



## MSHA's Accident Prevention Program Innovative Products

Safety  
and  
Health  
are  
Values!

### "Welding Voltage Reduction Devices"

Anyone who has burned rods as a welder could receive an electrical shock when replacing the rod in the stinger. If you wear worn or damp gloves, or foolishly, no gloves at all, you may get an eye opening experience. Under the right conditions, severe burns and electrocutions could result.

Devices are available to eliminate this hazard. A Voltage Reduction Device (VRD) is a product that assists in the reduction of electrical shock to personnel involved in welding activities. It reduces open-circuit voltage (OCV) to a safe value before and after the welding operation. Upon arc strike, full selected voltage becomes available. Upon completion of welding, the open-circuit voltage is returned to a safe value until the next welding cycle.



These devices have been found to limit the maximum unloaded open-circuit voltage to a safe level with little noticeable difference while actually welding.

For information on manufacturers that are known to MSHA to have such products available, contact MSHA's Applied Engineering Division at 304-547-0400 or e-mail [InnovativeProducts@dol.gov](mailto:InnovativeProducts@dol.gov).

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Remember "SAFETY and HEALTH are a VALUE" you can live with.