

**Alumiinium ja alumiiniumisulamid.  
Ümbersulatuseks, ligaturideks ja  
valanditeks kasutatavate legeerimata ja  
legeeritud alumiiiumist valukangide  
tähistus. Osa 2: Keemilistel sümbolitel  
põhinev tähistussüsteem**

Aluminium and aluminium alloys - Designation of  
unalloyed and alloyed aluminium ingots for  
remelting, master alloys and castings - Part 2:  
Chemical symbol based designation system

## EESTI STANDARDI EESSÖNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1780-2:2003 sisaldb Euroopa standardi EN 1780-2:2002 ingliskeelset teksti.	This Estonian standard EVS-EN 1780-2:2003 consists of the English text of the European standard EN 1780-2:2002.
Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

<b>Käsitlusala:</b> See Euroopa standardi EN 1780 osa määrab kindlaks legeerimata alumiiniumi, alumiiniumisulamite ja ligaturide tähistuskoodi, nagu on kindlaks määratud vastavates Euroopa standardites. Tegemist on kujutava koodiga, mis põhineb peamiselt keemilistel sümbolitel.	<b>Scope:</b>
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**ICS 77.150.10**

**Võtmesõnad:**

October 2002

ICS 77.150.10

Supersedes EN 1780-2 : 1996.

**English version**

Aluminium and aluminium alloys  
**Designation of alloyed aluminium ingots for  
remelting, master alloys and castings**  
Part 2: Chemical symbol based designation system

Aluminium et alliages d'aluminium –  
Système de désignation applicable  
aux lingots pour refusion en alumi-  
nium allié, aux alliages-mères et aux  
produits moulés – Partie 2: Système  
de désignation basé sur les symboles  
chimiques

Aluminium und Aluminiumlegie-  
rungen – Bezeichnung von legiertem  
Aluminium in Masseln, Vorlegierungen  
und Gussstücken – Teil 2: Bezeich-  
nungssystem mit chemischen  
Symbolen

This European Standard was approved by CEN on 2002-09-02.

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 stand-  
ards may be obtained on application to the Management Centre or to any CEN  
member.

The European Standards exist 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 Management Centre has  
the same status as the official versions.

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

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

This document (EN 1780-2:2002) has been prepared by Technical Committee CEN /TC 132, "Aluminium and aluminium alloys", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 1 "*Liquid metal, unalloyed and alloyed ingots*" to prepare the following standard :

**EN 1780-2, Aluminium and aluminium alloys – Designation of alloyed aluminium ingots for remelting, master alloys and castings – Part 2 : Chemical symbol based designation system.**

This document supersedes EN 1780-2:1996 "*Aluminium and aluminium alloys – Designation of unalloyed and alloyed aluminium ingots for remelting, master alloys and castings – Part 2 : Chemical symbol based designation system*".

In this revised edition, unalloyed aluminium ingots have been removed from the scope and provisions for unalloyed aluminium ingots have been deleted.

The provisions about the writing rules of unalloyed aluminium has been transferred into the revised version of EN 576.

This European Standard EN 1780, "*Aluminium and aluminium alloys – Designation of alloyed aluminium ingots for remelting, master alloys and castings*", comprises of the following parts:

- *Part 1 : Numerical designation system*
- *Part 2 : Chemical symbol based designation system*
- *Part 3 : Writing rules for chemical composition*

Annex A is normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a chemical symbol based designation system for aluminium alloys and master alloys as specified in the relevant European Standards. It applies to ingots for remelting and to castings.

A designation system for unalloyed aluminium is specified in EN 576.

An alternative numerical designation system is specified in EN 1780-1. Writing rules for chemical composition are specified in EN 1780-3.

## 2 Normative references

This European Standard 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 European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 575, *Aluminium and aluminium alloys – Master alloys produced by melting – Specifications*.

EN 1676, *Aluminium and aluminium alloys – Alloyed ingots for remelting – Specifications*.

EN 1706, *Aluminium and aluminium alloys – Castings – Chemical composition and mechanical properties*.

EN 1780-3:2002, *Aluminium and aluminium alloys – Designation of alloyed aluminium ingots for remelting, master alloys and castings – Part 3 : Writing rules for chemical composition*.

## 3 Basis of codification

The designation of aluminium alloys and master alloys shall be based on their chemical symbols, usually followed by numbers indicating the nominal content of the considered alloying element.

The chemical symbols used shall be those of the international nomenclature (see Annex A).

The numbers or figures indicating the nominal content of the alloying element in question shall be based on the chemical composition limits specified in clause 3 of EN 1780-3:2002.

Preferably all designations complying with this codification should be put within square brackets, following the five figure designation. If only the chemical symbol based designation is used, then it shall have the prefix EN, followed by a blank space, then the letter A representing aluminium and the letter B representing ingots for remelting, or the letter C representing castings, or the letter M representing master alloys.

This letter (B, C or M) shall be separated from the following designation by a hyphen.

EXAMPLE      EN AB-45400 [Al Si5Cu3] or EN AB-Al Si5Cu3

The designations currently in use and the corresponding chemical compositions limits are specified in EN 575, EN 1676 and EN 1706.

Assignments or revisions of designations shall be approved by Technical Committee CEN/TC 132.