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## Refer to PipeWorx 400 Welding System Owner's Manual for equipment safety precautions

Enabling Voltage-Reducing Device (VRD) mode configures the PipeWorx system to operate in VRD mode using low Open Circuit Voltage (Low-OCV).

The VRD Memory Card is only required to enable and/or disable VRD for the system; the card does not need to remain in the PipeWorx system once the system has been configured.

When enabled, the system will utilize Low-OCV starting algorithms and monitor the open circuit voltage while not welding. The voltage will be displayed on the Volts display of the Wire Feeder for Stick and TIG modes.

On newer systems, the "VRD ON" indicator will be illuminated when VRD is enabled and functioning as expected.

On older systems (not equipped with a "VRD ON" indicator), a valid Low-OCV condition is indicated during idle by displaying "hrd" on the power source Amps display. **NOTE:** During welding and for a short duration following welding, the power source Amps display will display average welding amperage, reverting to "hrd" following the weld display hold time (approximately ten seconds). During the weld display time, the output is in a Low-OCV mode even though "hrd" is not displayed at this time.

The unit will display a fault condition (H17) if the output voltage exceeds the VRD limits.

## Enabling VRD Mode

1. Insert the VRD card.
  - a. Hold open the memory card access cover.
  - b. Insert the memory card into the slot (push the card all the way in and then release).
  - c. Close the memory card access cover.
  - d. CARD will illuminate on both the feeder and the power source to indicate the presence of the VRD card.
  - e. The Amps display on the power source will show the current setting of the VRD mode ("Std" for standard mode or "hrd" for hazard (voltage) reducing device mode).
  - f. **NOTE:** If (d) and/or (e) do not occur, a system software update is required. The latest system software may be downloaded from <http://www.millerwelds.com>
2. Set the desired selection.
  - a. Use the Amps knob on the power source to set the VRD mode as desired.
    - i. To enable VRD mode, rotate the knob clockwise until the display reads "hrd".
    - ii. To disable VRD mode, rotate the knob counter-clockwise until the display reads "Std".
2. Remove the VRD card.
  - a. Hold open the memory card access cover.
  - b. Push in and release the memory card to eject the memory card.
  - c. Grasp the memory card and remove it from the slot.
  - d. Close the memory card access cover.



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## **PipeWorx Welding System**

VRD Memory Card

Usage Instructions