
Železniške naprave - Infrastruktura - Vlečni stroji, priklopni vagoni in spremljajoča oprema - 2. del: Splošne varnostne zahteve

Railway applications - Infrastructure - Demountable machines, trailers and associated equipment - Part 2: General safety requirements

Bahnanwendungen - Infrastruktur - Ausgleisbare Maschinen, Anhänger und zugehörige Ausstattung - Teil 2: Allgemeine Sicherheitsanforderungen

Applications ferroviaires - Infrastructure - Machines dérailables, remorques et éléments associés - Partie 2 : Prescriptions générales pour la sécurité

Ta slovenski standard je istoveten z: EN 15955-2:2025

SIST EN 15955-2:2025

<https://standards.sist.net/catalog/standards/sist/96383ad1-6d8c-462a-bc82-2b7626c17938/sist-en-15955-2-2025>

ICS:

45.060.20	Železniški vagoni	Trailing stock
45.120	Oprema za gradnjo in vzdrževanje železnic oz. žičnic	Equipment for railway/cableway construction and maintenance

SIST EN 15955-2:2025

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15955-2

May 2025

ICS 45.060.20; 45.120

Supersedes EN 15954-2:2013, EN 15955-2:2013

English Version

**Railway applications - Infrastructure - Demountable
machines, trailers and associated equipment - Part 2:
General safety requirements**

Applications ferroviaires - Infrastructure - Machines
déraillables, remorques et éléments associés - Partie 2 :
Prescriptions générales pour la sécurité

Bahnanwendungen - Infrastruktur - Ausgleisbare
Maschinen, Anhänger und zugehörige Ausstattung -Teil
2: Allgemeine Sicherheitsanforderungen

This European Standard was approved by CEN on 7 March 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 15955-2:2025](https://standards.itech.ai/catalog/standards/sist/9b583ad4-6d6e-462a-ac82-2b9628cff938/sist-en-15955-2-2025)

<https://standards.itech.ai/catalog/standards/sist/9b583ad4-6d6e-462a-ac82-2b9628cff938/sist-en-15955-2-2025>



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	Page
European foreword	7
Introduction	9
1 Scope.....	11
2 Normative references.....	12
3 Terms and definitions	18
4 Hazards and categories.....	21
4.1 List of significant hazards	21
4.2 Examples of demountable machines and trailers.....	21
4.3 Attachments with rail wheels.....	21
5 Safety requirements and/or measures.....	22
5.1 General.....	22
5.2 Ergonomics.....	22
5.3 Machine profile.....	22
5.4 Machine mass	22
5.5 Protection from the risks of lasers	22
5.6 Safety against derailment	23
5.6.1 General.....	23
5.6.2 Safety against derailment for machines with a maximum travelling speed of $v > 60$ km/h.....	23
5.6.3 Safety against derailment for machines with a maximum travelling speed of $v \leq 60$ km/h.....	23
5.6.4 Safety against derailment for machines in working mode with an admissible speed $v \leq 60$ km/h.....	25
5.6.5 Dynamic tests on track for all machines.....	25
5.6.6 Railhead clearing devices	26
5.7 Stability and prevention of overturning.....	26
5.7.1 General.....	26
5.7.2 Stationary stability.....	26
5.7.3 Proof of stability when moving along the track in working mode.....	28
5.7.4 Load moment control and display device	30
5.7.5 Roll over protective structure (ROPS)	32
5.8 Machine frame and structure	32
5.8.1 Design of the machine frame for machines with a maximum speed $v > 30$ km/h.....	32
5.8.2 Design of the machine frame for machines with a maximum speed $v \leq 30$ km/h.....	33
5.8.3 Lifting and jacking points.....	33
5.9 Inter-machine couplings	33
5.10 Rail gear	33
5.11 Rail wheel suspension.....	34
5.12 Braking	34
5.12.1 General.....	34
5.12.2 Holding on gradients	35
5.12.3 Remote application of brakes	35
5.13 Driving and working cabs	36
5.13.1 Requirement to fit cab	36
5.13.2 Emergency exit	36

5.13.3	Visibility from driving position	36
5.13.4	Minimum dimensions in cabs	38
5.13.5	Cab floors	38
5.13.6	Protection from dust	38
5.13.7	Climatic conditions in cab	39
5.13.8	Windows	39
5.13.9	Storage for operating instructions	40
5.13.10	Falling object protection structures (FOPS)	40
5.13.11	Noise	41
5.14	Access and egress to and from working places	41
5.14.1	Cabs	41
5.14.2	Working places, places for control and maintenance outside of cabs	41
5.14.3	Working platforms and walkways on the machine	42
5.15	Seats	42
5.15.1	Operator's seat	42
5.15.2	Additional seats	42
5.15.3	Seat belts	42
5.16	Standing places	42
5.16.1	General	42
5.16.2	Risk of falling	42
5.17	Edges and corners	43
5.18	Pressurized systems	43
5.19	Controls	43
5.19.1	General requirement	43
5.19.2	Starting/stopping system	44
5.19.3	Inadvertent activation	44
5.19.4	Pedals	44
5.19.5	Protection against uncontrolled motion in working mode	45
5.19.6	Control panels and indicators	45
5.19.7	Remote controls	45
5.19.8	Movement controls	46
5.19.9	Movement controls in travelling mode	46
5.20	Visibility of the machine	46
5.21	Warning systems	46
5.22	Electrical system	46
5.22.1	Electrical equipment	46
5.22.2	Disconnection devices	46
5.22.3	Protection devices	46
5.22.4	Conductors, cables and wiring practices	47
5.22.5	Batteries	47
5.22.6	Overhead contact line system	47
5.22.7	Equipotential bonding	48
5.22.8	Antennas	49
5.22.9	Pantograph	49
5.23	Electromagnetic compatibility (Immunity of machines from railway environment)	49
5.24	Safety related control systems	50
5.24.1	Specific control systems	50
5.24.2	Software	50

