

11450.2 Reference Section	RCDR Topic	RCDR Number
Paragraphs 2-4.2.2 (j), 2-5.6.1.2(c)	Self-locking worm gears with open loop drives	25-030

## QUESTION

Q: NAVCRANECENINST 11450.2A paragraphs 2-4.2.2(j) and 2-5.6.1.2(c) require a mechanical load brake to be used on hoists with open loop variable frequency drives (VFD). Is a self-locking worm gear permitted to be used in lieu of a mechanical load brake for an open loop VFD controlled hoist?

## ANSWER

A: A self-locking worm gear that meets NAVCRANECENINST 11450.2A 2-4.2.1(b)3 criteria, that is, the self-locking worm gear stops and holds 125 percent of the hoist's rated load and does not require the load to be raised before being lowered, may be utilized with an open loop variable frequency drive, in lieu of a mechanical load brake, as required by NAVCRANECENINST paragraphs 2-4.2.2(j) and 2-5.6.1.2(c).