

Product group classification

InnoTrans 2024

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Railway Technology					
1.	Railbound vehicles for public and freight transport	3.2.11	Electromechanical components	3.3.8	Exterior claddings
1.1	<u>Public transport rail cars</u>	3.2.12	Energy storage	3.3.9	Rail hydraulic systems
1.1.1	Local and regional public transport rail cars	3.2.13	Energy supply systems	3.3.10	Subassembly supports
1.1.2	Long distance public transport rail cars	3.2.14	Energy meter	3.3.11	Fastening systems
1.1.3	Motor units and motor coaches	3.2.15	Earthing contacts	3.3.12	Lighting systems
1.2	<u>Freight cars</u>	3.2.16	Driver panels	3.3.13	Ventilation systems
1.2.1	Covered wagons	3.2.17	Master controller	3.3.14	Brake linings
1.2.2	Loading units	3.2.18	Vehicle control system	3.3.15	Brake pads
1.2.3	Flat wagons	3.2.19	Field bus components	3.3.16	Brake disks
1.2.4	Self-discharging wagons	3.2.20	Floodlight keyboards	3.3.17	Braking systems
1.2.5	Other standard-type rail cars	3.2.21	Filling level measuring technology	3.3.18	Front fairings
1.2.6	Special-purpose rail cars	3.2.22	Handheld lamps	3.3.19	Gaskets
1.2.7	Tank wagons	3.2.23	Inductive Components	3.3.20	Bogies
1.3	<u>Locomotives</u>	3.2.24	Cables and lines	3.3.21	Bogie pivot centre plates
1.4	<u>Magnetic levitation trains</u>	3.2.25	Cable protection	3.3.22	Compressed air technology
1.5	<u>Narrow-gauge railway vehicles</u>	3.2.26	Cassettes	3.3.23	Thrust collars for tramway bogies
1.6	<u>Special-purpose cars</u>	3.2.27	Battery chargers	3.3.24	Rail tyres
1.7	<u>Rack railway-train</u>	3.2.28	Charging rectifiers	3.3.25	Passenger counting systems
1.8	<u>Other</u>	3.2.29	Power switches and switchgear	3.3.26	Vehicle cabins
2.	Intermodal transport vehicles	3.2.30	Circuit boards	3.3.27	Springs / Spring systems
2.1	<u>Other</u>	3.2.31	Control systems	3.3.28	Radio remote control systems
3.	Subassemblies and components	3.2.32	Tilting systems	3.3.29	Clevis guides
3.1	<u>Driving gear</u>	3.2.33	Registration and display systems	3.3.30	Casing systems
3.1.1	Exhaust gas silencer	3.2.34	Series terminals	3.3.31	Articulations
3.1.2	Driving systems and electronics	3.2.35	Relays	3.3.32	Rocker bearings
3.1.3	Traction motors	3.2.36	Switching gear	3.3.33	Joint rod sockets
3.1.4	Vehicle lubrication	3.2.37	Switches	3.3.34	Cardan shafts
3.1.5	Generators	3.2.38	Metal contacts	3.3.35	Friction bearings
3.1.6	Transmissions	3.2.39	Switch cabinets and accessories	3.3.36	Cast metal wheels
3.1.7	Hydraulic drive systems for railway vehicles	3.2.40	Fuses and accessories	3.3.37	Integrated subassemblies
3.1.8	Motors / Engines	3.2.41	Special-purpose electric machines	3.3.38	Air ducts
3.1.9	Traction motor ventilation	3.2.42	Connectors	3.3.39	Carbon brushes
3.1.10	Traction motor housing	3.2.43	Control components	3.3.40	Carbon strips
3.1.11	Traction motor preheaters	3.2.44	Control cubicles	3.3.41	Compressors
3.1.12	Motor oil refilling systems	3.2.45	Current collectors	3.3.42	Capacitors
3.1.13	Pneumatic material	3.2.46	Power generating sets	3.3.43	Ball bearings
3.1.14	Wheelset gear sets	3.2.47	Current transformers	3.3.44	Cooling systems
3.1.15	Lubricating systems	3.2.48	Traction current converters & control systems	3.3.45	Couplers
3.1.16	System technology	3.2.49	Transformers	3.3.46	Couplings
3.2	<u>Energy / Electrotechnology</u>	3.2.50	Pantographs	3.3.47	Coupling adaptors
3.2.1	Automation technology	3.2.51	Overvoltage safety systems	3.3.48	Bearing housings
3.2.2	Battery holders	3.2.52	Inverters	3.3.49	Profiles for lighting sittings
3.2.3	Batteries	3.2.53	Interconnection systems	3.3.50	Air filter
3.2.4	Battery isolators	3.2.54	Converters	3.3.51	Tilting technology
3.2.5	Ventilation / evacuation systems	3.2.55	Resistances	3.3.52	Impact protection modules
3.2.6	Operating and control panels	3.3	<u>Vehicle components and -systems</u>	3.3.53	Sections
3.2.7	DC / DC converters	3.3.1	Exhaust filtering systems	3.3.54	Buffer
3.2.8	Diagnosing equipment	3.3.2	Exhaust silencer	3.3.55	Radar technology
3.2.9	Compressed air supply	3.3.3	Axle guard sidebearer liners	3.3.56	Wheelsets
3.2.10	Pressure measuring equipment	3.3.4	Axle guard sidebearer guides	3.3.57	Wheelset pumps
		3.3.5	Acoustic systems	3.3.58	Friction pads for railway vehicles
		3.3.6	Armature	3.3.59	Rescue tools
		3.3.7	Exterior parts	3.3.60	Sooty particle filters
				3.3.61	Rail brakes
				3.3.62	Hoses
				3.3.63	Locks and fittings

