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**Welding consumables - Test methods and quality requirements - Part 3:  
Conformity assessment of wire electrodes, wires and rods for welding of aluminium alloys**

Welding consumables - Test methods and quality requirements - Part 3: Conformity assessment of wire electrodes, wires and rods for welding of aluminium alloys

**EESTI STANDARDI EESSÖNA****NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 14532-3:2005 sisaldb Euroopa standardi EN 14532-3:2004 ingliskeelset teksti.	This Estonian standard EVS-EN 14532-3:2005 consists of the English text of the European standard EN 14532-3:2004.
Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 25.01.2005 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:**

This document describes the basic verification tests, the testing methods, the amount of testing and the requirements for the qualification of wire electrodes, wires and rods for welding of aluminium.

**Scope:**

This document describes the basic verification tests, the testing methods, the amount of testing and the requirements for the qualification of wire electrodes, wires and rods for welding of aluminium.

**ICS 25.160.20**

**Võtmesõnad:**

**EUROPEAN STANDARD**

**EN 14532-3**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

November 2004

ICS 25.160.20

English version

**Welding consumables - Test methods and quality requirements -  
Part 3: Conformity assessment of wire electrodes, wires and  
rods for welding of aluminium alloys**

Produits consommables pour le soudage - Méthodes d'essai et exigences de qualité - Partie 3: Evaluation de la conformité des fils électrodes, fils et baguettes pour le soudage des alliages d'aluminium

Schweißzusätze - Prüfverfahren und Qualitätsanforderungen - Teil 3: Konformitätsbewertung von Drahtelektoden, Drähte und Stäbe zum Schweißen von Aluminiumlegierungen

This European Standard was approved by CEN on 14 October 2004.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 14532-3:2004) has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN.

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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This document consists of the following parts:

EN 14532-1, *Welding consumables — Test methods and quality requirements — Part 1: Primary methods and conformity assessment of consumables for steel, nickel and nickel alloys*

EN 14532-2, *Welding consumables — Test methods and quality requirements — Part 2: Supplementary methods and conformity assessment of consumables for steel, nickel and nickel alloys*

EN 14532-3, *Welding consumables — Test methods and quality requirements — Part 3: Conformity assessment of wire electrodes, wires and rods for welding of aluminium alloys*

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

## Introduction

This document proposes harmonised verification test conditions for the qualification of welding consumables for aluminium. The responsibility to identify the extent of the tests to be carried out lies with the manufacturer/supplier on the basis of his assessment of the market requirements.

It should be noted that tests in accordance with this document are made in a way, which is not necessarily representative of a real welded structure.

The requirements for the qualification of welding consumable manufacturers, suppliers and distributors are given in EN 12074.

## 1 Scope

This document describes the basic verification tests, the testing methods, the amount of testing and the requirements for the qualification of wire electrodes, wires and rods for welding of aluminium.

NOTE Additional information is given in Annex I.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 439, *Welding consumables — Shielding gases for arc welding and cutting*

EN 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition*

EN 895, *Destructive tests on welds in metallic materials — Transverse tensile test*

EN 1011-4:2000, *Welding — Recommendations for welding of metallic materials — Part 4: Arc welding of aluminium and aluminium alloys*

EN 1320, *Destructive tests on welds in metallic materials — Fracture test*

EN 1321, *Destructive tests on welds in metallic materials — Macroscopic and microscopic examination of welds*

EN 1435, *Non-destructive examination of welds — Radiographic examination of welded joints*

EN 10204, *Metallic products — Type of inspection documents*

EN 14532-1:2004, *Welding consumables — Test methods and quality requirements — Part 1: Primary methods and conformity assessment of consumables for steel, nickel and nickel alloys*

EN 30042, *Arc-welded joints in aluminium and its weldable alloys — Guidance on quality levels for imperfections (ISO 10042:1992)*

EN ISO 544, *Welding consumables — Technical delivery conditions for welding filler metals — Type of product, dimensions, tolerances and markings (ISO 544:2003)*

EN ISO 6520-1, *Welding and allied processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding (ISO 6520-1:1998)*

EN ISO 6947, *Welds — Working positions — Definitions of angles of slope and rotation (ISO 6947:1993)*

EN ISO 18273, *Welding consumables — Wire electrodes, wires and rods for welding of aluminium and aluminium alloys — Classification (ISO 18273:2004)*

CR ISO 15608, *Welding — Guidelines for a metallic material grouping system (ISO/TR 15608:2000)*