilverLine just follow the instructions on our Quick Set-up card: the more you cut the more you save!



Centricut product for ESAB

# PT-15XL®

## Quick Set-up

### SilverLine electrodes on average last twice as long as standard electrodes.

The hafnium-silver bond is more effective than hafnium-copper in standard electrodes. This allows the SilverLine electrode to achieve a 33% deeper pit depth.

The robust copper-silver interface, combined with the hafnium-silver bond deliver consistent performance and lower the overall cost of cutting.



| Part number | Reference         | Description                                   |
|-------------|-------------------|---|
| 1. C10-754  | 20754             | Torch body, PT-15XL                           |
| C10-954     | 16365             | SilverLine, torch assembly, 260 amp           |
| C10-955     | 16365             | SilverLine, torch assembly, 300 amp           |
| C10-NIT     | N/A               | Torch assembly, N <sub>2</sub> , 400 amp      |
| 2. C10-755  | 20755             | Insulator body with o-ring, PT-15XL           |
| 3. C10-940  | 21940             | Contact ring assembly                         |
| 4. C10-142  | 948142            | Gas swirl baffle, ceramic, 4 X .032"          |
| C10-586     | 2075586           | Gas swirl baffle, ceramic, 8 X .067"          |
| 5. C10-660  | 35660, 0558001625 | Gas swirl baffle, ceramic, 8 X .047"          |
| C10-398     | 20398             | Electrode holder, O <sub>2</sub>              |
| 6. C47-084  | 34084             | Electrode holder (beveling)                   |
| C47-1096    | 34086             | SilverLine electrode, 50/250 amp (beveling)   |
| 7. C10-1066 | 35666             | SilverLine electrode, 300/340 amp             |
| 8. C10-1063 | 20763             | SilverLine electrode, 260 amp                 |
| 9. C10-751  | 20751             | Nozzle, O <sub>2</sub> , 260 amp              |
| C10-662     | 35662             | Nozzle, O <sub>2</sub> , 300 amp (2 piece)    |
| C10-962     | 35662             | Nozzle, O <sub>2</sub> , 300 amp              |
| C10-664     | 35664             | Nozzle, O <sub>2</sub> , 340/360 amp          |
| C10-665     | 35665             | Nozzle, O <sub>2</sub> , 340/360 amp, reverse |
| C10-920     | 20920             | Nozzle, O <sub>2</sub> , 260 amp, reverse     |
| 10. C10-317 | 37317             | Nozzle, 125 amp (2 piece)                     |
| C10-262     | 21962             | Nozzle, 300 amp (beveling)                    |
| C10-063     | 21963             | Nozzle, 300 amp (reverse beveling)            |
| 11. C10-758 | 20758             | Nozzle retaining cap                          |
| C10-759     | 20759             | Nozzle retaining cap                          |
| L10-570     | 35570             | Nozzle retaining cap (beveling)               |
| C10-483     | 19483, 0558001626 | Double threaded mounting tube                 |
| L10-630     | 999630            | Nozzle/electrode stem tool                    |

## Recommended parameters for mild steel cutting with oxygen

| Thickness<br>mm | Amps<br>A | Plasma start gas<br>bar | Plasma cut gas<br>bar | Start water<br>bar | Cut water<br>bar | Arc voltage<br>V | Initial height<br>mm | Speed<br>mm/min | Pierce delay<br>sec |
|-----------------|-----------|-------------------------|-----------------------|--------------------|------------------|------------------|----------------------|-----------------|---------------------|
| 6               | 90        | 1,7                     | 4,4                   | 1,9                | 2,2              | 117              | 4                    | 2794            | 0,5                 |
| 6               | 125       | 1,7                     | 4,4                   | 1,9                | 2,5              | 110              | 4                    | 3302            | 0,5                 |
| 13              |           | 1,7                     | 4,4                   | 1,9                | 2,5              | 130              | 4                    | 1168            | 0,5                 |
| 6               | 260       | 1,7                     | 2,9                   | 5,7                | 5,7              | 118              | 6                    | 4318            | 0,5                 |
| 10              |           | 1,7                     | 2,9                   | 5,7                | 5,7              | 128              | 6                    | 3302            | 0,5                 |
| 13              |           | 1,7                     | 2,9                   | 5,7                | 5,7              | 130              | 8                    | 2413            | 0,5                 |
| 16              |           | 1,7                     | 2,9                   | 5,7                | 5,7              | 135              | 8                    | 1905            | 0,5                 |
| 19              |           | 1,7                     | 2,9                   | 5,7                | 5,7              | 143              | 10                   | 1651            | 0,5                 |
| 25              |           | 1,7                     | 2,9                   | 5,7                | 5,7              | 155              | 10                   | 1143            | 1                   |
| 6               | 300       | 1,7                     | 3,1                   | 4,4                | 4,7              | 125              | 6                    | 6350            | 0,5                 |
| 10              |           | 1,7                     | 3,1                   | 4,4                | 4,7              | 137              | 6                    | 3937            | 0,5                 |
| 13              |           | 1,7                     | 3,1                   | 4,4                | 4,7              | 135              | 8                    | 3302            | 0,5                 |
| 16              |           | 1,7                     | 3,1                   | 4,4                | 4,7              | 145              | 8                    | 2159            | 0,5                 |
| 19              |           | 1,7                     | 3,1                   | 4,4                | 4,7              | 150              | 10                   | 1905            | 0,5                 |
| 25              |           | 1,7                     | 3,1                   | 4,4                | 4,7              | 150              | 10                   | 1397            | 0,5                 |
| 19              | 340       | 1,7                     | 3,3                   | 4,4                | 4,7              | 131              | 10                   | 2413            | 0,5                 |
| 25              |           | 1,7                     | 3,3                   | 4,4                | 4,7              | 145              | 10                   | 1600            | 1,5                 |
| 32              |           | 1,7                     | 3,3                   | 4,4                | 4,7              | 138              | 13                   | 1066            | 2                   |
| 32              | 360       | 1,7                     | 3,3                   | 4,4                | 4,7              | 144              | 13                   | 1219            | 2                   |
| 38              |           | 1,7                     | 3,3                   | 4,4                | 4,7              | 153              | 13                   | 914             | 2                   |

### Achieve maximum consumable life

**Use electrode to full life:** A fully used SilverLine electrode will have a pit depth of 3,0 mm. This is deeper than the recommended pit depth for standard parts of 2,3 mm.

**Properly tighten the nozzle retaining cap:** Make sure the nozzle retainer 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 injection water pressure:** Refer to the cut chart for optimum injection water pressure. Having the correct injection water flow provides protection to the nozzle and ceramic.

**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.

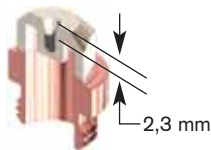
**Adjust arc voltage:** As the consumables wear, the torch will get closer to the plate. To maintain optimum cutting height, increase arc voltage in 5-volt increments, up to 20 volts higher than the initial setting.

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

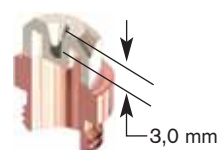
#### Partially-used electrode

This SilverLine electrode is only partially consumed. The pit in the center of the part measures 2,3 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 3,0 mm. The operator increased the arc voltage in 5-volt increments, up to 20 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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