ICS 77.120.10 TECHNICKÁ NORMALIZAČNÁ INFORMÁCIA September 2015

	Hliník a zliatiny hliníka - Mechanický potenciál zliatin Al-Si na vysokotlaké, nízkotlaké a gravitačné liatie.	**TNI CEN/TR 16748** 42 4252

Aluminium and aluminium alloys - Mechanical potential of Al-Si alloys for high pressure, low pressure and gravity die casting

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 16748:2014.
This Technical standard information includes the English version of CEN/TR 16748:2014.

Táto technická normalizačná informácia bola oznámená vo Vestníku ÚNMS SR č. 08/15

121334

TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CEN/TR 16748

December 2014

ICS 77.120.10

English Version

Aluminium and aluminium alloys - Mechanical potential of Al-Si alloys for high pressure, low pressure and gravity die casting

Aluminium et alliages d'aluminium - Potentiel mécanique des alliages Al-Si coulés sous pression et dans des moules permanents pour moulage par gravité et basse pression

Aluminium und Aluminiumlegierungen - Potential der mechanischen Eigenschaften von AlSi-Legierungen für Druckguss, Niederdruckguss und Schwerkraftkokillenguss

This Technical Report was approved by CEN on 9 September 2014. It has been drawn up by the Technical Committee CEN/TC 132.

CEN members are the national standards bodies of 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword

This document (CEN/TR 16748:2014) has been prepared by Technical Committee CEN/TC 132 “Aluminium and aluminium alloys”, the secretariat of which is held by AFNOR.

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

1 Scope

This Technical Report presents the characteristics of reference dies and reference castings, to be used for evaluating the mechanical potential (in terms of Ultimate Tensile Strength, Yield Strength and Elongation) which can be expected by Al-Si based alloys, cast by high pressure, low pressure and gravity (permanent mould) processes. These properties are measured on separately cast test specimens produced with state-of-the-art knowledge on die design, process management and alloy treatments correctly applied to minimize defects and imperfections.

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

EN 1559-4, *Founding - Technical conditions of delivery - Part 4: Additional requirements for aluminium alloy castings*

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

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

EN 12258-1:2012, *Aluminium and aluminium alloys - Terms and definitions - Part 1: General terms*

EN ISO 6892-1, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1)*