

TNI	Meranie vlastností náteru neorientovaných ocelí pre elektrotechniku	TNI CEN/TR 17856 42 0235
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Measurement of the coating properties of non-oriented electrical steel

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 17856:2022.
This Technical standard information includes the English version of CEN/TR 17856:2022.

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TECHNICAL REPORT

CEN/TR 17856

RAPPORT TECHNIQUE

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English Version

Measurement of the coating properties of non-oriented electrical steel

Mesures des propriétés de vernis d'aciers électriques à grains non orientés

Bestimmung der Beschichtungseigenschaften bei nicht kornorientiertem Elektroband und -blech

This Technical Report was approved by CEN on 10 July 2022. It has been drawn up by the Technical Committee CEN/TC 459/SC 8.

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CEN/TR 17856:2022 (E)

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European foreword

This document (CEN/TR 17856:2022) has been prepared by Technical Committee CEN/TC 459 “ECISS - European Committee for Iron and Steel Standardization”¹, the secretariat of which is held by AFNOR.

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¹ Through its sub-committee CEN/TC 459/SC 8 “Steel sheet and strip for electrical applications” (secretariat: DIN).

CEN/TR 17856:2022 (E)**Introduction**

EN 10342 describes the electrical steel coating types. The electrical steels ordered according to standards EN 10106, EN 10265, EN 10303, EN 10341 are supplied either with or without such a coating.

The measurements necessary to qualify these coatings are based on different standards, which are not necessarily dedicated to electrical steel coatings. The lack of a clear description of which evaluation methods to use, with which calibration methods, sample preparation, etc. brings inconsistency in obtained measurement results. The purpose of this technical report is to overcome the problem of differences in coating qualification results, by combining the aspects of Non-Oriented Electrical Steel coating testing in a clear guideline.

In particular, the non-oriented fully processed electrical steels in high efficiency applications, such as electric traction, benefit from the clarifications that this technical report brings to the specific coating challenges, of such high power density machines.

1 Scope

This document describes the qualification methods, relevant for the non-oriented electrical steel coatings described in EN 10342. In particular, it describes the testing methods, sample preparation, calibration methods, that are necessary to obtain reliable results that can be considered a reference for quality evaluation.

This document applies only to the coatings of non-oriented electrical steels.

2 Normative references

There are no normative references in this document.

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