3.3.64 Welded assemblies, underfloor-components

3.3.65 Vibration absorbers

3.3.66 Sensors

3.3.67 Self-locking nuts

3.3.68 Special sections for rail car construction

3.3.69 Wheel flange lubrication systems

3.3.70 Shock absorbers

3.3.71 Flexible shunt assemblies

3.3.72 Testing systems

3.3.73 Thermocouples

3.3.74 Gangway installations

3.3.75 Valves

3.3.76 Connection systems

3.3.77 Wiring systems

3.3.78 Locking technology and systems

3.3.79 Haunch, air ducts and flow sections

3.3.80 Car bodies

3.3.81 Antifriction bearings

3.3.82 Resistance thermometers

3.3.83 Push / Pull devices

3.3.84 Coupler carriers

3.4 Materials

3.4.1 Bent components in aluminium / steel

3.4.2 Insulating materials

3.4.3 Sealing materials

3.4.4 Flat products

3.4.5 Rubber articles

3.4.6 Rubber-metal connections

3.4.7 Cast parts

3.4.8 Insulation materials

3.4.9 Adhesives

3.4.10 Structural foams

3.4.11 Plastics

3.4.12 Coating

3.4.13 Sound insulation materials

3.4.14 Melamine resin foam

3.4.15 Upholstery materials

3.4.16 Foams

3.4.17 Lubricants

3.4.18 Protective films

3.4.19 Special light-weight insulating materials

3.4.20 Steel products

3.4.21 Composite materials

3.4.22 Water varnish

3.4.23 Materials for lightweight and sandwich construction

3.5 Other

4. Service for vehicles

4.1 Maintenance

4.1.1 Exhaust systems

4.1.2 Re-railing equipment and systems

4.1.3 Sand filling systems

4.1.4 Bogie testing plants

4.1.5 Corner force measuring equipment

4.1.6 Disposal systems

4.1.7 Replacement parts

4.1.8 Lifting devices for tracked vehicles

4.1.9 Inspection devices and systems

4.1.10 Maintenance systems

4.1.11 Varnishing devices

4.1.12 Measuring equipment and systems

4.1.13 Wheel force measurement systems

4.1.14 Wheelset treatment

4.1.15 Wheelset diagnostic systems

4.1.16 Category of maintenance

4.1.17 Foils / films

4.1.18 Testing devices and systems

4.1.19 Maintenance machines

4.1.20 Workshop equipment

4.2 Cleaning

4.2.1 Vehicle washing systems

4.2.2 Surface treatment

4.2.3 Cleaning equipment / technology

4.2.4 Special cleaning services

4.2.5 Waste-water-treatment

4.3 Refurbishment

4.3.1 Expertises

4.3.2 Restoration

4.3.3 Damage repair and management

4.4 Services

4.4.1 Railway application testing

4.4.2 Design

4.4.3 Commissioning

4.4.4 Engineering services

4.4.5 Maintenance management systems

4.4.6 Marking

4.4.7 Systems analysis

4.4.8 Transport of railway vehicles

4.4.9 Workshop services

4.5 Other

Interiors

5. Interiors

5.1 Vehicle equipment

5.1.1 Handicapped accessible equipment

5.1.2 Floor coverings

5.1.3 Window systems

5.1.4 Driver consoles

5.1.5 Luggage racks

5.1.6 Stay bars

5.1.7 Hand-held lamps

5.1.8 Interior furnishings

5.1.9 Lamps

5.1.10 Upholstery systems

5.1.11 Roller blind systems

5.1.12 Seats and seating systems

5.1.13 Sanitary equipment

5.1.14 Sanitary cubicles

5.1.15 Textiles

5.1.16 Glazing systems

5.2 Finishings / Information / Air conditioning / Security

5.2.1 Anti-pinch systems

5.2.2 Fire protection isolation

5.2.3 Flooring systems

5.2.4 Fans for railway components

