SLOVENSKI STANDARD
SIST-TS CEN ISO/TS 19392-2:2022

01-september-2022

Barve in laki - Premazni sistemi za lopatice rotorjev vetrnih turbin - 2. del: Ugotavljanje in vrednotenje odpornosti proti eroziji zaradi dežja z vrtečo roko (ISO/TS 19392-2:2018)

Paints and varnishes - Coating systems for wind-turbine rotor blades - Part 2: Determination and evaluation of resistance to rain erosion using rotating arm (ISO/TS 19392-2:2018)

Beschichtungsstoffe - Beschichtungssysteme für Rotorblätter von Windenergieanlagen - Teil 2: Bestimmung und Bewertung der Beständigkeit gegen Regenerosion mittels rotierendem Arm (ISO/TS 19392-2:2018)

Peintures et vernis - Matériaux de revêtement pour pales de turbines éoliennes - Partie 2: Détermination et évaluation de la résistance à l'érosion causée par la pluie au moyen d'un bras rotatif (ISO/TS 19392-2:2018)

Ta slovenski standard je istoveten z: **CEN ISO/TS 19392-2:2022**

ICS:

27.180	Vetrne elektrarne	Wind turbine energy systems
87.040	Barve in laki	Paints and varnishes

SIST-TS CEN ISO/TS 19392-2:2022 **en,fr,de**

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

CEN ISO/TS 19392-2

June 2022

ICS 87.040

English Version

Paints and varnishes - Coating systems for wind-turbine rotor blades - Part 2: Determination and evaluation of resistance to rain erosion using rotating arm (ISO/TS 19392-2:2018)

Peintures et vernis - Matériaux de revêtement pour pales de turbines éoliennes - Partie 2: Détermination et évaluation de la résistance à l'érosion causée par la pluie au moyen d'un bras rotatif (ISO/TS 19392-2:2018)

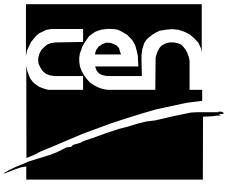
Beschichtungsstoffe - Beschichtungssysteme für Rotorblätter von Windenergieanlagen - Teil 2: Bestimmung und Bewertung der Beständigkeit gegen Regenerosion mittels rotierendem Arm (ISO/TS 19392-2:2018)

This Technical Specification (CEN/TS) was approved by CEN on 20 June 2022 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels

Ref. No. CEN ISO/TS 19392-2:2022 E

Contents

Page

European foreword

The text of ISO/TS 19392-2:2018 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as CEN ISO/TS 19392-2:2022 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO/TS 19392-2:2018 has been approved by CEN as CEN ISO/TS 19392-2:2022 without any modification.

TECHNICAL SPECIFICATION

ISO/TS 19392-2

First edition
2018-04

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

Part 2: Determination and evaluation of resistance to rain erosion using rotating arm

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

Partie 2: Détermination et évaluation de la résistance à l'érosion causée par la pluie au moyen d'un bras rotatif

Reference number
ISO/TS 19392-2:2018(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes.*

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

Introduction

In the wind energy industry, coatings are applied to rotor blades surface to protect the glass fibre reinforced polymer composite substrate. Rain drops and hailstones can damage these coatings in such a way that individual layers come off or the whole coating delaminates from the substrate.

ISO/TS 19392-1 describes the minimum requirements and weathering of the coating system. Rain erosion can be simulated by means of high speed water jets or water droplets impinging on the specimen surface. This document describes a method which simulates rain erosion by accelerating one or more coated panels, attached to the end of rotating arms, through a simulated rain field at a constant rotational velocity. ISO/TS 19392-3 describes a method where a water jet or a series of water jets at defined pressure hits the surface of the specimen.