

## Hydraulic Pumps, Valves and Cylinders

Hydraulic Pumps, Valves and Cylinders - Lots of lift trucks are powered by liquid propane. Though a few facilities will have refuelling capabilities on site, some will have cylinders brought to their workplace instead. When a lift truck runs out of fuel, the cylinders are changed. Some training and cautions is needed whenever handling propane in view of the fact that it is a very flammable material.

PPE or Personal Protective Equipment, should be worn when changing or refilling a lift truck cylinder. The liquid is extremely cold and could cause burning or irritation when it comes into skin contact. Always wearing thick leather gloves would help protect hands. Goggles or various approved eyewear along with a face shield is likewise extremely recommended. Having a fire extinguished close at hand is also suggested before the refuelling process starts.

Ensure the lift truck is turned off prior to starting and extinguish whatever cigarettes or open flames in the area. Look for the fill valve on the cylinder and remove the protective plastic cover, then firmly attach the fill line to the fill valve. When the fill line is in place, cautiously open the bleed valve. This would be a small spherical knob on the cylinder which is often brass coloured. A hissing sound could escape when the valve is open and this is normal as long as it is only air being vented and not actual propane.

Open the valve extremely unhurriedly on the fill line, listening for any leaks. If there are no leaks, then the valve could be safely opened. The sounds of fuel entering the tank should be audible. On no account leave the tank unattended whenever refuelling and look at the bleeder valve throughout the method. A spray of white propane gas would emit from the bleeder valve once the tank is full. Turn the fill valve off completely and after that close the bleeder valve. Very unhurriedly and cautiously remove the fill line from the tank. Watch for whatever excess gas caught in the coupling which would be expelled when the seal is broken. It must only be a small amount of gas and is normal. Replace the protective cover on the fill valve. Double check all valves are fully closed. The tank is now ready and full to utilize.