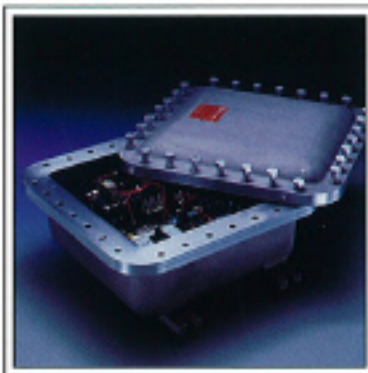


EXPLOSION PROOF ELECTRICAL COMPONENTS



Nema 7/9 Control Enclosures

Nema control enclosures are designed to reduce or eliminate the risk of explosion in hazardous environments. Nema 7 enclosures prevent ignition of gas external to the enclosure by containing the explosion within the panel. Nema 9 enclosures are sealed to prevent an explosion by excluding the entry of explosive amounts of hazardous dust.



Explosion or Dust Ignition Proof Motors

Explosion proof motors and brakes perform in the same way as Nema 7 control enclosures, preventing the ignition of external gas by containing the explosion within the motor and brake. Dust-ignition proof motors prevent ignition of the dust in the atmosphere, or which has built-up on the motor and brake, by operating at temperatures below the ignition point of the hazardous materials. Illustrated is an explosion proof motor and brake for use in a Class 2, Group F, Division 1 atmosphere.



Explosion Proof Limit Switch Enclosures

Unprotected limit switches can also pose an explosion risk in hazardous environments. Explosion proof and dust ignition proof geared or block type limit switches are provided for Nema 7 and 9 equipment. Illustrated is a Nema 7 geared limit switch enclosure.



Intrinsically Safe Controls & Pendants

Intrinsically safe systems engage a motion's contactors with electrical components operating at voltages too low to cause ignition of gases or dust. While the motion's controls must be housed in a Nema 7 or 9 enclosure, the pendant station can use a smaller, lighter, standard enclosure (as shown) reducing operator fatigue and permitting easier operation of the equipment.

SPARK RESISTANT MECHANICAL COMPONENTS



Stainless Steel Wire Rope

For hazardous applications that require spark resistant features, the hoists are reeved with stainless wire rope instead of the standard plain steel. Stainless steel rope reduces the possibility of sparking when making contact with the rope drum, sheaves, or external objects with which it may come in contact with.



Bronze Hooks & Lower Blocks

Solid, cast bronze hooks reduce the possibility of sparking in the event the hook strikes steel or other ferrous metal objects. Hooks are provided with stainless steel, spring-loaded safety latches as a standard feature. The entire lower block body is fabricated from solid bronze plate. Solid bronze is used instead of coated steel because coating can chip or wear off—solid bronze does not.



Bronze Trolley Wheels

Trolley wheels manufactured from Manganese bronze reduce the possibility of sparking when in contact with steel rail, bridge or runway beams, or drive pinions, thereby also reducing the possibility of igniting the hazardous atmosphere. Illustrated are wheels for under-running monorail hoists.



Bronze Bridge Wheels

Top or under-running bridge crane wheels are manufactured from manganese bronze for spark-resistant requirements. Bronze wheels contacting a steel rail, runway beam or drive pinion reduces the possibility of hazardous sparks. Illustrated are wheels and pinions for under-running bridge cranes.

