

Explo 13

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AIRCRAFT HANGAR PITS, MANHOLES AND SERVICE OUTLETS

Pits, manholes or service outlets allow the military and airline companies to position electrical power in the hangar floor / deck convenient to airplanes scheduled for maintenance. These pits, manholes and service outlets have explosionproof receptacles mounted to a wall / bulkhead.

To power portable equipment needed for the maintenance effort, plug / cable assemblies must connect to these receptacles. This requires personnel to get down to their knees, or into the pit, to couple a plug to these receptacles.

The following user-friendly options are available from Vantage:

- V-70532** ... Attachment receptacles allow customers to easily mate to a plug and stow the excess cable out of harm's way.
- V-70535** ... Cable reels, high above the hangar floor, eliminate clutter.

VANTAGE: CONNECTORS FOR THE 21ST CENTURY.

**FOR SAFETY AND PERFORMANCE IN HAZARDOUS AREAS,
THINK VANTAGE EXPLOSIONPROOF CONNECTORS.**

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Aircraft Hangar Pits, Manholes and Service Outlets

Problem ... Electrical power is positioned in the hangar floor convenient to parked aircraft. To activate electrical service, maintenance personnel must kneel on the concrete floor - or get into the pit – to mate an explosionproof plug to a “pit-mounted” receptacle.

Solution ... Consider a Vantage explosion proof receptacle attached to one end of a short length of cable (3-5 meters) with the opposite end terminated to an explosionproof junction box located in the pit or manhole. The receptacle can be cradled in a wire basket attached to the underside of the pit or manhole cover. As the user lifts the door, the receptacle is “presented” to maintenance personnel. All they need do is remove the receptacle from the basket and hold it while another mates a plug / cable assembly to this receptacle. With a cutout in the pit / manhole cover sized to the diameter of the cable, mated connectors can be stowed safely out of harm’s way.



Aircraft Hangars – Electrical Power

During maintenance operations, an aircraft hangar is a busy, congested place. Equipment required to support the maintenance effort surrounds the aircraft. This equipment is powered by electrical cables whose length and size often have the area looking like a “sea” of electrical cables.

Delta Airlines / Hartsfield International Airport / Atlanta, Georgia ...
has minimized the cable congestion by locating 200 amp power in reels mounted near the ceiling of their newest Atlanta Maintenance / Repair Facility.

Large, motor-operated reels with slip rings are mounted 20–25 meters above the hangar floor. Attached to these reels are flexible electrical cables, with a 600 volt jacket, suitable for Class I, Division 1 hazardous area use.

Explosionproof pushbutton stations, located on the hangar wall, allow personnel to lower these cables to the hangar floor. As this action will bring cables into a hazardous area - explosionproof connectors are required.



Aircraft Hangars – Electrical Power

Vantage GDU and GDT 200 amp Class I, Division 1 attachment receptacles, with female inserts for lineside power, were selected by Delta Airlines for this application.

GDU-B1528-31SL-XX
200 amp, 3 pole 4 wire

GDT-B1528-42SL-XX
200 amp, 5 pole 6 wire

Vantage GD, GDU and GDT connectors are UL and CSA listed at 60/400 Hz for Class I, Division 1 installations.

These GDU/GDT receptacles are then mated to an explosionproof plug, which is part of a cable assembly that powers the equipment required to support aircraft maintenance.

Excess cable can be lifted off the hangar floor, adding to a “safe working environment”.