

Explosion classified areas are defined by the following classes, divisions and groups, by the National Electric Code (NEC) (\*See caution below). Many hoist manufacturers can furnish equipment to comply with the various classifications. A distinction needs to be recognized between equipment designed to comply with these provisions of the NEC and equipment that is designed to be spark resistant. The provisions of the NEC are related primarily to the use of proper enclosures and wiring trolleys, bronze hooks, stainless steel chain or wire rope to accomplish the necessary spark resistance. When specifying equipment for these areas please determine if you need spark resistant features in addition to the NEC requirements for the electrical enclosures and wiring. Spark resistant features when applied to hoist equipment normally decrease the capacity and increase the cost.

<b>Explosion Proof Classifications</b>	
<b>Class</b>	<b>Definitions</b>
Class I	Locations: Are those in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.
Class II	Locations: Are those which are hazardous due to the presence of combustible dust.
Class III	Locations: Are those which are hazardous due to the presence of easily ignitable fibers or flyings, but in which such fibers or flyings are not likely to be in suspension in the air in quantities to produce ignitable mixtures.
<b>Division</b>	
Division I	Locations in which hazardous concentrations in the air exist continuously, intermittently, or periodically under normal operating conditions.
Division II	Locations in which hazardous concentrations are handled, processed, or used but are normally within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown.
<b>Group (Class I)</b>	
Group A	Atmospheres containing acetylene.

Group B	Atmospheres containing hydrogen, or gases (or vapors) of equivalent hazard, such as manufactured gas.
Group C	Atmospheres containing ethyl-ether vapors, ethylene or cyclo propane.
Group D	Atmospheres containing gasoline, hexane, naptha, benzine, butane, alcohol, acetone, benzol, lacquer solvent vapors, or natural gas.
<b>Group (Class II)</b>	
Group E	Atmospheres containing metal dust, including aluminum, magnesium and their commercial alloys and other metals of similarly hazardous characteristics.
Group F	Atmospheres containing carbon black, coal, or coke dust.
Group G	Atmospheres containing flour, starch, or grain dust.