Office of the Technical Regulator

Laboratory turret cocks and parallel threads

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The AS/NZS 5601.1:2022 Clause 4.4 prohibits the use of the following fittings:

The following fittings or jointing systems shall not be used in consumer piping:

- a) Croxed joints.
- b) Compression fittings with non-metallic olives excluding plastics fittings suitable for gas and complying with AS/NZS 4129.
- c) Compression fittings with metallic olives if not approved by the manufacturer for use with gas.
- d) Longscrew connectors.
- e) Internally threaded PVC-U fittings unless manufactured with a reinforcing metal band.
- f) Capillary fittings containing soft-solder.
- g) Plain nipples e.g. running nipple with parallel threads except where no practical alternative is available.



NOTE: A brass external parallel thread to a brass internal parallel thread may be used, provided that the joint is welded or a suitable permanent quick-setting thread compound is used and a means of disconnection is provided immediately downstream. Wherever possible the fitting should be secured against disturbance.

Laboratory Gas Turret Cocks May be an exception to the Parallel Thread rule.

Some Bunsen burner gas turret cocks have a plain nipple (parallel thread) stem as an integral part of the fitting. Turret cocks are recognised fittings, certified by the AGA to AG 201.

They can be found under the heading of Class 2 Miscellaneous Valves in the AGA, ALPGA Approved Appliance & Component directory.



A male parallel thread allows the thread to tighten only when it bottoms out in the attached fitting, as a result any disturbance of the fitting may result in an escape of gas (see Bulletin 11 – Parallel threads).

Provided that you complete the following, the installation will be acceptable:

- 1. Drill a hole in the base flange of the turret cock (unless it already has stabilising pins attached) and screw the cock to the bench to prevent any rotational movement.
- 2. Apply a setting-jointing compound to the parallel thread and turret cock and attach a BSP socket to copper flared fitting to the parallel thread.
- 3. Reconnect the copper supply to the fitting (do not use setting compound on the copper flared fitting).
- 4. Test for leaks.



Contact the Office of the Technical Regulator for more information

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