## STN

# Zlievarenstvo Technické dodacie podmienky Časť 5: Doplnkové požiadavky na odliatky zo zliatin horčíka

STN EN 1559-5

42 1480

Founding - Technical conditions of delivery - Part 5: Additional requirements for magnesium alloy castings

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/17

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1559-5

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#### **English Version**

## Founding - Technical conditions of delivery - Part 5: Additional requirements for magnesium alloy castings

Fonderie - Conditions techniques de fourniture - Partie 5 : Spécifications complémentaires pour les pièces moulées en alliages de magnésium Gießereiwesen - Technische Lieferbedingungen - Teil 5: Zusätzliche Anforderungen an Gussstücke aus Magnesiumlegierungen

This European Standard was approved by CEN on 6 January 2017.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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Con	tents	Page
Europ	oean foreword	3
Introd	duction	4
1	Scope	5
2	Normative references	5
3	• Terms and definitions	5
4	Information to be supplied by the purchaser	6
5	Designations	6
6	Manufacture	
7	Requirements	7
8	Inspection	8
9	• Marking	9
10	Packaging and surface protection	
11	• Complaints	9
Annex	x A (informative) Significant technical changes between this European standard and the previous edition	

#### **European foreword**

This document (EN 1559-5:2017) has been prepared by Technical Committee CEN/TC 190 "Foundry Technology", 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1559-5:1997.

Within its programme of work, Technical Committee CEN/TC 190 requested CEN/TC 190/WG 9 "Cast Magnesium" to revise the following standard:

EN 1559-5:1997, Founding — Technical conditions of delivery — Part 5: Additional requirements for magnesium alloy castings

Annex A provides details of significant technical changes between this European Standard and the previous edition.

This standard is one of a series of European Standards for technical delivery conditions for castings. The other standards in this series are:

- EN 1559-1, Founding Technical conditions of delivery Part 1: General
- EN 1559-2, Founding Technical conditions of delivery Part 2: Additional requirements for steel castings
- EN 1559-3, Founding Technical conditions of delivery Part 3: Additional requirements for iron castings
- EN 1559-4, Founding Technical conditions of delivery Part 4: Additional requirements for aluminium alloy castings
- EN 1559-6, Founding Technical conditions of delivery Part 6: Additional requirements for zinc alloy castings

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

#### Introduction

CEN/TC 190 "Foundry Technology" has prepared material standards covering magnesium alloy castings.

In order to assist manufacturers and purchasers to prepare proper contractual arrangements and prevent misunderstanding, CEN/TC 190 approved the preparation of a series of standards covering technical delivery conditions. These have been prepared as separate parts.

This part of EN 1559 covers the additional technical delivery conditions for magnesium alloy castings, e.g. optional information, manufacturing process, additional requirements regarding the condition of the casting and test methods.

This part of EN 1559 cannot be used alone for compiling a specification for ordering and supplying magnesium alloy castings, but as a complement to EN 1559-1.

The clauses marked with a single dot ● indicate that the requirements of the same clauses of EN 1559-1 have to be met.

#### 1 Scope

This part of EN 1559 specifies the additional technical delivery conditions for castings (see EN 1753) and cast anodes (see EN 12438) made from magnesium alloys.

This part of EN 1559 applies to magnesium alloy castings produced in sand or permanent moulds or by pressure die casting, centrifugal casting, continuous casting or investment casting.

This part of EN 1559 does not apply to ingots, bars, billets (or other shapes) for further reprocessing, such as re-melting or extrusion.

#### 2 Normative references

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

EN 1370, Founding - Examination of surface condition

EN 1371-1, Founding - Liquid penetrant testing- Part 1: Sand, gravity die and low pressure die castings

EN 1371-2, Founding - Liquid penetrant testing - Part 2: Investment castings

EN 1559-1:2011, Founding - Technical conditions of delivery - Part 1: General

EN 1753, Magnesium and magnesium alloys - Magnesium alloy ingots and castings

EN 1754, Magnesium and magnesium alloys - Designation system for anodes, ingots and castings - Material symbols and material numbers

EN 12438, Magnesium and magnesium alloys - Magnesium alloys for cast anodes

prEN 12681-1, Founding - Radiographic testing - Part 1: Film techniques<sup>1</sup>

prEN 12681-2, Founding - Radiographic testing - Part 2: Techniques with digital detectors<sup>2</sup>

EN ISO 3452-1, Non-destructive testing - Penetrant testing - Part 1: General principles (ISO 3452-1)

EN ISO 5579, Non-destructive testing - Radiographic testing of metallic materials using film and X- or gamma rays - Basic rules (ISO 5579)

#### koniec náhľadu – text ďalej pokračuje v platenej verzii STN

<sup>&</sup>lt;sup>1</sup>) In development.

<sup>&</sup>lt;sup>2</sup>) In development.