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Spec-Master High Purity (99.9999%) Regulator Operating Instructions

It is important that only experienced and properly trained persons should handle these compressed gases. They should be conversant with the relevant safety instructions including the current British Compressed Gases Association code of practice CP4 and the gas safety instructions from the gas supplier. To help maintain the purity integrity of the product, prior to use these regulators should be stored in a clean dry and warm environment. The regulator should be kept in its sealed protective plastic packaging until use.

Markings

The regulator is marked with the following:-

- Maximum inlet pressure (pressure service)
- Rated outlet pressure

Fitting the regulator

Before fitting the regulator, ensure all connections are clean and free from contaminants including dirt, oil and water and if fitted, fully release the regulator adjusting knob by winding anticlockwise. Right hand thread is employed for oxygen and permanent gas cylinders and left hand thread is used for fuel gas cylinders. Use only the correct size of spanner and finally tighten by applying two blows to the end of the spanner with the heel of the hand.

Purging

It is critical that all high purity equipment be thoroughly purged before use to ensure that any residual moisture is removed from the system. The following procedure should be carried out:

- Pressurise the regulator to its maximum outlet operating pressure and then with the inlet pressure isolated reduce the outlet pressure to 1 bar. Repeat this process 3 times.
- Finally at a minimum operating pressure of approximately 1 bar, purge the regulator until the operating pressure falls to approximately 0.5 bar and hold for a period of 2 to 5 minutes.

Note! To avoid Oxygen depletion or enrichment of the local environment, ensure all purging gases are safely vented.

Operating

After fitting of the downstream equipment, open the cylinder or inlet isolation valve slowly, this is a critical operation and must be done slowly to be safe. If fitted, adjust the regulator knob to the required outlet pressure and purge hoses, make the final adjustments when the gas is flowing. It is vital to ensure that any audible vibration or freezing of the regulator is avoided during operation. Check for leaks at all joints with a leak detection spray.

NEVER:

- Use a regulator showing any signs of damage
- Allow cylinders to become heated
- Use pressure gauges that are damaged, not smooth in operation or not zeroing
- Remove or change any component parts of a regulator

ALWAYS:

- Check the whole system for damage and leaks at frequent intervals
- Comply with BCGA codes of practice. To purchase copies, telephone 01491 825533