# DIN EN 13481-4:2007-06 (E)

## Railway applications - Track - Performance requirements for fastening systems - Part 4: Fastening systems for steel sleepers (includes Corrigendum AC:2004 + Amendment A1:2006)

## Contents

Page


Introduction ..... 4

1 Scope ..... 4

2 Normative references ..... 4

3 Terms and definitions ..... 5

4 Symbols ..... 5

5 Requirements ..... 5
5.1 Longitudinal rail restraint ..... 5
5.2 Torsional resistance ..... 5
5.3 Effect of repeated loading ..... 6
5.4 Electrical resistance ..... 8
5.5 Effect of exposure to severe environmental conditions ..... 8
5.6 Dimensions ..... 8
5.7 Effect of fastening system tolerances on track gauge ..... 8
5.8 Clamping force ..... 9
5.9 In-service testing ..... 9

6 Test specimens ..... 9

7 Classification ..... 9

8 Fitness for purpose ..... 9

9 Marking, labelling and packaging ..... 9

Annex A (normative) Effect of repeated loading - steel sleeper configuration ..... 10

A.1 Test arrangement ..... 10
A.2 Test report ..... 11

Bibliography ..... 12