



SLOVENSKI STANDARD

SIST EN 15827:2026

01-februar-2026

Nadomešča:
SIST EN 15827:2011

Železniške naprave - Sistemskotehnične zahteve za osnovne vozičke in tekalne sestave

Railway applications - System Engineering requirements for bogies and running gear

Bahnanwendungen - Anforderungen an das System Engineering für Drehgestelle und Fahrwerke

Applications ferroviaires - Exigences systèmes pour l'ingénierie des bogies et des organes de roulement

Ta slovenski standard je istoveten z: EN 15827:2025

<https://standards.iteh.ai/catalog/standards/sist/e4c818ee-134e-4d52-b75f-b937c33154df/sist-en-15827-2026>

ICS:

45.040	Materiali in deli za železniško tehniko	Materials and components for railway engineering
--------	---	--

SIST EN 15827:2026

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15827

December 2025

ICS 45.040

Supersedes EN 15827:2011

English Version

**Railway applications - System Engineering requirements
for bogies and running gear**

Applications ferroviaires - Exigences systèmes pour
l'ingénierie des bogies et des organes de roulement

Bahnanwendungen - Anforderungen an das System
Engineering für Drehgestelle und Fahrwerke

This European Standard was approved by CEN on 10 November 2025.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

SIST EN 15827:2026

<https://standards.iteh.ai/catalog/standards/sist/e4c818ee-134e-4d52-b75f-b937c33154df/sist-en-15827-2026>



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

European foreword	4
Introduction	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions	8
4 Engineering process.....	10
4.1 General.....	10
4.2 Process stages	10
4.3 Function development	11
4.4 Risk assessment.....	12
5 Requirements and interface management	12
5.1 General.....	12
5.2 Design operating envelope.....	13
5.2.1 Operating environment.....	13
5.2.2 Functional performance.....	14
5.2.3 Vehicle parameters	14
5.2.4 Design and validation requirements.....	14
5.2.5 Other standards	15
5.2.6 Maintenance and inspection inputs.....	15
5.3 Validated operating envelope	15
6 Structural design criteria.....	17
6.1 General.....	17
6.2 Loads.....	17
6.3 Requirements for structural integrity.....	17
7 Dynamic performance criteria.....	18
7.1 Introduction.....	18
7.2 Dynamic behaviour acceptance criteria	19
7.2.1 General	19
7.2.2 Safety against derailment at low speed	19
7.2.3 Running dynamic behaviour	19
7.2.4 Vibration dose and noise levels.....	19
7.2.5 Gauging.....	20
7.3 Ride characteristics and ride comfort.....	20
7.4 Component dynamic performance requirements.....	20
8 Validation of the design	20
8.1 Validation plan.....	20
8.2 Use of existing validation records.....	22

8.3	Use of satisfactory service experience	22
8.4	Use of operational data in validation strategy	22
8.5	Structural integrity validation	22
8.6	Dynamic performance validation	23
9	Quality plan	23
10	Maintenance plan.....	24
10.1	General.....	24
10.2	Input data.....	24
10.3	Qualification of tools and equipment	24
10.4	Skills and knowledge of maintenance staff	24
10.5	Update of the maintenance plan.....	24
10.6	Maintenance quality plan.....	24
Annex A (informative)	Component related standards	25
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive (EU) 2016/797 aimed to be covered.....	26
Bibliography		29

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

SIST EN 15827:2026

<https://standards.iteh.ai/catalog/standards/sist/e4c818ee-134e-4d52-b75f-b937c33154df/sist-en-15827-2026>