# INSTRUCTION

**Please read carefully before using and save for future reference**

# Usage

This product is a pressure reduction equipment to reduce the pressure of cylinder holding various kind of gas under high pressure. Majorly used for welding, slicing, chemical industry, analyzing, testing and other industry usage. This product can retain steady pressure output even the input pressure and input flux changes.

# Products Structure and using method

Gas pressure regulator of single retroaction and dual retroaction gas regulator, has two gas pressure indictors, indicator 1 and indication 11.

Turn the adjustment screw 5 clockwise, major pressure adjustment spring 6 is compressed, the applied force pass through the spring pads 4, diaphragm 3 and mandrel 7, open the valve bib 9, the gas under high pressure pass through the valve bib entering into low pressure chamber 8, pass through the exist and transport the gas to the working position.

When the machine is not in use. We should loosen the adjustment screw completed, and make sure the spring recovered from compressed condition, release gas remained in low pressure chamber, the valve bib near sub pressure adjustment spring 10 completed sealed.

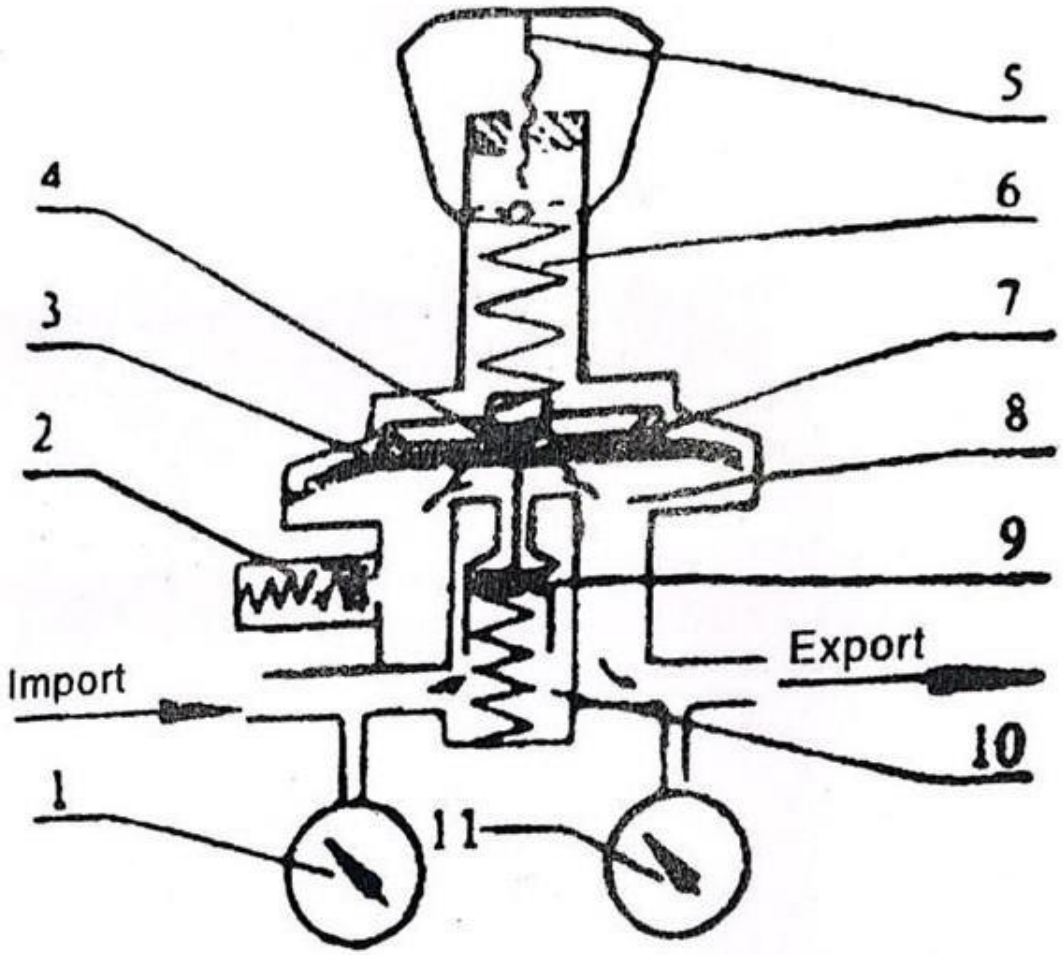
Safety valve 2 is a pressure discharging equipment that guarantee the security of the pressure regulator and signal device in case the pressure regulator is malfunctioned. When the output pressure regulator is malfunctioned. When the output pressure is 1 .15 times to 1.5 times than the maximum output pressure because of the damages on the valve bib seal, the valve seat or other parts, the safety valve will open automatically to discharge, and will closed automatically when the pressure drops to certain value.

