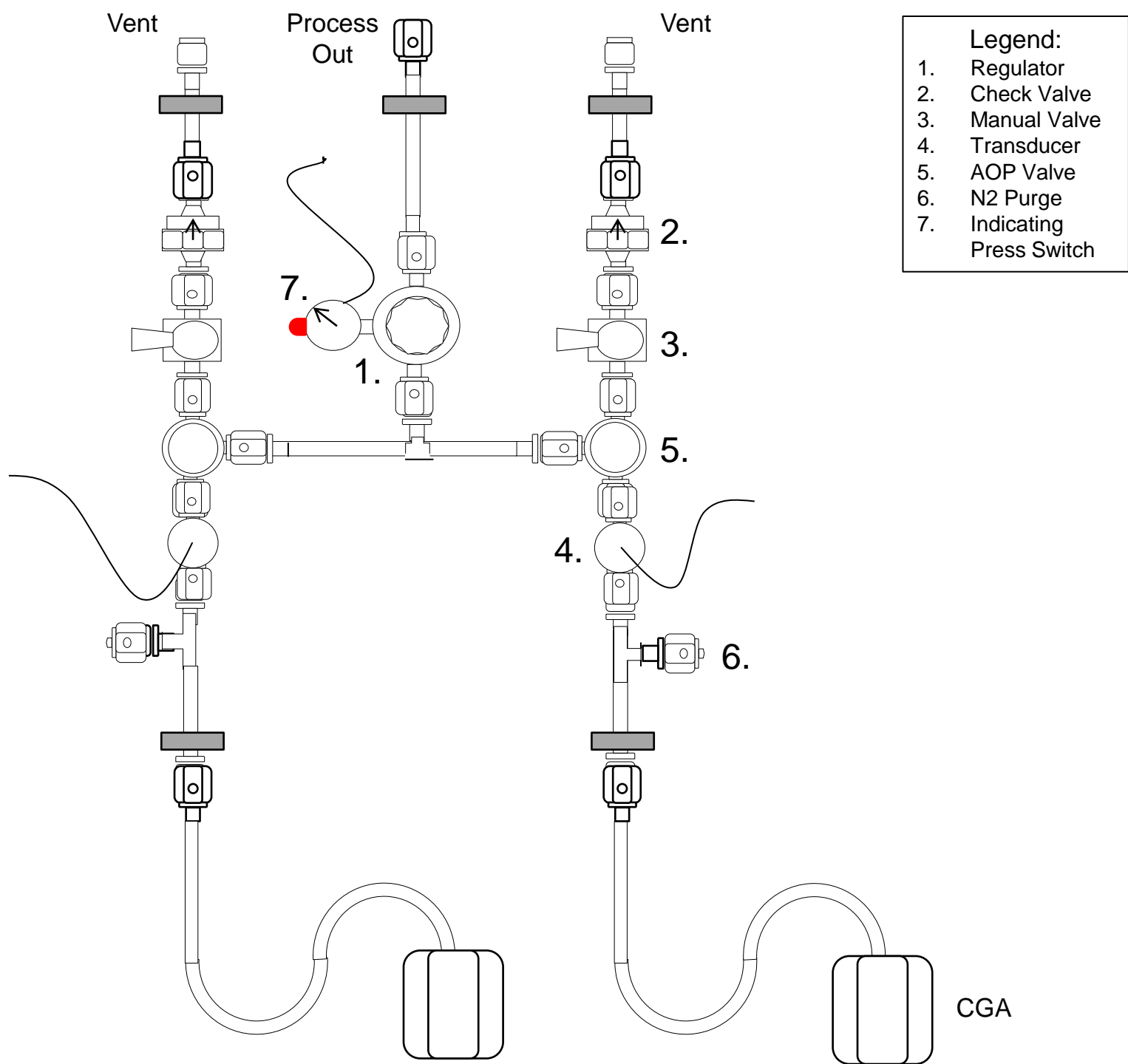
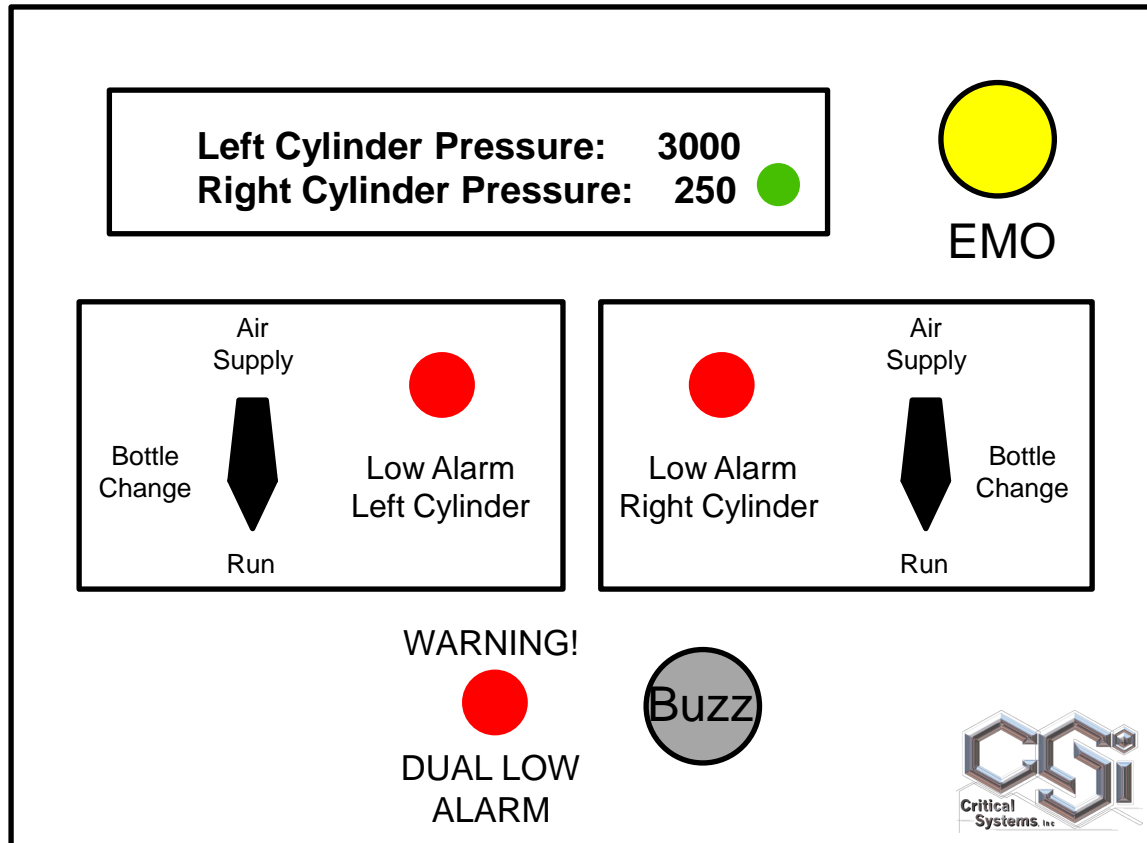


