



Training Bulletin

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Anatomy of a Propane Tank

To understand the causes of fires and explosions involving gas grills, fryers, and other pieces of equipment that rely on propane tanks for fuel, we'll first examine the anatomy of a propane tank, and their built-in safety features. Consumer propane cylinders, also called bottles or tanks, have several anatomical features. The cylinder contains a mixture of liquefied gas and vapor in the cylinder, which is the shell of the tank. The cylinder collar at the top of the cylinder protects the gas valve and incorporates carry handles. The cylinder foot is a ring of steel at the bottom of the cylinder which provides a stable base for the cylinder to rest on.

Anatomy and Safety Features of a Propane Tank



OPD Valve

The Overfilling Prevention Device (OPD) Valve is the most modern and current industry standard gas valve for consumer propane cylinders. The OPD Valve is the result of generational product improvement and has had several safety devices incorporated into it as its design has matured, improving safety. These include the pressure relief valve and a quick closing coupling.

Overfill Protection Float: This is a float which closes off the filling tube when the tank is 80% full. It works just like the float in a toilet cistern.

<https://www.robsonforensic.com/articles/propane-tank-fires-explosions-expert>

Quote: If nothing changes, nothing changes. Courtney C. Steven

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