In the [compressed air](https://www.atlascopco.com/en-uk/compressors/wiki/compressed-air-articles/what-is-compressed-air) sector, as in many other industrial sectors, regulations apply. They may include requirements that are defined by legislation as well as optional regulations or recommendations, as for national and international standards.

Industry Standards

Sometimes regulations in standards may become binding when they come into force through legislation. If a standard is quoted in a commercial agreement it can thereby also be made binding. Binding regulations can apply, for example, to safety for people and property while optional standards are used to facilitate work with specifications, selection of quality, performing and reporting measurements, manufacturing drawings etc.

The benefits of international standardization are obvious to both manufacturers, intermediate parties such as engineering companies and final customers. It increases the interchangeability of products and systems and allows performance statements to be compared on equal terms. These performance statements may include operational, environmental and safety aspects.

Standards are referred to frequently by legislators as a way of creating uniform market impacts. Standards may be produced, issued and maintained by standardization organizations on national, supranational (European) and international levels, but equally by specific trade associations focusing on specific industrial sectors (the petroleum industry, compressed air industry, electronics industry etc).

Standards produced by the International Organization for Standardization (ISO) may be converted into national standards by the ISO member countries at their discretion. Standards produced by the CEN (European Committee for Standardization), are developed for use by the 30 national members, and conversion into national standard may be mandatory in the case of harmonized standards.

All standards can be acquired through the various national standardization organizations.
In the compressed air industry, standards may also be produced by trade associations such as PNEUROP (European committee of manufacturers of compressed air equipment, vacuum pumps, pneumatic tools and allied equipment), or its counterpart CAGI (United States Compressed Air and Gas Institute). Examples of such documents are the performance measurement standards for compressor capacity, oil content in the compressed air, etc. which were issued while awaiting an international standard to be developed.

Compilation

A non-exhaustive list of current (2010) standards within the compressed air [industry](https://www.atlascopco.com/en-uk/compressors/wiki/compressed-air-articles/compressed-air-applications) follows below. The listed references are both European and US. Pneurop standard initiatives are usually issued in parallel with a CAGI issue for the American market. It is recommended to check with the issuing body to ensure that the latest edition is being used, unless the particular market requirement/demand refers to a dated issue.

**Machinery safety**EU Machinery directive 2006/42/EC, referring to the following standards:

* EN 1012-1 Compressors and vacuum pumps – Safety requirements
* EN ISO 12100-1:2003 AMD 1 2009, Safety of Machinery – Basic concepts, General principles for design – Part 1: Basic Terminology, Methodology
* EN ISO 12100-2:2003 AMD 1 2009, Safety of Machinery – Basic concepts, General principles for design – Part 2: Technical Principles

**Pressure equipment safety**EU Directive 87/404/EC, Simple pressure vessels
EU  Directive  97/23/EC,  Pressure  Equipment, referring to the following standards:

* EN 764-1 to 7, Pressure equipment
* EN 286-1 to 4, Simple, unfired pressure vessels designed to contain air or nitrogen

**Environment**EU Directive 2000/14/EC, Outdoor Noise Emission, referring to the following standards:

* EN ISO 3744:2009, Determination of sound power levels of noise sources using sound pressure – Engineering method
* EN ISO 2151:2004, Noise test code for compressors and vacuum pumps – Engineering method
* EU Directive 2004/26/EC, Emission standard for non-road engines – Stage III levels implemented from 2006 to 2013, Stage IV as from 2014
* US  Federal  Emission  standard  for  non-road engines – Tier III levels implemented from 2006 to 2008, Tier IV levels as from 2008 to 2015

**Electrical safety**EU Directive 2004/108/EC, Electromagnetic compatibility, referring to the following standards:

* EN 61000-6-2:2005, Electromagnetic compatibility (EMC) - PART 6-2: Generic Standards - Immunity for Industrial Environments
* EN 61000-6-4:2006, Electromagnetic compatibility (EMC) - PART 6-4: Generic Standards – Emission standards for Industrial Environments

EU Directive 2006/95/EC, Low Voltage Equipment, referring to following standards:

* EN 60034- Part 1 to 30, Rotating Electrical Machines – Rating and Performance
* EN 60204-1:2009, Safety of Machinery – Electrical Equipment of Machines – Part 1 : General Requirements
* EN 60439-1:2004, Low-voltage and control gear assemblies – Part 1 : Type tested and partially type tested assemblies

**Medical devices-general**EU Directive 93/42/EC, referring to the following standards:

* EN ISO 13485:2000, Plastics Piping system – Test method for leak-tightness under internal pressure
* EN ISO 14971:2007, Medical Devices – Application of risk management to Medical Devices

**Standardization**
ISO 3857-1:1977, Compressors, pneumatic tools and machines - Vocabulary - Part 1: General

ISO 3857-2:1977, Compressors, pneumatic tools and machines - Vocabulary - Part 2: Compressors

ISO 5390:1977, Compressors - Classification

**Specifications and testing**ISO 1217:2009, Displacement compressors – Acceptance tests

ISO 5389:2005, Turbo-compressors - Performance test code

ISO 7183:2007, Compressed air dryers - Specifications and testing

ISO 12500:2007-Part 1 to 3, Filters for Compressed Air – Test Methods

ISO 8573-Part 1 to 9, Compressed Air - Contaminants and purity classes – Test Methods