



## Mec-Tric E-Main Technical Publication 072314 Subject: Safety Relief Valve Actuator Lever Compliance

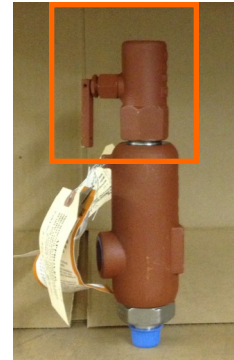
Safety relief valves are often classified as having a Screwed Cap, Open Lever or Packed Lever. ASME Boiler and Pressure Vessel Code establishes these requirements. Illustrations below describe Caps and Levers.



ASME Section VIII style valve with Screwed Cap



ASME Section I style valve with Open Lever



ASME Section VIII style valve with Packed Lever

ASME Boiler and Pressure Vessel Code **Section I**—Power Boilers (PG-73.2.4) provides “each safety valve or safety relief valve shall have a substantial lifting device, which when activated will release the seating force on the disc when the valve is subjected to pressure of at least 75% of the set pressure”

ASME Boiler and Pressure Vessel Code **Section VIII** Division 1—Pressure Vessels (UG-136) provides “Each pressure relief valve on air, water at the inlet that exceeds 140°F (60°C), excluding overpressure or relief events, or steam service shall have a substantial lifting device which when activated will release the seating force on the disc when the valve is subjected to pressure of at least 75% of the set pressure of the valve”.

Section VIII of the ASME Code covering pressure vessels requires pressure relief valves to have lifting levers on air, steam, and hot water (over 140 F) service. There are however instances where this requirement may be ignored. ASME Code case #2203 allows for lifting levers to be ignored provided the following conditions are met.

1. The user has a documented procedure and an associated implementation program for the periodic removal of the relief valve for inspection, testing, and repair.
  2. The user specifies that no test lever be supplied.
  3. The user shall obtain permission to omit the lifting lever (device) from the authority having jurisdiction over the installation of pressure vessel.
- These rules apply to valves installed in ASME Section VIII applications. All valves used in ASME Section I (Boiler) applications require lifting levers except for those valves used in organic fluid vaporizer service.

Excerpts from ASME code used for training purposes.