



## Sensor™ PHC

Voltage-sensing height control



The Sensor PHC is an easy-to-use and reliable voltage-sensing height control for conventional plasma applications.

**The benefits realized are substantial in terms of:**

- Consumable life improvement
- Improved cut quality
- Reduced operator intervention

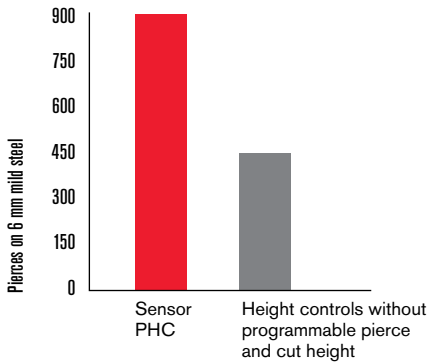
The Sensor PHC offers easy installation on new or existing conventional plasma cutting tables with any CNC and a broad range of plasma systems. The Sensor PHC delivers improved performance at a reduced cost compared to other height control solutions.

**Specifications**

- 5120 mm/m maximum speed
- 150 mm range of motion
- 50 V–210 V arc voltage set-point for arc-voltage feedback and adjustment that is accurate to 1 arc-volt
- Ohmic contact and stall-force initial height sense
- Plasma on/off signal provided by CNC
- Multiple cable options in various lengths available to suit different applications

### Better consumable life

- Spatter during piercing presents a threat to the nozzle and shield.
- Setting the height of the torch higher during piercing protects the consumables by moving them away from the spatter.
- The Sensor PHC offers separate settings for both pierce and cut heights to automatically position the torch.



Note: Results of standard lab pierce and cut tests using a Powermax system at 80 A.

### A stand-alone true voltage-sensing height control

- Programmable for separate pierce height and cut height for improved consumable life.
- Simple operational controls and fault indicators for easy training, operation and diagnostics.
- No operator input required while cutting.

### Improved cut quality performance

The Sensor PHC offers improved quality over the entire life of the consumables.

The following cut-edge angle dimensions were measured at the beginning and end of a 450 pierce-and-cut test for both setups.

|            | 1st cut sample, maximum kerf angle | 451st cut sample, maximum kerf angle |
|------------|------------------------------------|--------------------------------------|
| No PHC     | 4°                                 | 11°                                  |
| Sensor PHC | 3°                                 | 4°                                   |

Angles were measured on all four sides, all four samples. The lower the number, the better the cut quality. The angles will vary with thickness.

### Magnetic breakaway

The lifter has a built-in keyed magnetic breakaway for the torch holder that protects the torch during plate collisions by sensing the collision during separation from the mount.

It then provides fast and repeatable recovery due to the keyed assembly with magnets that retain the mounting block after the torch is repositioned.



For a location near you, visit:  
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