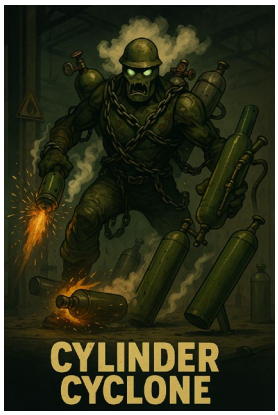
Controlling the Pressure

A 200-lb cylinder might look harmless in the corner — until the valve snaps and it becomes a 200-mph rocket. Add cracked hoses, leaking regulators, or sloppy storage, and suddenly you're surrounded by fuel, oxygen, and ignition sources.

That's where Cylinder Cyclone lurks — feeding on shortcuts and waiting for a chance to break loose.

Chain it, cap it, check it twice,
A flying tank won't play nice.
Hoses clear and valves tight,
Keep your gear and crew upright.



Meet Cylinder Cyclone – The Rolling Rocket

You don't hear him coming — you feel him. A shiver in the concrete floor, the rattle of chains, and then the hiss of leaking gas like a snake in the dark. Cylinder Cyclone isn't just a hazard — he's 200 pounds of compressed fury, waiting for one careless moment to set him free.

Where He Lurks:

- Freestanding cylinders leaning in the corner like forgotten sentries.
- Caps tossed aside, regulators left on overnight, hoses still under pressure.
- Storage rooms crammed with oxygen and fuel like a powder keg.

Why He's Terrifying:

When his valve snaps, he becomes a missile — 200 miles per hour of steel tearing through walls, bodies, and bone. When his hoses split, he breathes flammable vapor into the air, invisible until a spark makes it roar. He's not loud or flashy. He waits, patient, for a shortcut, for a cap skipped, for a chain left unlatched.

What He Does to You:

- Shrapnel turns lungs into confetti.
- A rocket cylinder smashes you before you can even blink.
- A gas cloud suffocates you in silence, or ignites with a roar that shatters windows.

How to Defeat Him:

- Bind him in chains and straps — always upright.
- Cap him when he sleeps.
- Bleed his hoses until they're empty and harmless.
- Keep him away from oxygen's touch, from heat's embrace, from oil's spark.

Remember:

Cylinder Cyclone doesn't need a stage. He doesn't need a plan. He needs only a second — one careless second — to turn a normal day into a horror story your crew won't walk away from.

Cyclone's Playbook	What It Looks Like in the Field	Risks if ignored	Our Defense
Toppling Tanks	Cylinders leaning on walls, freestanding, or tossed in truck beds	Tanks fall, valves shear, rocket across the shop	Always chain or strap upright. Store full/empty separately, valves closed, caps on.
Rocket Launch	Valve cap missing, regulator still attached, cylinder dropped or struck	200-mph missile smashing walls, equipment, or workers	Remove regulators after use, install caps immediately, never drag/roll/lift by valve or cap.

Hose Whip / Damage	Hoses flattened under wheels, scorched by sparks, cracked at fittings	Gas leaks, tripping hazards, whipping if ruptured	Inspect by sight/touch every shift. Route clear of traffic. Replace, never patch. Install flashback arrestors & check valves at both regulator and torch ends.
Gas Cloud Ambush	Hissing sound, white vapor, smell of fuel near valves/fittings	Flash fire, explosion, or asphyxiation	Leak test with soapy water. Open valves slowly. Shut down/tag out if leak found. Acetylene valves: keep wrench on valve while in use.
Fuel + Oxygen Mix	O2 and acetylene stored side by side with oily rags nearby	Fireball from oxidizer/fuel mix	Separate by 20 ft or fire-rated 5 ft barrier. No oil/grease on valves or regulators.
Heat & Confined Storage	Cylinders near weld sparks, radiators, or stored in closets	Cylinder rupture from heat >125°F or gas buildup	Store in well-ventilated, dry areas, away from heat/electric circuits. Never in confined spaces.

Special Note on Acetylene Cylinders

Acetylene isn't just "another fuel gas." It's dissolved in acetone inside a porous filler to prevent explosive decomposition. But if a cylinder is laid on its side, liquid acetone can flow into hoses and regulators, creating unstable and dangerous conditions.

Always store and transport upright. If moved horizontally, stand upright for at least 1 hour before use.

PPE for Cylinder & Hose Work

- Safety glasses or face shield
- Leather gloves (oil-free when handling oxygen)
- FR clothing for hot work
- Steel-toed boots (protect from drops and roll-overs)
- Keep hands/tools free from grease and oils

Hose Safety – What to Look For Every Shift

- **Inspect visually and by touch**: No cracks, burns, blisters, splices, or kinks.
- **Check connections**: Tight fittings, no damaged threads, and leak test with soapy water or approved solution after setup.
- **Protect routing**: Keep hoses away from sparks, hot metal, sharp edges, and traffic. Use hose covers or overhead routing when possible.
- **No shortcuts**: Never patch with tape or wire. Replace damaged hoses immediately.
- **Flashback defense**: Arrestors and check valves must be installed at torch *and* regulator ends.

The Bottom Line -

A single mistake with a cylinder or hose can change your shift forever.

Secure it. Test it. Respect the pressure — every time.

OSHA Case Study – *"Acetylene Cylinder Explosion"*

Incident (OSHA #110219.015, Mar 4, 2016): A worker was preparing to cut metal when an acetylene cylinder exploded. It had been stored uncapped and unsecured, with hoses left connected. A leak allowed gas to accumulate, and a stray spark ignited it. The blast blew out windows, hurled fragments 100 feet, killed one worker, and severely burned another.

Lessons Learned:

- Always secure and cap cylinders when not in use.
- Disconnect and bleed hoses after work.
- Perform leak tests before hot work.
- Store away from ignition, with ventilation.
- Keep oxygen equipment totally oil/grease-free.