

Mikey's Quick Tips

Filling High Pressure Cylinders

When do you push the “Stop Button”?

If using the pressure / temperature method, then you stop when the pressure catches up to the temperature on the filling chart.

Be sure you are using the correct column on the P/T filling chart. Watch for the cylinder service pressure, standard pressure, and 10% overfilling (+ mark)

Filling High Pressure Cylinders

When do you push the “Stop Button”?

If filling by weight on a gravimetric scale, then it is easy, when you reach the proper grams per product per the filling chart.

This is so simple and easy, why even Mikey can do it.

Quick review of the previous weeks

Filling Small CO2 Cylinders

**Ever have a 5 LB or smaller CO2
cylinder pop the safety?**

**Almost always it is because it was
overfilled.**

Filling Small CO2 Cylinders

Are you filling CO2 cylinders on scales that you fill your liquid containers on?

Those are probably 1000 to 1500-pound capacity scales.

Check the accuracy tolerance on your scale.

Think about it! If that 1000-pound scale has an accuracy of $\frac{1}{4}$ % of full scale, then that is plus or minus 2.5 pounds!

Even if it was plus or minus 1 pound (1/10 %) you could still be overfilling your 5 lb. cylinder by 1 pound or 20%.

You may think you are putting in 5 lbs. but it could be anything from 4 to 6 lbs.

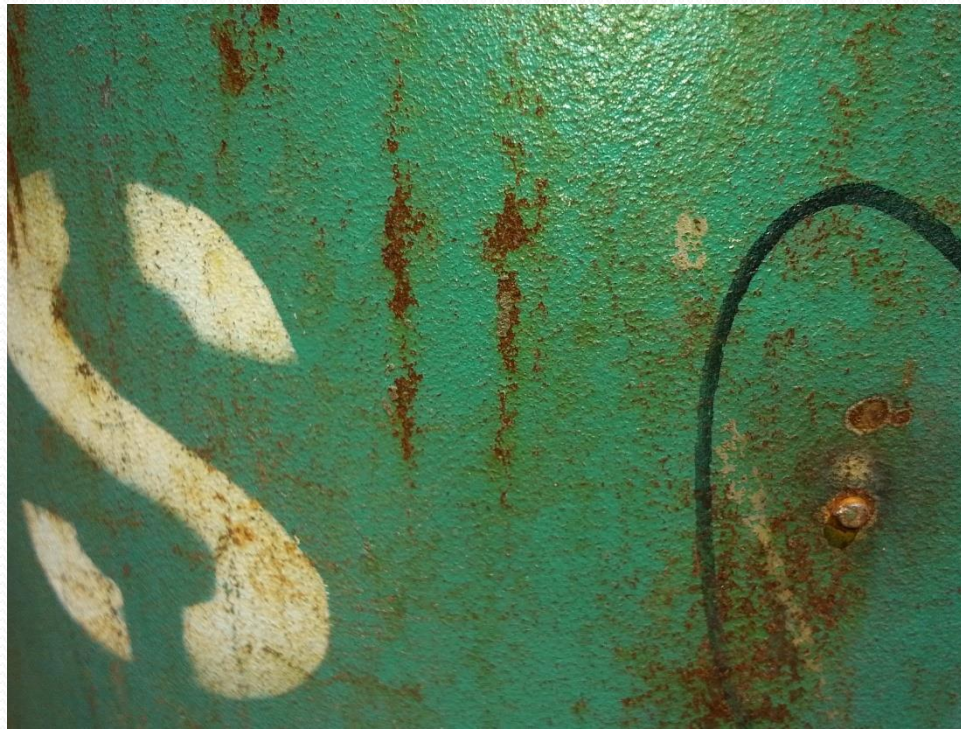
Filling Small CO2 Cylinders

How do I fix this?

- Get a smaller platform scale and put this on a roll around cart. Make sure the scale is certifiable and adjustable so you can have it checked as needed by the local laws for scales.
- Use a smaller capacity scale and they read +/- .01 lbs.
- No more under or overfilling and you get the benefit of the employee not having to bend over to handle and fill these smaller cylinders. No back strains.

Visual Inspections

Arc burns...out of here



Visual Inspection

Bulges...out of here



Visual Inspections

Oil and Grease



Visual Inspection

Hydrocarbons / oil and grease on valves



Cylinder Warnings



Cylinder Warnings



To Fill it and Use it

Must say

ICC

DOT

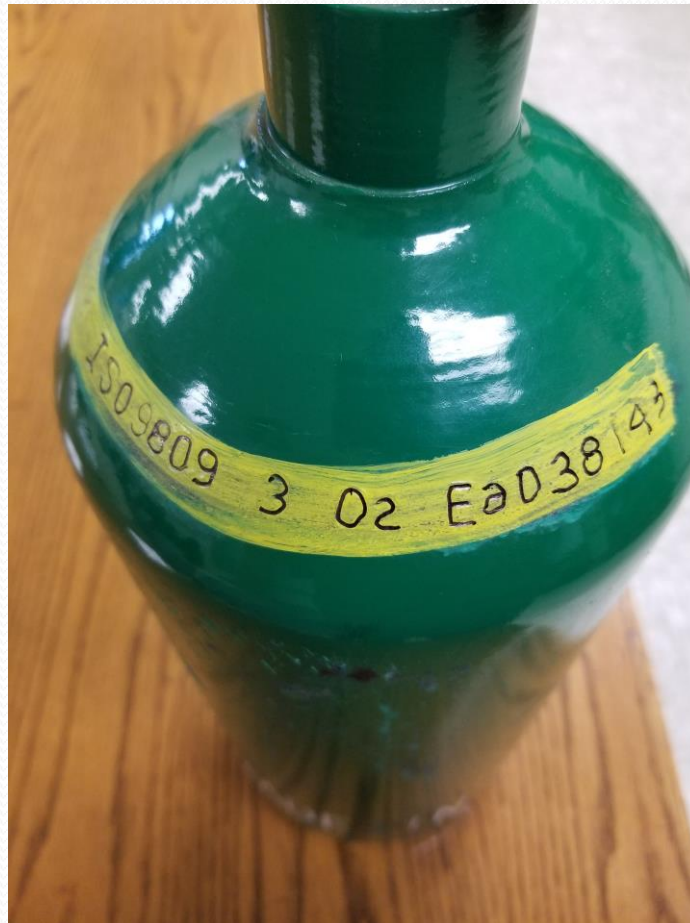
or

UN

Cylinder Warnings



Cylinder Warnings



Approved UN Cylinder



Approved UN Cylinder Markings



Cylinder Warnings



Cylinder Warnings



See through the holes!



Hammer test all steel cylinders

Make sure they are there!



Heat Damage

Steel cylinders

- Heat damage to paint or coating
 - Smudge = OK
 - Discolored = OK
 - Blistered = OK
 - Burned away = Scrap

Aluminum cylinders

- 350 degrees
- Change of color on the heat indicating coating, melted plastic parts or decals

LPG Filling

- **Tare Weight + Product Weight + Filling Assembly = Full Cylinder Scale Weight**

LPG Filling

- **Keep the Genie in the bottle!!**
- **Don't allow the employee to use the "spitter" valve**
- **You can't have a fire without the fuel**

Contact Info

Michael Dodd

- Cell 573-718-2887
- Email MLDSafety@Hotmail.com