

## საქართველოს სტანდარტი

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## Stationary electrostatic application equipment for ignitable flock material - Safety requirements

Matériel fixe de projection électrostatique de flock inflammable - Exigences de sécurité

Stationäre elektrostatische Flockanlagen für entzündbaren Flock - Sicherheitsanforderungen

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## Foreword

This document (EN 50223:2015) has been prepared by CLC/SC 31-8 "Electrostatic painting and finishing equipment" from CLC/TC 31 "Electrical apparatus for potentially explosive atmospheres".

This document supersedes EN 50223:2010.

The following dates are proposed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-04-13
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2018-04-13

The State of the Art is included in Annex ZY "Significant changes between this European Standard and EN 50223:2010".

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directives 94/9/EC and 2006/42/EC, see informative Annexes ZZA and ZZB, which are an integral part of this document.

## Introduction

In the process of electrostatic flock application, the flock is transported from a reservoir through an electrical field either by gravitational forces or an air stream or electrostatic forces. As the flock particles disperse due to the flock application device and/or the electric field, they are electrostatically charged by means of high voltage of some tens of kilovolts aligned and, in the form of a cloud, encased by and deposited on the grounded workpiece. They stick to those workpieces, which are covered with an adhesive layer. The adhesive is set at room temperature or by heating.

Flock particles not deposited on the workpiece (overspray) are upcast or removed by the exhaust ventilation system, by brushes or other devices into the flock recovery system.