

ICS

Descriptors:

English version

**Gas welding equipment - Industrial manual and machine  
oxygen-fuel gases blowpipes for flame heating and allied  
processes**

Matériel de soudage aux gaz - Chalumeaux manuels et  
oxy-gaz combustible (type machine), à usage industriel,  
pour le chauffage à la flamme et les techniques connexes

Gasschweißgeräte - Hand- und Maschinenbrenner für den  
industriellen Einsatz zum Flammwärmen und für verwandte  
Verfahren

This CEN Report was approved by CEN on 9 March 1998. It has been drawn up by the Technical Committee CEN/TC 121.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Foreword

This Technical report was prepared by the Technical Committee CEN/TC 121 "Welding", of which the secretariat is held by DS.

The Technical Committee agreed to publish this Technical report.

This Technical report gives safety recommendations for industrial manual and machine oxygen-fuel gases blowpipes for flame heating and allied processes (e.g. flame straightening, flame cleaning, flame heat treatment and quenching, etc.), which are not covered by EN 874 and EN ISO 5172.

This Technical report is applicable to manual and machine blowpipes which are fed with oxygen, compressed air and a fuel gas (e.g. acetylene, MPS, propane, natural gas, LPG, hydrogen, etc.), in a gaseous state.

## 2 Normative references

This Technical report incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this technical report only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 559

Gas welding equipment – Rubber hoses for welding, cutting and allied processes

EN 560

Gas welding equipment – Hose connections for equipment for welding, cutting and allied processes

EN 730

Gas welding equipment – Equipment used in gas welding, cutting and allied processes, safety devices for fuel gases and oxygen or compressed air – General specifications, requirements and tests

EN 874

Gas welding equipment – Oxygen/fuel gas blowpipes (cutting machine type) of cylindrical barrel – Type of construction, general specifications, test methods

EN 29090

Gas tightness of equipment for gas welding and allied processes (ISO 9090:1989)

EN 29539

Materials for equipment used in gas welding, cutting and allied processes (ISO 9539:1988)

EN ISO 5172

Manual blowpipes for welding, cutting and heating – Specifications and tests (ISO 5172:1995, including Amendment 1 : 1995)

ISO 554 : 1976

Standard atmospheres for conditioning and/or testing – Specifications

## 3 Definitions

For the purpose of this Technical report, the following definitions apply in addition to those given in EN ISO 5172 for manual blowpipes and in EN 874 for machine oxygen/fuel gas blowpipes :

### 3.1 Manual blowpipe

Blowpipe which is handled by the operator during its operation.

### 3.2 Machine blowpipe

Blowpipe being fixed to and guided by a mechanical device during its operation.

### 3.3 Common types of mixing systems

The injector-mixer and mixer without injector action are defined in EN ISO 5172.

### 3.4 Shapes of burners

The shape of a burner is determined by its application. Table 1 shows examples of shapes of burners.