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

**Part 1:  
Minimum requirements and  
weathering**

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

*Partie 1: Exigences minimales et érosion*

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## Foreword

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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](http://www.iso.org/directives)).

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

[ISO/TS 19392-1:2018](https://standards.iteh.ai/ISO/TS_19392-1:2018)

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## 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.

This document 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. ISO/TS 19392-2 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 a defined pressure hits the surface of the specimen.

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