



NSAI
Standards

Irish Standard
I.S. EN 10049:2013

Measurement of roughness average Ra and peak count RPc on metallic flat products

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I.S. EN 10049:2013

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S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

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Údarás um Chaighdeáin Náisiúnta na hÉireann

English Version

Measurement of roughness average R_a and peak count RP_c on
metallic flat products

Mesure de la rugosité moyenne R_a et du nombre de pics
 RP_c sur les produits plats métalliques

Messung des arithmetischen Mittenrauwertes R_a und der
Spitzenzahl RP_c an metallischen Flacherzeugnissen

This European Standard was approved by CEN on 29 August 2013.

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.

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Foreword

This document (EN 10049:2013) has been prepared by Technical Committee ECISS/TC 109 “Flat products for cold working - Qualities, dimensions, tolerances and specific tests”, 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of an identical text or by endorsement, at the latest by May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.

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.

This document supersedes EN 10049:2005.

The whole document was technically revised.

The European Committee for Iron and Steel Standardization (ECISS) has given Technical Committee 109 (Secretariat France) the task to prepare a European Standard on the measuring of roughness as a revision of EN 10049:2005.

The reason for the existence of this European Standard is that general roughness measurement rules as described in ISO standards (see Clause 2) are not practical for metallic flat products for the following reasons:

- the practical use of EN ISO 4288 is not convenient for flat products, because the choice of the cut-off (λc) is dependent on the Ra to be measured; the product range is quite wide and the transition point for Ra is $2\text{ }\mu\text{m}$ in EN ISO 4288 (EN ISO stipulates a cut-off (λc) of $0,8\text{ mm}$ for $Ra < 2\text{ }\mu\text{m}$ and a cut-off (λc) of $2,5\text{ mm}$ for $Ra > 2\text{ }\mu\text{m}$);
- in the automotive industry, the use of a cut-off (λc) of $2,5\text{ mm}$ is based on requirements related to paint appearance.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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