EN 15955-2:2025 (E)

5.25	Noise reduction.....	50
5.26	Failure recovery	51
5.27	Vibration	51
5.28	Setting up and packing away	52
5.29	Mobile elevating work platform (MEWP)	52
5.30	Moveable machine components	52
5.31	Emergency stopping devices.....	52
5.31.1	Emergency stopping devices for movement of the machine and working equipment	52
5.31.2	Action of emergency stopping devices	53
5.32	Moving parts and materials	53
5.33	Thermal hazards	54
5.34	Emission of gas and particles	54
5.35	Fuel tanks and hydraulic tanks.....	54
5.36	Safe handling	55
5.37	Environmental temperature conditions	55
5.38	Protection from the risks of fire	55
5.38.1	Material requirements.....	55
5.38.2	Fire detection devices	55
5.38.3	Self-rescue devices	56
5.38.4	Fire fighting equipment.....	56
5.38.5	Fire extinguishing devices.....	56
5.38.6	Built in fire extinguishing system	56
5.39	Lighting.....	56
5.39.1	Lighting general.....	56
5.39.2	Lighting inside the machine.....	57
5.39.3	Lighting for working places/areas beside the machine.....	57
5.40	Movement Limiting Devices.....	58
5.40.1	General.....	58
5.40.2	Design of movement limiting devices.....	58
5.40.3	High performance movement limiting device.....	58
5.40.4	Movement limiting devices – manually overriding the limit	59
5.40.5	Lateral limiting devices	59
5.40.6	Height limiting device	59
5.41	Machines with more than one moveable component.....	60
5.42	Substances hazardous to health	60
5.42.1	Storage	60
5.42.2	Use	60
5.42.3	Cleaning.....	61
5.43	Maintenance	61
5.43.1	General.....	61
5.43.2	Support devices	62
5.43.3	Unauthorized access to the engine compartment.....	62
5.44	Attachments.....	62
5.44.1	Requirement for machine.....	62
5.44.2	General attachments for raising and lowering personnel	62
5.44.3	Attachments with rail guidance wheels.....	62
5.44.4	Requirements for attachments	62
6	Additional safety requirements or measures for specific machine functions.....	63

6.1	Conveyors	63
6.2	Cranes and lifting devices fixed on the machine	63
6.3	Transport of loads by machines used for lifting.....	64
6.4	Rail profiling machines (grinding, milling or planing)	64
7	Marking of the machine.....	64
7.1	Warning signs and pictograms	64
7.2	Identification plate.....	64
7.3	Warning signs and written warnings	64
7.4	Marking	65
8	Documentation	66
8.1	General	66
8.2	Technical description.....	66
8.3	Instructions for use.....	67
8.4	Restrictions of use	67
8.5	Instructions for maintenance.....	68
9	Verification of the conformity to the requirements and/or particular safety measures	68
9.1	General	68
9.2	Methods of examination.....	69
9.2.1	General	69
9.2.2	Visual check	69
9.2.3	Measurement	69
9.2.4	Functional test	69
9.2.5	Load test(s)	69
9.2.6	Specific verification and other controls	69
	Annex A (normative) List of significant hazards	70
	Annex B (normative) Checklist for conformity	74
	Annex C (normative) Noise test code (grade of accuracy 2).....	81
C.1	General	81
C.2	Definitions.....	81
C.3	Determination of the emission sound pressure level at the working place and other specified positions.....	81
C.4	Determination of sound power level.....	82
C.5	Installation and mounting conditions.....	83
C.6	Working conditions	83
C.7	Measurement uncertainties.....	84
C.8	Information to be recorded	85
C.9	Information to be reported	85
C.10	Declaration and verification of noise emission values	86
	Annex D (normative) Vibration test code	88
D.1	General	88
D.2	Measurement and degree of uncertainty (K) of whole body vibration (WBV)	88
D.2.1	General	88
D.2.2	WBV Vibration measurement	88
D.2.3	Reporting whole body vibration data	88
D.3	Measurement and degree of uncertainty (K) of hand arm vibration (HAV)	89
D.3.1	General	89
D.3.2	HAV Vibration measurement	89
D.3.3	Reporting hand arm vibration data	89