§ 154.826 Vapor compressors and blowers.

(a) Each inlet and outlet to a compressor or blower which handles vapor that has not been inerted, enriched, or diluted in accordance with §154.824 of this subpart must be fitted with:

(1) A detonation arrester;
(2) A flame arrester; or
(3) An explosion suppression system acceptable to the Commandant (CG–522).

(b) If a reciprocating or screw-type compressor handles vapor in the vapor collection system, it must be provided with indicators and audible and visible alarms to warn against the following conditions:

(1) Excessive discharge gas temperature at each compressor chamber or cylinder;
(2) Excessive cooling water temperature;
(3) Excessive vibration;
(4) Low lube oil level;
(5) Low lube oil pressure; and
(6) Excessive shaft bearing temperatures.

(c) If a liquid ring-type compressor handles vapor in the vapor collection system, it must be provided with indicators and audible and visible alarms to warn against the following conditions:

(1) Low level of liquid sealing medium;
(2) Lack of flow of liquid sealing medium;
(3) Excessive temperature of the liquid sealing medium;
(4) Low lube oil level;
(5) Low lube oil pressure, if pressurized lubricating system; and
(6) Excessive shaft bearing temperature.

(d) If a centrifugal compressor, fan, or lobe blower handles vapor in the vapor collection system, construction of the blades and/or housing must meet one of the following:

(1) Blades or housing of nonmetallic construction;
(2) Blades and housing of nonferrous material;
(3) Blades and housing of corrosion resistant steel;
(4) Ferrous blades and housing with one-half inch or more design tip clearance; or
(5) Blades of aluminum or magnesium alloy and a ferrous housing with a nonferrous insert sleeve at the periphery of the impeller.