

# Sensomat-PAN

## Height Sensing for Oxyfuel

### Overview:

Sensomat-PAN Height Sensing reliably maintains the proper standoff distance between the oxyfuel torch tip and the workpiece, without operator intervention.

### Features and Benefits:

- Uses “Capacitive” technology at 15KHz, to provide reliability and tolerance to harsh environments.
- Measuring accuracy of +/- .12" and repeatability of +/- .04" maintains part quality and optimum cutting speeds without operator intervention.
- Accommodates plate inclination of +/- 3 degrees to allow use with wavy or warped plate (requires a transition with minimum radius of 10").
- Height “freeze” can be activated to allow cutting near the edge of the plate.
- Allows Messer TurboFlame torch to achieve optimum cutting quality and maximum cutting speed.



Sensing probe ring 22 shown



Control Box

### System Description:

The Sensomat-PAN system uses “Capacitive” technology, with the probe acting as an antenna, to sense the presence of the plate. Actual measurements are compared to a set value, corresponding to the desired stand-off. The built-in logic commands the lifter motor to constantly move the station to obtain a zero difference between “actual” and “set”, providing highly accurate torch stand-off distance.

The Sensomat-PAN Height Sensing operates using one of two different style sensing probes:

1. **Ring 22, .866" (22mm) diameter sensing probe**
  - Best used with thickness range from .250" to 1.5"
2. **U-65, 2.56" (65mm) diameter sensing probe with 180 degree radius and open mouth (U shape).**
  - Best used with thickness range from 1.5" to 3"
  - The open area of the U-65 probe provides a path for the hot stream of material to exit during the piercing process so as to not damage the probe. Programmed lead-in direction should consider the probe opening location. (NOTE: Slag build-up on probe will cause erratic operation.)



Sensing probe U-65 shown

### Application:

Available on EdgeMate, EdgeMaster, Titan II, MPC2000, and TMC4500ST machine models with TurboFlame torches.

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OPTIONS

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