

RETRO SYSTEMS

SENSOR™ Torch Height Control Software & RSVS-5 Lifter

SENSOR™ plasma torch height control software is tightly integrated into Hypertherm® CNC controls. Together they deliver a full featured precision plasma torch height control system specifically designed to work with Hypertherm plasma systems. **SENSOR** will significantly increase the productivity and profitability of your shape cutting operation.

The machine operator selects Material Type, Process Current, Plasma/Shield Gas and Material Thickness from the CUT CHART SCREEN. The CNC control retrieves cutting parameters from factory **Look-Up Tables** stored within the CNC control. All plasma process parameters are set and automatically maintained during the cutting cycle.

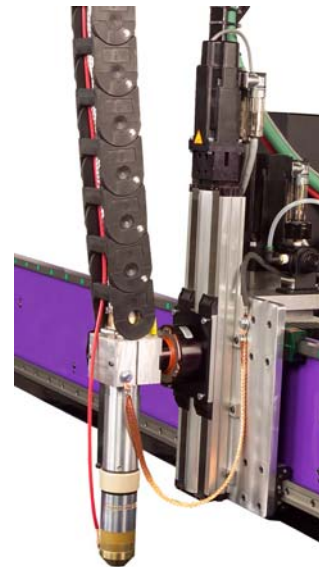
SENSOR SOFTWARE PARAMETERS:

- Pierce height
- Pierce time
- Cutting height
- Cutting voltage
- Retract height after cut

PLASMA CUT CHART SCREEN:

The screenshot shows the 'Plasma 1 Cut Chart - Rev A' interface. On the left, a dropdown menu for 'Material Thickness' is open, listing options: 10GA, 16GA, 1/4", 3/8", 1/2", 5/8", and 3/4". A red arrow points to the 1/4" option. Other parameters visible include: Material Type (Mild Steel), Process Current (60A), Plasma / Shield (Air / Air), Material Thickness (10GA), Cutflow Setting (80 psi), Cut Speed (211 ipm), Kerf (0.07 in), Net Arc Current (60 amps), Net Arc Voltage (134 volts), Cut Height (0.1 in), Pierce Height (150 %), Pierce Time (0.1 sec), and Creep Time (0 sec). The interface includes buttons for 'Save Process', 'Reset Process', 'Save Cut Charts', 'Load Cut Charts', and 'Change Consumables'.

Selection of Material Type, Process Current, Plasma/Shield and Material Thickness automatically sets and maintains all torch height control parameters during the cutting cycle.



RSVS-5 plasma torch lifter

RSVS-5 Lifter Features:

- Sets Initial Pierce Height and maintains torch to plate height during cut via voltage regulation
- Height Sensing using Ohmic or Position Error Stall Detection
- Ball Screw Drive with Dual Linear Guide Ways
- 250 Watt AC Servo Motor
- 600 IPM (15.2mm/min) positioning speed – 115 VAC input (machine model dependent)
- 1,000 IPM (25.4mm/min) positioning speed – 230 VAC input (machine model dependent)
- 10" (250mm) or 13.7" (350mm) stroke travel for torch positioning
- 50-210 VDC Arc Voltage Range in 1 volt increments
- RAD Pneumatic plasma torch collision mount
- Lifter dimensions (without RAD plasma mount): H 21" (533mm); W 3.5" (95mm); D 2.25" (57mm)
- Lifter dimensions (with RAD plasma mount): H 21" (533mm); W 3.5" (95mm); D 5.0" (127mm)

Typical Applications:

- Heavy Duty Conventional and High Definition plasma cutting