



Larisa
SOLUTIONS FOR TRANSPORT

PRODUCT CATALOGUE

2026

EDITION
1.0



RESEARCH AND DEVELOPMENT

We are constantly investing in new technologies and in the continuous improvement of our products. Every solution is developed on the basis of user needs and the many years of experience of our design team.

We use modern engineering tools at the design stage, and before any product is released for production, it undergoes thorough functional, durability and operational testing. In this way, we deliver solutions that meet the highest standards of quality and safety.



CUSTOM PROJECTS

We specialise in the design and manufacture of components made to individual order. We support our customers at every stage of the project - from concept development and technical documentation, through prototyping, to product launch in series production.

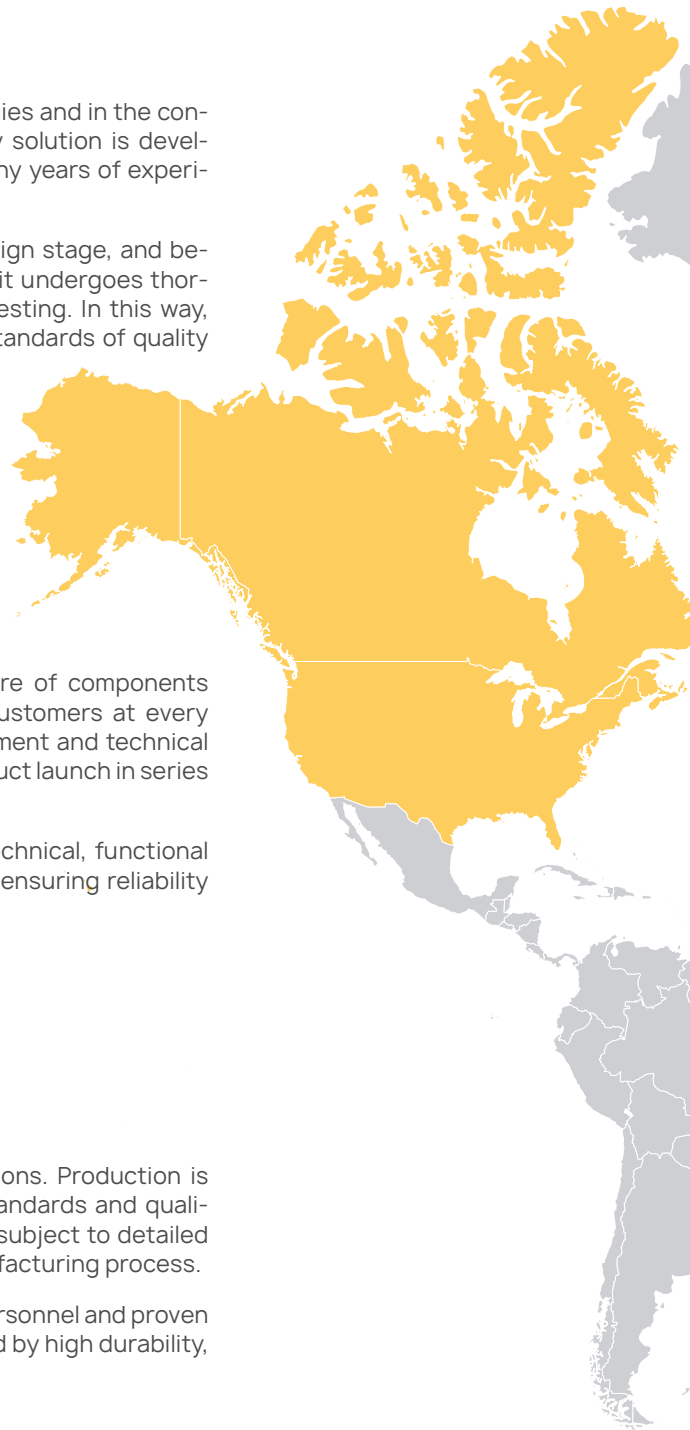
Our solutions are precisely tailored to the technical, functional and aesthetic requirements of each project, ensuring reliability and user comfort.