# Critical Systems IGAC Auto-Crossover System





For this controller we'll need:

1. Display of cylinder pressures from transducers or weight from scales – 4-20mA - a light should indicate which cylinder is active.
2. Ability to set 2 alarm outputs per transducer, a low and a usable contact out for the user to send elsewhere
3. Dual Low alarm is when both transducers are in low alarm state. This should sound a buzzer, and have a switch contact to light a beacon.
4. Controller should power the transducers and be 110AC capable
5. EMO should shut both air operated valves, and will trip if downstream pressure from Reg trips the pressure switch
6. Controller to hold two 3way solenoid valves (SMC style), and the controller 's alarm for low pressure will switch off that valve and open the other valve. Operator replaces the cylinder that is low and controller switches back when that cylinder is low.

# Critical Systems “IGAC” Inert Gas Cylinder Crossover System

- Allows for inert gas cylinder auto-crossover at minimal cost.
- Controller to allow for transducer or scale use. If scale, needs to be able to Tarr the cylinder.
- Transducers monitor bottle pressure, (scales monitor cylinder weight) when the bottle pressure falls to user set level, controller turns off the supply valve, and opens the second cylinder supply valve.
- A red light above a description indicates low bottle pressure and a green light next to the displayed pressure shows which cylinder is active.
- If both transducers show low pressure alarms, a “Dual Low Alarm” light engages and a buzzer on the panel sounds.
- An Emergency Shut Off switch on the regulator (indicating pressure switch) cuts off the electrical signal to the solenoid valves, allowing both cylinders to shut.
- EMO reset will put the solenoids in the same position as when they were active.
- Lock out for bottle change is a 3 way ball valve on the air line to the diaphragm valve (located physically on the controller panel). Turn to “Bottle Change” to prevent air getting to valve.