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Steel structures — Structural bolting — Test method for determining the slip factor for faying surfaces of slip-resistant connections

Structures en acier — Boulonnerie de construction métallique — Méthode d'essai pour déterminer le coefficient de frottement des surfaces en contact pour les assemblages résistant au glissement

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Foreword

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This document was prepared by Technical Committee ISO/TC 167, *Steel and aluminium structures*.

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Introduction

This document has been prepared to provide provisions and guidance in the testing of slip-resistant connections made of steel for providing slip factors to be used in structural steelwork.

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Steel structures — Structural bolting — Test method for determining the slip factor for faying surfaces of slip-resistant connections

1 Scope

This document specifies a procedure to determine the slip factor of faying surfaces in slip-resistant (friction) connections to be used in structural steelwork.

The method is mainly applicable to uncoated and coated components made of steel with various surface treatments.

This document applies mainly to carbon steels but can be used for other type of steels as appropriate.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 17607-1, *Steel structures — Execution of structural steelwork — Part 1: General requirements and terms and definitions*

ISO 17607-3, *Steel structures — Execution of structural steelwork — Part 3: Fabrication*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17607-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Symbols

$F_{p,C}$ specified pretension of the bolts

F_{Si} individual slip load

F_{Sm} mean value of the slip load

n number of test specimens

s standard deviation s_{Fs} for the slip load from the first five specimens (ten values), expressed percentage of the mean slip load value

s_{Fs} standard deviation for the slip load

s_{μ} standard deviation for the slip factor

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