5.2.5 Heating systems

5.2.6 Information- and advertising systems

5.2.7 Interior design systems

5.2.8 Interior lining

5.2.9 Installation equipment

5.2.10 Cabin air ventilation / -climatisation

5.2.11 Air-conditioning systems

5.2.12 Emergency systems

5.2.13 Sanitary systems

5.2.14 Door furniture

5.2.15 Door opener push buttons

5.2.16 Door controls

5.2.17 Door systems

5.2.18 Surveillance systems

5.2.19 Detrainment systems

5.3 Travel Catering & Comfort Services

5.3.1 Station catering

5.3.2 Accessories / Amenities

5.3.3 Catering service provider

5.3.4 Beverages

5.3.5 Hygiene

5.3.6 Kitchen equipment

5.3.7 Refrigeration and counter systems

5.3.8 Food

5.3.9 Trolleys

5.3.10 Service equipment

5.3.11 Food dispensing

5.3.12 Food / Beverage vending machines

Railway Infrastructure

6. Infrastructure / Railway Construction

6.1 Construction work

6.1.1 Electrical power systems

6.1.2 Overhead contact line

6.1.3 Building construction

6.1.4 Civil engineering and construction

6.1.5 Maintenance

6.1.6 Control and signalling technology

6.1.7 Superstructures

6.1.8 Permanent way welding technology

6.1.9 Specialised civil engineering

7.2.21	Clock systems		<u>technology</u>	10.1.2	Industrial parks
7.2.22	Shelters	8.3.1	Sensors	10.1.3	Freight traffic companies
7.2.23	Path control systems	8.4	<u>Communication systems</u>	10.1.4	Freight traffic centres
7.2.24	Advertisement systems	8.4.1	Digital radio systems	10.1.5	Passenger transport companies
7.2.25	Weather protection	8.4.2	Interphone systems	10.1.6	Technology and incubation units
7.3	<u>Passenger information systems</u>	8.4.3	Internet systems	10.1.7	Associations
7.3.1	Display-cases	8.4.4	Mounting systems for train radio equipment	10.1.8	Organisations
7.3.2	GPS-controlled time displays	8.4.5	Train radio systems	10.1.9	Joint transport authorities
7.3.3	Infotainment systems	8.5	<u>Management systems</u>	10.1.10	Publishing houses
7.3.4	Interactive Voice Response Systems (IVR)	8.5.1	Plant management systems	10.1.11	Business development
7.3.5	LED displays	8.5.2	Depot management	10.1.12	Science, research and development
7.3.6	Plasma displays	8.5.3	Facility management	10.1.13	Railway infrastructure companies
7.3.7	Coach controllers	8.5.4	Infrastructure management systems	10.2	<u>Services in the transport industry</u>
7.3.8	Seat reservation systems	8.5.5	Lean production	10.2.1	Health and safety
7.3.9	System controllers	8.6	<u>Operation - Rail systems</u>	10.2.2	Recruitment agency
7.3.10	TFT flat panel displays	8.7	<u>Location and navigation systems</u>	10.2.3	Services shop floor level
7.3.11	TFT-LCD displays	8.8	<u>Planning systems</u>	10.2.4	Documentation
7.4	<u>Ticket management</u>	8.8.1	Time-table planning	10.2.5	Passenger survey
7.4.1	Settlement systems	8.8.2	Vehicle deployment	10.2.6	Financial services
7.4.2	Board computer	8.8.3	Optimisation	10.2.7	Education and training
7.4.3	Chip cards	8.8.4	Personnel- and service planning	10.2.8	Risk protection
7.4.4	Revenue management	8.8.5	Resource planning (personnel, wagons, locomotives)	10.2.9	Trade
