

Safe Movement of Compressed Gas Cylinders

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In general industry, compressed gas cylinders with the regulators installed are considered by OSHA to be "in use" or "connected for use." OSHA only permits the movement of such cylinders if the cylinders are mounted on a special truck. OSHA defines a "special truck" as a vehicle or cart that provides for stable support of vertical standing DOT portable gas cylinders during movement and at various work locations. The "special truck" must be designed so the following conditions can be met: (1) when cylinders are on the special trucks, they must be held in an erect or nearly erect position; and (2) protection of the cylinder valves and regulators must be provided. If cylinders are not secured on a special truck, regulators must be removed and valve-protective caps must be put in place before cylinders are moved.

There are good reasons for these requirements. Compressed gas cylinders are often filled to pressures between 2000 psig and 3000 psig and in some cases cylinders with pressure ratings to 7500 psig are in use. With these kinds of pressures, it is clear why there must be concern for the protection of the regulator as well as the protection of the cylinder valve on all compressed gas cylinders. Should a regulator become damaged it is possible for its parts to be ejected with great velocity thereby presenting a significant hazard to workers. If a valve is damaged, the pressurized content can release violently. Uncontrolled releases from gas cylinders can pose both a severe physical and chemical hazard to the employees.

When cylinders are not "in use" or "connected for use" in other words in storage, valve protective caps, where cylinders are designed to accept a cap, must always be in place and the cylinders properly secured to prevent tipping or falling.