

April 2011 Safety Meeting Inspecting and Labeling Cylinders

Spring is here and with that comes outdoor cooking season. We should all be aware of the Federal and State rules and regulations that apply to cylinders.

Safely inspecting portable cylinders is an important job that requires training and following specific procedures. Customers are often not aware of cylinder inspection and requalification requirements and you may have to refuse to fill their cylinder. The safety of yourself, the customer, and the public should not be compromised. You have no idea what happened to the container prior to its arrival for refilling, and you have no control over the container after it leaves your location. What you must do is use reasonable care in your handling of the cylinder while it is in your control.

Before filling a cylinder, DOT regulations require a visual inspection to verify that it is fit for continued use. If any of the following are found, the cylinder must not be refilled.

- Leaks
- Cracks
- Bulging
- Serious dents or gouging
- Defective valves
- Defective or leaking pressure relief valves
- Evidence of physical abuse, fire or heat damage, or excessive rust
- Damage to the cylinder valve, valve protection, and foot rings
- Out of date requalifications

If any of these conditions are found, identify the cylinder and set it aside in a designated safe area per your company policy.

Steel cylinders that are subject to fire must be requalified, reconditioned, or repaired prior to being placed back into service. Aluminum cylinders subjected to fire must be permanently removed from service.

Valves and accessories should be inspected prior to filling. Valves may wear or become damaged creating a potentially hazardous situation. They should be checked for signs of aging and wear. Valves may be damaged from improper maintenance. Painting a cylinder may result in gauge faces and discharge openings of relief valves may be covered with paint. A blue-green stain on the brass portion of the cylinder valve is evidence that it has been in contact with anhydrous ammonia, which is used to make illegal drugs. If you suspect or find a cylinder that contains, or has contained anhydrous ammonia, place it out of service and follow your company policy.

Many companies will not fill a cylinder that is not equipped with an OPD. Follow your company policy for filling or handling cylinders without an OPD.

Valve accessories may be broken or even lost, allowing dirt or moisture to enter the valve. Inspect and replace all faulty or missing dust caps or plugs. All refillable cylinders must be requalified at regular intervals. Requalification is performed only by qualified individuals whose facility is registered with the DOT. The most recent requalification date is stamped on the cylinder with the company RIN.

- A date without a letter indicates the next requalification must be within 12 years.
- The letter “s” following the date indicates the cylinder must be requalified within 7 years of the marked date.
- The letter “e” following the date indicates that requalification is required again within 5 years of the marked date.

Cylinders that are out of qualification must not be refilled.

Cylinder wrapping prevents a proper cylinder inspection. Wraps should be removed and the cylinder inspected before filling.

Cylinder labeling is required by NFPA 58, DOT and OSHA. DOT cylinders used to transport propane must be clearly and durably marked with the proper shipping name and hazard class. A consumer information warning label must be present. The label must include information on the potential hazards of propane. Apply a new label if one is not present or legible. If you have any question regarding the legibility or completeness of the warning label that is on the cylinder, place a new label on the cylinder.

Prior to filing the cylinder notice how it will be transported. Cylinders placed in a vehicle must be secured against movement. Closed bodied vehicles such as passenger cars and vans are limited to a maximum of 90lbs. of LP Gas with no single container having a capacity of more than 45lbs. NFPA 58 allows for up to four 20lb. grill cylinders, up to three 30lb. cylinders, and up to two 40lb. cylinders. “Cylinders of 2 ½ lb. water capacity (1lb. propane capacity) or more must be positioned so that each cylinder’s pressure relief valve is in direct communication with the vapor space at all times.” All cylinders and appurtenances are determined to be leak free.

Class Discussion

Have employees discuss the proper procedures for inspecting a cylinder before filling.

Closing

Properly inspecting and labeling cylinders enables you to safely and legally serve both your customers and your company. At the same time, customers are provided with a safe source of fuel for their cylinder needs.

April 2011 Safety Test
Inspecting and Labeling Cylinders

Name _____

Date _____

Instructions: Read and answer each of the following questions. When complete, grade the test and review incorrect answers so each employee is “armed” with the correct answers before they leave the training.

- (1) Before a cylinder can be filled or refilled, DOT regulations require a _____ to verify it is fit for service.
 - (A) visual check
 - (B) requalification
 - (C) purging
 - (D) all of the above

- (2) _____ cylinders subject to fire must be permanently removed from service.
 - (A) steel
 - (B) aluminum
 - (C) cast iron
 - (D) any

- (3) A blue-green stain on the brass portion of the cylinder valve is evidence that it has been in contact with _____.
 - (A) methanol
 - (B) propane
 - (C) anhydrous ammonia
 - (D) ethyl mercaptan

- (4) The letter “e” following the date on the cylinder indicates that requalification is required again within _____ years of the marked date.
 - (A) 5
 - (B) 7
 - (C) 10
 - (D) 12

- (5) If a cylinder label is not legible, _____ before releasing the cylinder to the customer.
 - (A) have the customer sign a waiver
 - (B) notify the customer
 - (C) contact your supervisor
 - (D) place a new one on it

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Answer Key

1. A
2. B
3. C
4. A
5. D