

# APPLICATION BRIEF

## AEROSPACE INDUSTRY

● NEC	● OSHA
590.6	1926.404
410.82	1910.304
	1926.56

## Woodhead® Portable Lighting Solutions from Molex Help Aerospace Companies Protect Workers, Enhance Productivity

The HAZTEX® Portable Hazardous Duty Wide Area Purge Light and other innovative lighting and electrical components are ruggedly designed and built to withstand the harsh and often hazardous environments of aircraft manufacturing and maintenance.

**Business Challenge:** Aerospace companies face many challenges due to the complexity of the equipment they manufacture and maintain. The sheer size of aircraft manufacturing plants and the often remote locations of maintenance facilities make adequate lighting of work spaces a major challenge. Moreover, the environments in and around these worksites often contain noxious fumes and combustible or explosive gases. Aerospace employers bear a huge responsibility in providing for worker safety, while still maintaining optimal efficiency and quality control. Molex has been serving the aerospace industry for decades with innovative Woodhead lighting and electrical products designed to perform in the most demanding situations.

**Solution:** Woodhead Portable Lighting and Electrical Products. Woodhead portable lighting and electrical products offer the highest quality design and engineering, and are ruggedly built to deliver reliable performance over long service life. Some products typically deployed in the aerospace industry include:

**HAZTEX® Portable Hazardous Duty Wide Area Purge Light.** Originally designed for a major U.S. aircraft manufacturer, the HAZTEX Purge Light provides wide area lighting in worksites where explosive or combustible gases are present – such as when workers coat the titanium airframe, inside and out, with an explosive-rated, corrosion-resistant paint to prevent cracking at stress points. This compact, lightweight “light with a brain” uses fresh air and positive pressure to purge potentially dangerous gases and prevent them from entering the fixture.

**Heavy Duty Portable Lighting.** Exceptionally reliable and durable, Woodhead portable lighting and accessories include:

- **Fluorescent Hand Lamps** (13W, 27W, 40W) provide bright, diffuse illumination for task lighting, while remaining cool to the touch.
- **Wide Area Lamps** provide ample wide area lighting; can be conveniently ‘daisy-chained’ to illuminate larger work areas, such as the interior airframe.
- **LED Hand Lamps** use light emitting diodes (LEDs) to generate 780 initial lumens of light and provide 100,000 hours of service life. Compact for use in confined spaces, the lamps are energy efficient, economical to operate and cool to the touch. The battery-operated version has a built-in rechargeable battery pack for optimum flexibility and portability.
- **Super SAFEWAY® Fluorescent Hand Lamps** feature a linear profile for easy threading through narrow openings to light extremely small spaces, such as when workers must spot weld a specific point within an aircraft wing.
- **TubeLite™ Workcenter**, a space-saving accessory designed to provide a single source for area lighting, electrical power and pressurized air distribution. Each workcenter combines a TubeLite stand, three duplex receptacles, and four air supply hook-ups with feed-through electrical and air outlets to allow ‘daisy-chaining’ several workcenters together.

**Heavy Duty Molded Rubber GFCI Outlet Boxes, Receptacles, Portable Workstations and Pendant Boxes** in an assortment of styles and sizes. Tough NEoTEX® rubber material resists breakage, will not damage airplane paint, and resists cutting by sheet metal parts. Also available is a wide array of high quality cables, cordsets, plugs and connectors, including the special L-5-15 locking adapters required for certain applications in the aerospace industry. All GFCI outlet boxes and receptacles support OSHA 1926.404 and OSHA 1910.304 and NEC 590.6 requirements.

**Hazardous Duty Temporary Stringlights**, available in incandescent and fluorescent versions,

are used to illuminate dark work areas, such as ship hulls, cargo holds and other remote compartments, as well as constrained work spaces where noxious fumes may be present. These are the only portable stringlights to be third-party certified by CSA as a complete assembly for use in hazardous locations. The assembly includes a 25-ft. lead, 600V rated SOW cord, molded “T” drops spaced at 10-ft. intervals, and choice of Woodhead hazardous duty hand lamps. Customized lengths and spacing of drops can also be specified. Supports OSHA 1926.56 and NEC 410.82.

**Benefits and ROI:** Woodhead hazardous duty portable lighting products can help aerospace companies provide well-lighted work areas, which in turn typically results in improved worker safety, efficiency and productivity.

**GFCI Products.** Designed for rugged service, our full line of NEC-compliant, portable GFCI products are equipped with an open-neutral relay that meets OSHA requirements to safeguard workers against ground faults. Watertite® GFCI outlet boxes, made of tough, long-lasting rubber, are built for use in wet, dusty and dirty environments and assist in the reduction of “Nuisance Tripping.” All GFCI outlet boxes and receptacles support OSHA 1926.404 and OSHA 1910.304 and NEC 590.6 requirements.



To learn more about Woodhead® electrical products and solutions, call your Molex representative today or call 1-800-225-7724 or visit [www.woodhead.com](http://www.woodhead.com)

