

Installation and use of inert gases for beverage dispensing

ANZIGA

ANZIGA is the peak industry group for the manufacture and distribution of gases in Australia and New Zealand. As a leading industry association, ANZIGA promotes the highest standards of safety, quality and reliability.

This Safety Advice is intended to provide information and relevant recommendations on a safety concern relating to the production, transportation, storage, handling and use of gases.

Installation and Use of Inert Gases for Beverage dispensing

This Safety Advice addresses the application of the Australian Standard AS5034-2005 *Installation and use of inert gases for beverage dispensing*.

Summary

Australian Standard AS5034-2005 *Installation and use of inert gases for beverage dispensing* was issued in October 2005. This standard sets out the requirements for the use of inert gases for beverage dispensing and looks at all areas associated with the hazards of compressed and refrigerated gases. The standard was developed in response to a coronial enquiry into the death of a cellar worker who died as a result of gas leakage.

Following the time lines outlined in the Australian, AS 5034 should now be fully implemented by all relevant workplaces.

This Standard gives specific guidance to the designers, installers, users, maintainers, inspectors, hirers and owners of pressurised beverage equipment beyond the general principles of risk assessment required in the handling of Dangerous Goods. The objective of this Standard is to ensure the safety of owners, hirers and users when operating compressed inert gas systems and equipment for beverage dispensing.

Safety Concern

It is possible for gas systems, including cylinders, used in beverage dispensing systems to develop leaks. This may result in a build-up of inert gases in areas such as cellars, cool rooms, kitchens, storage areas and plant rooms which present hazards for those working in them. Inhalation of these gases may result in the asphyxiation of people entering these areas.

ANZIGA is concerned to ensure that hospitality venues are as safe as possible when operating compressed inert gas systems and equipment. Unfortunately tragic accidents have continued to occur and ANZIGA believes that it is essential to continue to reinforce the need for users of inert gases for beverage dispensing to implement AS 5034 and undertake informed risk assessments to determine the appropriate and reasonable control measures required to control the risks associated with the use of inert gases.

Status of AS 5034

ANZIGA is aware that as an Australia Standard, AS5034 is not legally binding under Work Health and Safety Legislation unless specifically incorporated into a legislative instrument (if it is incorporated the Australian Standard assumes the same force as the particular legislative instrument). At this stage AS 5034 has not been incorporated under any legislation and therefore serves only as non-legally binding guidance material. Compliance with AS5034 is however recommended and such compliance could be relied upon as evidence that all reasonably practical steps were taken to address the identified risks.

Application of the Australian Standard

As stated in AS 5034, all installations using inert gases for beverage dispensing should be assessed for risk, and control measures implemented.

Your risk assessment should cover:

- Room size;
- Gas volumes stored;
- Current condition and equipment
- Staff knowledge and access control
- Lighting and general house keeping

The risks identified can be controlled by implementing the following control measures as required:

- Implementing and maintaining gas monitoring systems;
- Relocating gas storage or reducing total gas stored
- Equipment remediation
- Conducting training, retraining and assessing competency of staff
- Implementing emergency procedures and providing emergency equipment
- Providing on site first aid facilities

The AS 5034 provides advice on:

- Design, Installation and testing including location and design of dispensing systems.
- Location and ventilation of supply systems including gas detection and emergency procedures
- System operation and maintenance including maintenance records
- Signage
- Training of staff and contractors

Obtaining Assistance

ANZIGA encourages users of inert gases for the dispensing of beverages are encouraged to obtain professional assistance in implementing AS5034 if there is any uncertainty as to its application.

Your gas supplier may be consulted on where assistance can be obtained.

References

AS5034: 2005 – *Installation and use of inert gases for beverage dispensing*

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