

TOPIC OVERVIEW

Oxygen is used in numerous industrial applications, from metal processing to medical technology. However, handling oxygen requires special care, especially when selecting and installing valves and piping. This white paper provides technical knowledge and practical recommendations for the safe planning and installation of oxygen systems. It shows which components are suitable, how to determine the correct sizing and which safety aspects must be observed.

Fundamentals and safety aspects

Safety when handling oxygen
Ignition mechanisms in oxygen systems

Technical requirements and selection of components

Selection of valves for oxygen systems
Design features and sealing types of valves
Calculation and selection of valves

Installation, operation and maintenance

Installation criteria for oxygen systems
Safety instructions and operating regulations

Disclaimer:

- This white paper is intended solely as general technical information on handling oxygen and does not claim to be exhaustive. Appropriate technical training and experience in handling technical gases are essential for the proper application and evaluation of the contents.
- It is expressly pointed out that this document does not address the possible health effects of increased or reduced oxygen concentrations in the air we breathe. For further information, we recommend DGUV Information 213-073 'Oxygen' from the German Social Accident Prevention Institution (DGUV).

