

11450.2A Reference Section(s)	RCDR Topic	RCDR Number
2-4.2.1(f)	Allowance for commercial package hoists and end truck assemblies: brake housing material with gray cast iron or aluminum in hazardous/explosive (minimum anti-spark protection) general purpose service (GPS) applications	24-012

BACKGROUND

The intent of NAVCRANECEN 11450.2A with respect to packaged hoist design and pre-engineered end truck assemblies and general purpose service (GPS), non-ordnance applications is to require commercial configurations with some available standard options, not custom engineered/fabrication solutions. This question and answer only applies to hazardous/explosive environments (minimum anti-spark protection) GPS applications and does not apply to hoists and end trucks in maximum anti-spark protection, special purpose service (SPS), ordnance handling, or hot (molten) metal service.

QUESTION

Q1: NAVCRANECENINST 11450.2A, Section 2-4.2.1(f), requires all motor mounted brakes to have a disc brake housing constructed of steel or ductile/malleable cast iron. Commercial package hoist and commercially available pre-engineered end truck manufacturers typically offer brakes made from gray cast iron or cast aluminum, with steel or ductile cast iron not a standard option. Would a brake equipped with a gray cast iron or an aluminum housing be acceptable for these applications?

ANSWER

A1: Yes, for commercially available package hoists and commercially available pre-engineered end truck assemblies. It should be noted that housings are often called end plates, enclosures, or covers; the term “housing” is intended to refer to a load bearing item.