7.4.5	Electronic payment systems	8.8.6	Roster planning	10.2.10	Engineering services
7.4.6	Ticket defacing	8.9	<u>Safety and control engineering</u>	10.2.11	Leasing
7.4.7	Ticket issuing	8.9.1	Passenger alarm systems	10.2.12	Marketing
7.4.8	Mobile ticketing	8.9.2	Computer-assisted operations control system	10.2.13	Testing services
7.4.9	RFID media	8.9.3	Video surveillance systems (CCTV)	10.2.14	Recycling
7.4.10	Rate management	8.10	<u>Software / Software development</u>	10.2.15	Expert services
7.4.11	Access systems	8.10.1	Computer-based training programme	10.2.16	Insurances
7.5	<u>Parking area management</u>	8.10.2	E-Procurement	10.2.17	Certification
7.5.1	Parking permits	8.10.3	Analyses and calculations relating to the dynamics of vehicle movement	10.3	<u>Analysis / Consulting / Development / Planning</u>
7.6	<u>Cleaning / Waste Disposal</u>	8.10.4	Software for project management	10.3.1	Execution planning
7.6.1	Services	8.11	<u>Traffic Management</u>	10.3.2	Consultancy
7.6.2	Cleaning and waste disposal equipment	8.11.1	Traffic data determination	10.3.3	Design
7.6.3	Washing and toilet facilities	8.11.2	Traffic information systems	10.3.4	Engineering
7.7	<u>Safety and control</u>	8.11.3	Traffic engineering	10.3.5	Complete solution for planning and design
7.7.1	Security	8.11.4	Traffic control systems	10.3.6	Noise and vibration reduction
7.7.2	Fire detection systems	8.12	<u>Other</u>	10.3.7	Studies, conceptual and system planning
7.7.3	Fire protection systems	9.	<u>Freight traffic logistics</u>	10.3.8	Project planning
7.7.4	Fire extinguishing systems	9.1	<u>Fleet management systems</u>	10.3.9	Simulation / Calculation of power networks
7.7.5	Supervising services	9.2	<u>Hazardous cargo transports</u>	10.3.10	Systemanalysis / -development
7.7.6	Safety engineering	9.3	<u>Identification systems</u>	10.4	<u>Realisation / Project-Management</u>
7.7.7	Monitoring systems	9.4	<u>Combined transport</u>	10.4.1	Electric project management
7.8	<u>Clothing / Workwear</u>	9.5	<u>RFID tracking</u>	10.4.2	Contract and claims-, project and construction management
7.8.1	Headgear	9.6	<u>Shipment tracking systems</u>	10.5	<u>Other</u>
7.8.2	Shoes	9.7	<u>Loading / Unloading systems and organisation</u>	10.6	<u>Mobility+</u>
7.8.3	Protective clothing	9.8	<u>Interchangeable containers, changing systems</u>	10.6.1	Autonomous driving
7.8.4	Textiles	9.9	<u>Swap bodies, systems</u>	10.6.2	Bike sharing
7.9	<u>Other</u>	9.10	<u>Other</u>	10.6.3	Car sharing
8.	<u>Transport IT Transport management / Data processing / Information / Communication</u>	10.	<u>Services</u>	10.6.4	Chauffeur-Service
8.1	<u>E-Business</u>	10.1	<u>Institutions / Media / Transport companies</u>	10.6.5	Digital mobility platforms
8.2	<u>Information technology / quality assurance systems</u>	10.1.1	Authorities	10.6.6	First/last mile
8.2.1	Testing and analysis systems			10.6.7	E-Scooter sharing
8.2.2	Real-time statistics			10.6.8	Car rental
8.2.3	Journey analysis systems			10.6.9	Mobility apps
8.2.4	Geo information systems			10.6.10	Ridepooling
8.2.5	Efficiency control			10.6.11	Rideselling
8.3	<u>Components for information</u>				