# Specification

## Specifications

| Items | Specification | Maximum input pressure $P_1$ | Maximum input pressure $P_2$ | Flux Q |
|---|---|---|---|---|
| | MPa | | | $m^3/h$ |
| Oxygen Regulator | 4 x 25 | 15 | 2 | 250 |
| | 16 x 25 | 15 | 1 | 30 |
| | 2.5 x 25 | 15 | 1.25 | 40 |
| | 4 x 25 | 15 | 2 | 50 |
| | 6 x 25 | 15 | 3 | 10 |
| | 0.4 x 25 | 15 | 0.2 | 20 |
| Carbon dioxide regulator | 0.3 x 25 | 15 | 0.3 | 25 |
| Hydrogen regulator | 0.4 x 25 | 15 | 0.2 | 20 |
| | 1.6 x 25 | 15 | 1 | 30 |
| | 25 x 25 | 15 | 1.25 | 40 |
| Nitrogen regulator | 2.5 x 25 | 15 | 1.25 | 40 |
| | 4 x 25 | 15 | 2 | 50 |
| Acetylene regulator | 0.25 x 4 | 1.6 | 0.15 | 5 |
| Propane regulator | 0.16 x 2.5 | 1.6 | 0.15 | 5 |
| Ammonia regulator | 1 x 6 | 4 | 0.4 | 20 |
| Argon regulator | 0.3 x 25 | 15 | 03 | 25 |

# Working schematic




1)high pressure indicator
2)safety valve
3)diaphragm
4)spring pads
5)adjustment screw
6)adjusting spring
7)mandrel
8)low pressure chamber
9)Valve bib
10)Valve Spring
11)Low pressure indicator

# Safe Operation Instructions

1. Make cylinders fixed on the walls, pillars or car, be sure to not make cylinders overturned on the ground
2. Ensure that the pressure regulator is intact and check for oil pollution before using. If grease exists, ask professional personnel to clean it. Grease, dusts or dirt on the pressure regulator (especially at the entrance) should be removed.
3. Check whether there are grease contamination on the valve, and check if there is a broken screw thread, if above mentioned defects detected then do not use the cylinder and report to the Gas supplier. Remove the contaminations, dusts or dirt on the pressure regulator (especially at the entrance).
4. Mount the pressure regulator to the cylinder valve, pull all connectors tightly.
5. Turn the adjustment screw of the regulator counter-clockwise until the spring is not under pressure before opening the cylinder valve.
6. Not stand in front or backside of the regulator when opening the cylinder valve, and it should be slowly raised to the index displayed in the high-pressure table.
7. Turn the adjustment screw of the regulator clockwise, to ensure the reading in the low-pressure indicator meet the requested working temperature. If the reading is higher than requested then adjust the adjustment screw to remove some gas and re-adjust.
8. To check whether there is a leak of gas, to turn off the cylinder valve, then turn the adjustment screw counter-clockwise for one circle. If the reading in the high pressure indicators drops, that is to say there is leakage on the cylinder or the high pressure indicator. If the reading in the low pressure indicator drops, that is to say there is a leakage on the low pressure indicators or the pipeline or equipment after the regulator, of the reading for the high pressure indicator drops, meanwhile, the reading for the low pressure indicator raises, that means there is a leak age on the valve seat. Gas leakage as mentioned above can be detected by using leakage check up liquor safe and effective.
9. We must turn off the valve of gas cylinder after using. When we stopped working, we should turn off the valve of gas cylinder, and open the valve of the welding or slicing machine to disc harge remnants gas, turn off the valve of the welding or slicing machine, turn off the valve of the welding or slicing machine, turn the adjust screw counter-clockwise until the adjust spring no longer under-pressure.
10. The regulator should only be applied for gas specified to use.

11. When using pressure regulator of oxygen, ethane, and propane, one should strictly follow stipulation issued by National label constitute as for “safety monitoring standard for gas cylinder” and “safety monitoring standard for dissolved ethane gas cylinder”.
12. If the regulator or the pressure indicator showing any anomalous or were found broken, it must be fixed immediately.
13. The repair of the pressure regulator should only be carried out by specialized personnel.
14. The components use to replace dysfunction parts should be the same model produced by our factory, otherwise it might cause problems or malfunction of the equipment.
15. For Carbon Dioxide pressure regulators into Notes: if the pressure regulator is an electric heating pressure regulator, you must use the correct voltage; otherwise it will burn equipment, remember to warm-up for 5 to 10 minutes before using.
16. Maintain good air circulation for the working place, do not pile up flammable substances nearby, place the fire extinguisher appropriately and check regularly.

# Attention

1. The regulator functioning normally when environment temperature is above-10 centigrade.
2. The regulator should only be unfreezing using steam or hot water, open fire is strictly prohibited.
3. The regulator specified for certain gas should only be used for the gas indicated.
4. Type and name of the product please refers to the product nameplate.