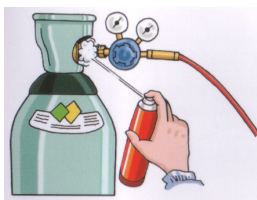


Safe Handling of Acetylene for Welding and Cutting

Acetylene is mainly used for OXY-DA welding and cutting. Overall, there were 6 accidents reported in a month that were related to incorrect procedures. Acetylene is non-toxic, but it is highly flammable and unstable, being 10 times more flammable than Petrol. Decomposition and explosions will happen when optimum conditions are reached. Below are some of the safety tips to use Acetylene for welding and cutting.



Check your equipment. Ensure that apparatus such as hoses, regulators, nozzles and torches are checked and always in good conditions.
Leak Check Check for leaks after all the apparatus are assembled.
Use Check Valve Use a check valve to avoid Oxygen (higher pressure) flow back to the Acetylene hose (lower pressure) when not in use.
Clean Valve Outlet Clean the valve outlet from oil, sand and contaminants by using a lint-free cloth. Never open the valve to purge the valve outlet.
Safe Practices for lighting up and shutting down a). Lighting up – Open the cylinder valve and regulator. Then open the torch valve and let the gas flow for a while to replace the residual gas in the hose. Close the torch valve. Do it one by one for Acetylene and oxygen. Lastly, open the Acetylene and ignite the gas and followed by Oxygen. b). Shutting down – Close the torch valve and cylinder valve. Then open the torch valve to release the pressure inside the hose. Finally, close the torch valve and lastly, the regulator. Do it one by one for Acetylene and oxygen.
Don't open the valve too fast Use the suitable pressure rate for Acetylene (Normally less than 9 psi).
Use Flashback Arrestor It will stop the fire flash back to the regulator and cylinder.
Use the cylinder in an up-right position If the cylinder is lying on the ground, this will cause Acetone to leak from the cylinder and flow into the hose, causing a flashback.
Use regulator to check the content Do not open the valve without using a regulator. Friction from the gas flow will ignite Acetylene.
Oxygen can also be the source of the fire/explosions: <ul style="list-style-type: none">- Ensure that all apparatus, include the regulator for Oxygen application are oil and grease-free.- Do not open the hand wheel too fast. Open slowly to avoid Adiabatic Compression, which will cause a fire.



Check leak



Flashback Arrestor