



Installation, Handling and Safety Information for Halogen/Tungsten Heaters



Halogen/tungsten heaters supplied by Freek emit infrared energy primarily in the medium to short wavelength range. The energy is produced by a high temperature tungsten coil inside a sealed quartz glass tube. Infrared energy is emitted from all objects with a temperature above absolute zero and provides a safe and efficient means of non contact heating. However, as is the case with all high intensity heat sources, certain precautions should be taken during installation and operation.

- The body of the Halogen/tungsten heater is a sealed quartz glass tube. Like all glass products, these heaters should be handled with care. Excessive mechanical or physical force during handling or installation could break or damage the glass tube. Broken glass may be hazardous to personnel and also the heating process.
- Gloves should be worn while handling the heater. Finger prints can affect the optical properties of the glass tube and may reduce the operating life of the heater.
- Halogen/tungsten heaters are high intensity infrared heaters. Care should be taken to ensure that personnel cannot touch the heater during operation and that a safe distance from the heater is always maintained to ensure there is no risk of burning due to the radiant output of the heater.
- Halogen heaters can produce high intensity white light which could cause damage to human eyes. Care should be taken to ensure that personnel cannot look directly at the heaters during operation. If necessary, a filter to reduce the glare or protective glasses should be provided. In such cases, personnel should be warned of the danger using suitable signage.
- The temperature of the glass tube may exceed 600°C. As with all high temperature heat sources, care should be taken to ensure that the atmosphere within which the heater is operating is free of potentially explosive gases which could be ignited by contact with the glass tube. In all cases, the operator is responsible for ensuring that the heater is suitable for use in their specific application.
- The heater should be installed by a qualified person ensuring that all relevant electrical safety standards are adhered to.
- Ensure the heater is connected to an electrical supply corresponding to the rated voltage of the heater. Excessive voltage will reduce the operating life of the heater.
- The heater is designed for horizontal operation only unless clearly specified for vertical operation.
- The pinch seal section of the heater (the flattened glass section at the ends) should not be exposed to temperatures exceeding 300°C. Temperatures exceeding this value may cause gas leakage and therefore reduce the operating life of the heater.
- Halogen/tungsten heaters can take more than 10 times the normal operating current when operated from cold (normal room temperature). Ensure that fuses or other protective devices are correctly specified to handle this starting current.

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