- 10.6.12 Ridesharing
- 10.6.13 Taxiservices
- 10.6.14 Vertical Take-Off and Landing VTOL
- 10.6.15 Other
- 10.7 Artificial Intelligence Mobility**
- 10.7.1 Vehicle control / automation and safety
- 10.7.2 Infrastructure monitoring and maintenance
- 10.7.3 Data analysis / acquisition and prediction / real-time data analysis
- 10.7.4 Data protection
- 10.7.5 Passenger management / customer service
- 10.7.6 Speech recognition / voice assistance / chatbots
- 10.7.7 Cyber security / encrypted communication
- 10.7.8 Consulting
- 10.7.9 Robotics

Tunnel Construction

11. Tunnel Construction

11.1 Construction machines, -parts and components

- 11.1.1 Equipment for removing excavated material
- 11.1.2 Power plant
- 11.1.3 Rock-crushing equipment
- 11.1.4 Building site equipment
- 11.1.5 Drilling platforms, supports and accessories
- 11.1.6 Hammer drill
- 11.1.7 Drilling steels and rock drilling bits
- 11.1.8 Drilling derricks
- 11.1.9 Moisture separators
- 11.1.10 Conveyor belt and -systems
- 11.1.11 Geotechnical instruments
- 11.1.12 Track transport and carrying devices
- 11.1.13 Pick wheels
- 11.1.14 Hydraulic excavators & breakers
- 11.1.15 Injection devices and accessories
- 11.1.16 Injection packer and accessories
- 11.1.17 Injection hose systems
- 11.1.18 Cables and accessories
- 11.1.19 Compressors and pneumatical tools
- 11.1.20 Cranes / Lifting equipment
- 11.1.21 Machines and systems for track construction
- 11.1.22 Microtunnelling and trenchless headings
- 11.1.23 Piling equipment / systems
- 11.1.24 Pumps
- 11.1.25 Shaft boring devices
- 11.1.26 Lining and scaffolding
- 11.1.27 Excavating machines for slurry trenches
- 11.1.28 Probe / diamond core cutters
- 11.1.29 Rail-head equipment / drilling jibs
- 11.1.30 Transport- and feed systems

