

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 13452-2:2003



#### **National Foreword**

This European Standard EN 13452-2:2003 was adopted as Luxembourgish Standard ILNAS-EN 13452-2:2003.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

#### THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

### EUROPEAN STANDARD ILNAS-EN 13452-2:2003 **EN 13452-2**

# NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2003

ICS 45.060.01

#### **English version**

## Railway applications - Braking - Mass transit brake systems - Part 2: Methods of test

Applications ferroviaires - Freinage - Systèmes de freinage des transports publics urbains er suburbains - Partie 2: Méthodes d'essais Bahnanwendungen - Bremsen - Bremssysteme des öffentlichen Nahverkehrs - Teil 2: Prüfverfahren

This European Standard was approved by CEN on 27 December 2002.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

### **Contents**

		р	age
	Forewo	ord	3
	Introdu	ction	4
	1	Scope	5
	2	Normative references	_
	_		
	3	Terms and definitions	_
_	4	Test requirements	
3	4.1	General	
5	4.2	Type test requirements	
2	4.2.1 4.2.2	Static type tests	
ż	4.2.3	Holding brake - Type testing	
٦ ت	4.2.4	Parking brake - Type testing	
7	4.3	Routine test requirements	
2	4.3.1	General	
5	4.3.2	Static routine tests	10
Î	4.3.3	Dynamic routine tests	
<b>○</b>	4.3.4	Holding brake - Routine testing	
2	4.3.5	Parking brake - Routine testing	
2	4.4	Documentation	
4	4.4.1 4.4.2	General Test procedure	
3	4.4.2	Test report	
77.5	_	·	
1	5	Guidance on testing methods	13
#	Annex	A (informative) Brake testing	14
i	<b>A.</b> 1	Emergency/security/service brake testing	
4	A.2	Parking brake testing	
à	A.2.1	Holding test	
7	A.2.2	Push-through test	
=	A.3	Holding brake testing	
	A.4 A.5	Track testing under degraded adhesion conditions	
	Biblioa	raphy	17

#### **Foreword**

This document (EN 13452-2:2003) has been prepared by Technical Committee CEN/TC 256, "Railway applications", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

CEN/TC 256/SC3/WG 23 "Braking/Urban traffic" has been assisted with the preparation of this European Standard by CEN/TC 256/SC3/WG 25 "Braking/Terminology, calculations and acceptance procedures".

This series EN 13452 Railway applications – Braking – Mass transit brake systems consists of two parts:

- Part 1: Performance requirements
- Part 2: Methods of test.

With regard to clause 9 of EN 13452-1, which concerns Commuter/Regional trains, it should be noted that there might be border-line cases which may also come under the scope of CEN/TC 256/SC 3/WG 22 "Braking/Mainline railways".

Annex A is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

#### Introduction

The objective of this part of the European Standard is to provide the test requirements to enable compliance with EN 13452-1 to be demonstrated.

This European Standard covers the static and dynamic brake type and routine testing of completed units or trains but it does not cover the testing of components, equipment or individual vehicles.