

GAS BOTTLES REGULATION

Gas Bottle-Cylinder Testing Facts & Expiry Date
In Australia, BBQ gas bottles must be tested every ten years.

It is illegal to fill a gas bottle that is past its expiry date but you are allowed to use it, past the expiry date, if it still contains gas.

What is Gas Bottle-Cylinder Testing?

In summary:

- **Gas bottles, cylinders and larger tanks must be inspected periodically for safety and re-certification.**
- **The testing periods vary - with 10 to 15 years being typical - and the test date is permanently marked or stamped on the bottle.**
- **The gas bottles are subject to internal and external inspection for rust and any other damage.**
- **Physical testing, including pressure tests, may be required depending on the type and size of vessel and the country where tested.**
- **Only approved testing facilities are authorised to test and re-certify gas bottles, cylinders and tanks.**

Test Date Stamp Expiry

The original test date is stamped into the neck ring of the BBQ gas bottle by the gas bottle manufacturer.

When that test date expires the gas bottle must be re-inspected by an Australian certified test station and the neck ring re-stamped and dated.

The following is a brief summary of the re-inspection process:

Preparation - De-gassing

LPG gas bottle degassing station

At the start of the process the gas bottle is totally emptied of any remnant gas.

A degassing station is shown in the picture to the right.

The old gas valve is then removed to facilitate the internal inspection.

External Inspection

LPG gas bottle condemned because of fire damage

The external surface of the gas bottle is inspected for defects, as defined by the applicable Standard, AS 2337.1-2004.

The kind of things they look for are swelling of the cylinder walls, the depth and diameter of any dents, the length and depth of any gouges, the depth and intensity of any corrosion, the presence of any cracks, or any damage from fire or heat.

Failure in any one category is cause for condemning the gas bottle.

The gas bottle in the picture was condemned for fire damage.

Internal Inspection

LPG gas bottle with corroded cylinder neck area

A flexible scope, with illumination, is used to inspect the inside of the gas bottle.

The interior is inspected for rust, scale, corrosion or any contamination.

Normally, if the bottle has been kept either full of LPG or empty with the valve closed, internal rust and corrosion are not a problem.

Any gas bottle that fails to meet the Standard is condemned.

Cylinder Neck

The neck of the gas bottle is a critical area, as it is the point of attachment for the valve.

The valve threads are inspected to see if they are clean and intact, damage free, free of burrs and cracks or any other imperfections that could affect the integrity of the connection.

Once again, failure in any area is cause for condemnation.

New Date Stamping

Test station stamping tool

Gas bottles that pass all of the tests are stamped with a new inspection date, showing the month and last two digits of the year.

In addition the test station stamps its own unique test station mark onto the gas bottle.

Both stamps are typically applied in previously unmarked areas of the neck ring, as shown to the right.

Valve Installation

LPG gas bottle valve removal and insertion tool

The next step is the installation of a new valve, as shown in the picture.

The old valves are discarded and recycled.

Refilling

While not part of the formal inspection process, the new valve installation should always be leak tested when refilled.

In fact, this is the standard procedure for all subsequent refilling, as well.

Additional Swap Scheme Procedures

Swap programs, such as SWAP'n'GO®, also refurbish the gas bottles before they are refilled.

Refurbishment

LPG gas bottles on an automated paint line

In addition to the normal test procedures, over half of the bottles tested by SWAP'n'GO would also be repainted.

Many would also be shot blasted prior to painting.

The end result is a refurbished gas bottle in near new condition, with a new test date stamp that is valid for ten more years.

The picture shows gas bottles being repainted on an automated coating line.

Recycling

Condemned gas bottles with large punctures for safe decommissioning

SWAP'n'GO bottles that are condemned are safely retired by punching a large hole in the side, so the metal recycling workers know that they have been safely decommissioned.

Please see Safe Disposal & Recycling of Gas Bottles-Cylinders

In addition to recycling the steel from the gas bottles, the brass from the valves is also recycled.