Air compressors and pressurised air tanks

CAMs # 478617

1. Relevant To

This alert is important for all Fulton Hogan business units who use compressed air.

It applies to **all** air compressors and pressurised air tanks, including mobile units.

Additional requirements apply to units that can operate at a pressure greater than 100MPa per litre.

2. Critical Risk – Energy

Age, use, manufacturing weaknesses, and insufficient maintenance can all reduce the integrity of pressure vessels over time.

A unit in poor condition could violently explode. All units must be inspected regularly.

Government regulations require air compressors and pressurised air tanks operating at greater than **100MPa per litre** to be inspected and certified each year by an independent, specialist company (i.e. SGS).

This is the only way that we can be sure that this equipment is safe to use.

3. Background

This risk was identified during the recent Telarc audit. This prompted us to review the way we manage the inspection and certification process.

This example shows how to determine the need for certification.

Question: A workshop compressor with a 125 L compressed air tank is operating at a working pressure of 8 bar – does this need an annual inspection?

Calculation: 125 L compressed air tank, operating at a pressure of 8 bar.
8 bar = 0.8 MPa. 0.8MPa x 125L = 100 MPa per Litre.

Answer: Because the air tank has a working pressure of 100 MPa per litre or more, independent annual inspection and certification is required.

4. Findings

Fulton Hogan has many compressors and pressurised air tanks. These are commonly located in our workshops, yards, quarries, asphalt and bitumen plants, and on our project sites.

Some of these items have not been regularly inspected and certified as the regulations require, potentially exposing people to an unacceptable risk.

5. Mandatory Requirements

Please complete the following mandatory requirements before 29 August 2025.

5.1. Inspect your sites and compile a full inventory of all compressors and pressurised air tanks in your region / project.

5.2. Eliminate the need for as many of these air compressors and tanks as possible by replacing air tools with battery operated tools. Please sell or scrap the redundant equipment.

5.3. Assign asset numbers to all remaining compressors / air tanks and physically fix the number to each asset. Check that the generic PAM 44 compressor maintenance inspection is also assigned to each asset.

5.4. Identify compressors and air tanks that could operate at a pressure greater than 100MPa per litre. Ensure these all have:

a. A design verification label or marking.
b. A current annual certificate of inspection.
c. Been set up with the annual PM inspection and certification requirements.
d. Design verification paperwork and annual inspection certificates attached to the asset in our maintenance system.

6. Revision History

Date	Author	Brief Description of Change
02/07/2025	A Allen	First Draft
02/07/2025	G Eaton	Second Draft
05/07/2025	T Talbot	Third Draft

7. Closeout Requirements

Please discuss this Red Alert with your teams, complete the items below and return to your Safety Manager. They will collate all responses for the business unit and send a single confirmation to nzincident@fultonhogan.com before 15th August 2025.

7.1. What date was this Red Alert communicated to the workplace: ____/____/2025

7.2. Could this incident occur in your Region/Project? (Circle your answer below)

YES If Yes, please answer questions 7.3 & 7.4

NO If No, please answer question 7.5

7.3. Have all the actions and recommendations been implemented? (Circle your answer below)

YES If Yes, please answer question 7.4

NO If No, please answer question 7.5

7.4. Are these measures sufficient to eliminate or reduce the risk of an incident (or similar) described in the alert from happening again? (Circle your answer below)

YES or **NO**

If No, please raise a CAMs case listing the required actions and accountabilities to be taken in order to eliminate or reduce the risk. Record the CAMs number below:

CAMs Case Number: CAMs-_____

7.5. Please explain why this incident could not occur within your region / project.

In signing this document, I confirm that the actions above have been completed in this region/project.

Region / Project: _____

Region / Project Manager Name: _____

Signature: _____ Date: _____