SHIFNOID®

CATALINA CYLINDERS
TECHNICAL SUPPORT DOCUMENT

Filling of CO2 Cylinders

Catalina Cylinders recommends that trained personnel fill CO2 cylinders. CGA pamphlets G-6; Carbon Dioxide and G-6.3; Carbon Dioxide Cylinder Filling and Handling Procedures and 49CFR 173.304; Charging of Cylinders with Liquified Compressed Gas be referenced, or included in, the training process and the filling items be incorporated into any CO2 cylinder filling procedure.

1. Perform a quick external inspection of the cylinder and valve as noted in Catalina Cylinders' technical support document, CO2 Cylinder Inspection at the Time of Each Fill.

2. Never fill a damaged cylinder, a cylinder with a damaged valve, or a cylinder with a valve safety relief device that appears to be altered.

3. Never fill or "top off" a partially filled CO2 cylinder.

4. Position the cylinder to be emptied of its remaining contents. If the cylinder is not equipped with a dip tube the cylinder should be inverted. Rotate the cylinder so the valve port is facing away from all personnel and equipment.

5. After moving or positioning the cylinder for emptying, allow a few minutes for any residual CO2 charge to settle before emptying the cylinder. Slowly open the valve, emptying any remaining charge and other contents (i.e. moisture, contamination, corrosion, etc.) from the cylinder. Close the valve.

6. If any content other that the CO2 charge, including any unusual odor, is discharged from the cylinder when emptying the cylinder, the cylinder should not be filled and should be subjected to further inspection and followed by internal cleaning.

7. Place the cylinder on a calibrated scale. The scale should be able to measure the weight of the cylinder to 3 significant digits (i.e. xx.x lb. or x.xx lb. depending on the size of the cylinder).

8. Secure the connection (filling) hose to the valve.

9. Record the weight of the connected empty cylinder to 3 significant digits.

10. Add this weight to the maximum allowable CO2 charge weight (capacity for this cylinder. Many cylinders are marked with this CO2 on the crown of the cylinder. This will be the target fill weight, cylinder weight when fully charged, at the end of the fill.

11. Open the valve slowly and fill the cylinder slow enough to accurately monitor the scale as to not exceed the target fill weight.

12. Stop the fill by closing the cylinder valve when the cylinder on the scale has reached the target fill weight.

13. With the hose still connected, verify the final weight is the same as the target fill weight.

14. If the cylinder has been overfilled, discharge the overfill immediately - do not wait.

Never overfill a CO2 cylinder. Never fill a CO2 cylinder with a charge greater than the target fill weight marked on the crown of the cylinder. Overfilling a CO2 cylinder, even by a slight amount, can cause the safety release device to actuate and discharge CO2 unexpectedly. Unexpected discharge of CO2 gas through the safety relief device has been know to cause accidents, sometimes leading to personnel injury or property damage.

DEALER PART #:

PC2020 10 OZ. CO2 BOTTLE

This bottle must be filled by an approved filling station with a maximum of 10 oz. of liquid CO2.

PC2030 2.5 LB. CO2 BOTTLE

This bottle must be filled by an approved filling station with a maximum of 2.5 lb. of liquid CO2.