Technical Specification

ISO/TS 19392-6

Second edition
2026-02

Paints and varnishes — Coating systems for wind-turbine rotor blades —

Part 6: Determination and evaluation of ice adhesion using centrifuge

Peintures et vernis — Matériaux de revêtement pour pales de turbines éoliennes —

Partie 6: Détermination et évaluation de l'adhésion de la glace à l'aide d'une centrifugeuse

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Foreword

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO/TS 19392-6:2023), which has been technically revised.

The main changes are as follows:

— in Clause 1 a note has been added to give more information on the different methods for the determination of ice adhesion;

— ISO 2808 has been added as a normative reference;

— in 8.3, in the seventh paragraph, considerations on the presence of mould were added;

— in 8.4, Table 1, a header and a separate column for the units were inserted;

— in Clause 9, Formula (1), $\bar{\omega}$ was corrected to the angular momentum ω and the explanation of symbols was updated;

— in Annex A an introductory sentence was added;

— in Table A.1 a separate column for the units was inserted.

A list of all parts in the ISO 19392 series can be found on the ISO website.

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Introduction

Ice accretion on rotor blade surfaces of wind turbines can decrease the efficiency and limit the performance of wind turbines in cold, humid environments. Ice formation can also lead to damage of the rotor blade and can be hazardous, if ice falls off the blade. Icephobic coatings (“icephobics”) can be applied to rotor blade surfaces to reduce or prevent the adhesion of ice by removing ice prior to reaching a critical ice mass for the rotor blades. They can also increase the efficiency of thermal ice protection systems.