



Just the Facts...

Mercury Vapor and Metal Halide Lamps Used for Illumination

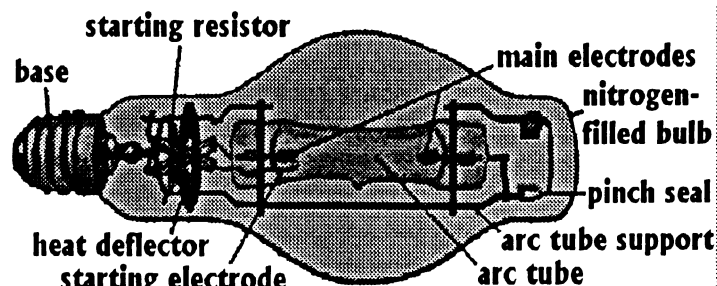
Potential Hazards.

- ✓ Mercury vapor and metal halide lamps are used for general illumination in gymnasiums, and many industrial and other areas. These lamps can be identified by their characteristic intense bluish or whitish emissions and ellipsoidal bulb shape with a short cylindrical glass protrusion.
- ✓ These lamps can pose a potential actinic ultraviolet radiation hazard should the outer glass envelope of the lamp break and the lamp continue to operate. The inner quartz envelope of the lamp can transmit appreciable ultraviolet radiation.
- ✓ An exposed individual may not see or feel the ultraviolet radiation and its adverse effects may not be felt for several hours after exposure. A serious and painful ultraviolet induced eye and skin irritation may result to exposed personnel.
- ✓ All mercury vapor lamps, intended for general illumination purposes, manufactured since 7 September 1981, must either self-extinguish after breakage and 15 minutes has elapsed or the shipping package that the lamp comes in must be marked with a warning describing the ultraviolet hazard (Title 21, CFR 1040.30, High Intensity Mercury Vapor Discharge Lamps, March 1990). The non-extinguishing lamps were primarily intended for outdoor service. Often it is difficult to determine which variety of lamp has been installed when the original packing information has been discarded.

Precautions.

The following precautions reduce needless occupational exposure:

- ✓ Whenever practicable, install lamp housings for mercury vapor and metal halide lamps which contain either a glass filter or other mechanical barrier to protect the lamp from breakage. This is especially important for areas where contact with the lamp is likely.
- ✓ Whenever practicable, install self-extinguishing lamps in indoor areas. The non-extinguishing lamps should be limited to outdoor use or installation within a glass enclosed fixture.
- ✓ Periodically check mercury vapor and metal halide lamps to ensure that the outer glass envelope has not been broken when such lamps are not installed within fixtures containing an additional glass filter.
- ✓ Immediately remove from service any broken lamp which continues to operate with no glass barrier to prevent personnel exposure to potentially harmful ultraviolet emissions.
- ✓ Inform lamp installers and personnel who routinely work around mercury vapor and metal halide lamps of the potential hazards from ultraviolet radiation.



This high-pressure lamp contains an arc tube within a nitrogen filled bulb.