

Keevitusmaterjalid. Kaarkeevituseks ja - lõikamiseks kasutatavad kaitsegaasid

Welding consumables - Shielding gases for arc
welding and cutting

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 439:1999 sisaldab Euroopa standardi EN 439:1994 ingliskeelset teksti.	This Estonian standard EVS-EN 439:1999 consists of the English text of the European standard EN 439:1994.
Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolevat standardit rakendatakse kaitsegaaskaarkeevituse ja lõikamisprotsesside korral, mis viiakse läbi selles standardis kindlaksmääratud gaaside ja segugaasidega. Rakendused hõlmavad muu hulgas järgmisi protsesse: TIG, MAG, MIG-keevitus, plasmakaarkeevitus (PAW) ja plasmakaarlõikamine (PAC). Käesoleva standardi eesmärgiks on klassifitseerida kaitsegaasid nende keemiliste omaduste järgi, mis oleksid aluseks kaitsegaaside ja lisamaterjalide koosluste heakskiiduks.	Scope:
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Võtmesõnad: gaasid, kaarkeevitus, keemilised omadused, keevitamine kaitsegaasis, keevitus, klassifikatsioonid, segugaasid, tähistus

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Descriptors: Welding, shielding gas, arc welding, thermal cutting.

English version

Welding consumables

Shielding gases for arc welding and cutting

Produits consommables pour le soudage;
gaz de protection pour le soudage et le
coupage à l'arc

Schweißzusätze; Schutzgase zum Licht-
bogenschweißen und Schneiden

This European Standard was approved by CEN on 1994-08-17.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 121 'Welding', the Secretariat of which is held by DS.

CEN/TC 121 decided to submit the final draft for Formal Vote. The result was positive.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by February 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This standard is applicable to gas shielded arc welding and cutting processes with gases and gas mixtures defined within. Applications include, but are not limited to:

- tungsten inert gas (TIG) welding;
- metal active gas (MAG) welding;
- metal inert gas (MIG) welding;
- plasma arc welding;
- plasma arc cutting;
- back shielding.

The purpose of this standard is to classify shielding gases in accordance to their chemical properties as a base for the approval of shielding gas and filler wire combinations.

Gas purities and mixing tolerances are also specified.

2 Properties of gases

The physical and chemical properties are listed in table 1.

3 Classification of shielding gases

Table 2 classifies into groups the various component/composition combinations of shielding gases according to their reaction behaviour.

The symbols used for classification groups are:

- R: reducing gas mixtures;
- I: inert gases and inert mixtures;
- M: oxidizing mixtures containing oxygen, carbon dioxide or both;
- C: highly oxidizing gas and highly oxidizing mixtures;
- F: unreactive gas or reducing gas mixtures.

Where components not listed in table 2 are added to one of these classifications it is designated as a special gas mixture and carries the prefix S. Details of the S designation are given in clause 4.