- 11.1.31 Tunnel boring machines
- 11.1.32 Full face TBMs
- 11.1.33 Grouting, pouring and injection machines
- 11.1.34 Heading shields
- 11.1.35 Capstans
- 11.1.36 Crushing machines
- 11.1.37 Access equipment
- 11.2 Finishing**
- 11.2.1 Support devices / support arches / steel supports / lattice girders
- 11.2.2 Compensating plate
- 11.2.3 Building industry
- 11.2.4 Fastening systems
- 11.2.5 Lighting systems
- 11.2.6 Concrete vibrators
- 11.2.7 Ground freezing
- 11.2.8 Ground stabilisation
- 11.2.9 Improvement of land
- 11.2.10 Electrification
- 11.2.11 Electrotechnology
- 11.2.12 Dedusting systems
- 11.2.13 Drainage and pump systems
- 11.2.14 Rock bolts / anchors
- 11.2.15 Gas-extraction equipment / systems
- 11.2.16 Impregnate / Sealing of facing
- 11.2.17 Air conditioning / ventilation
- 11.2.18 Air conduction systems
- 11.2.19 Air cleaning / waste-air disposal
- 11.2.20 Technical engineering and terotechnology
- 11.2.21 Relining
- 11.2.22 Pipes and pipe connections
- 11.2.23 Shaft sinking
- 11.2.24 Shaft linings
- 11.2.25 Slurry walls, shields and trenches
- 11.2.26 Drill-and-blast tunnelling
- 11.2.27 Tunnel supports
- 11.2.28 Power systems
- 11.2.29 Tunnel coatings
- 11.2.30 Tunnel membranes, water stops
- 11.2.31 Planking
- 11.2.32 Reinforcement and tensioning device
- 11.2.33 Gates and doors
- 11.3 Building and other materials**
- 11.3.1 Concrete
- 11.3.2 Bitumen
- 11.3.3 Injection products
- 11.3.4 Gypsum
- 11.3.5 Lime
- 11.3.6 Gravel
- 11.3.7 Mortar
- 11.3.8 Sand
- 11.3.9 Foam and polymeres
- 11.3.10 Ballast
- 11.3.11 Explosives
- 11.3.12 Shotcrete / Concrete additives
- 11.3.13 Clay
- 11.3.14 Grouting materials
- 11.3.15 Cement and additives
- 11.4 Maintenance**
- 11.4.1 Preservation, decontamination, Backfitting

- 11.4.2 Hydraulic service equipment
- 11.4.3 Lubricants
- 11.4.4 Tunnel maintenance
- 11.5 Safety features**
- 11.5.1 Safety at work
- 11.5.2 Site safety
- 11.5.3 Fire protection
- 11.5.4 Protection against dangers
- 11.5.5 Control systems
- 11.5.6 Measurement / Examination / Control and test equipment
- 11.5.7 Personal safety
- 11.5.8 Safety equipment / -systems
- 11.5.9 Monitoring- / Warning- / Alarm systems
- 11.5.10 Safety lighting
- 11.5.11 Escape route doors
- 11.5.12 Fire protection doors
- 11.6 Communication**
- 11.6.1 Radio systems
- 11.6.2 Interphone systems
- 11.6.3 Internet systems
- 11.6.4 Underground communications
- 11.6.5 Managementsystems
- 11.6.6 Software
- 11.6.7 Telecommunication
- 11.6.8 Video systems
- 11.7 Services / Consulting**
- 11.7.1 Calls for tenders / drafting and awarding contracts
- 11.7.2 Construction-site logistics
- 11.7.3 Authorities
- 11.7.4 Consultancy
- 11.7.5 Operational, environmental and safety equipment / systems
- 11.7.6 Documentation
- 11.7.7 Trade publications
- 11.7.8 Financing / Insurance
- 11.7.9 Geology
- 11.7.10 Geotechnical services
- 11.7.11 Engineering services
- 11.7.12 Expert services
- 11.7.13 Monitoring harmful substances
- 11.7.14 System analysis, -development
- 11.7.15 Technology centre
- 11.7.16 Associations, organisations
- 11.7.17 Publishers
- 11.7.18 Measurement
- 11.7.19 Contract and claims-, project and construction management
- 11.7.20 Science, research & development
- 11.7.21 Certification
- 11.8 Clothing / Workwear**
- 11.8.1 Geo textiles
- 11.8.2 Headgear
- 11.8.3 Protective clothing
- 11.8.4 Shoes
- 11.9 Other**