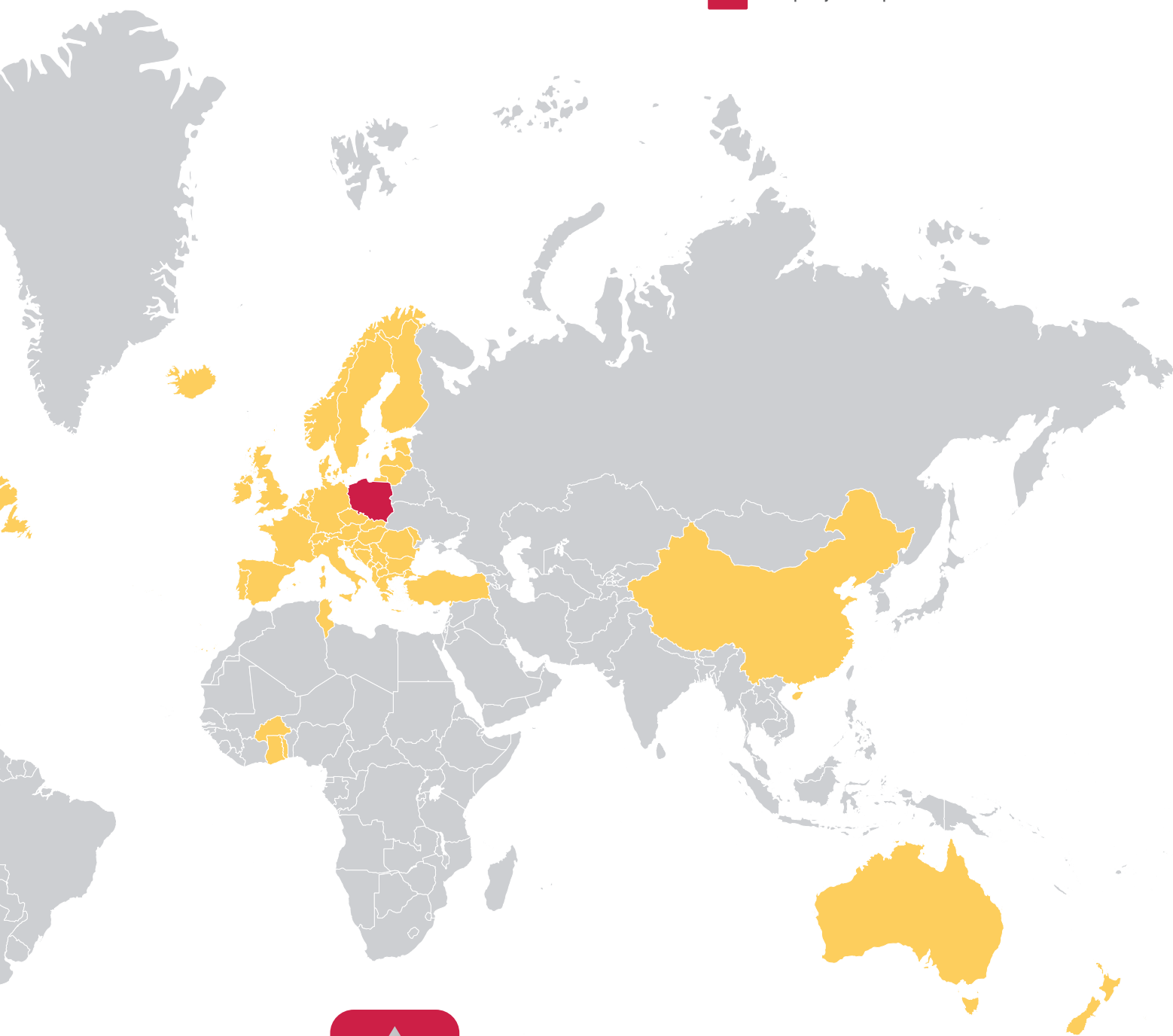
QUALITY

Quality is the foundation of LARISA's operations. Production is carried out in accordance with applicable standards and quality-control procedures, and every product is subject to detailed verification at successive stages of the manufacturing process.

Thanks to our modern machinery, qualified personnel and proven technologies, we offer products distinguished by high durability, reliability and quality of finish.



-  countries where LARISA products are used
-  company headquarters



LARISA

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www.larisa.pl

PPHU

LARISA

PPHU "LARISA" is a Polish manufacturer of modern equipment and accessories supplied to vehicle manufacturers. For many years, we have been designing and manufacturing mechanical, pneumatic and electronic solutions that enhance the safety, functionality and user comfort of rail and road vehicles.

Our products are developed to deliver the highest quality, durability and compliance with applicable standards. We combine experience with modern manufacturing technologies, enabling us to fulfil both standard orders and custom projects tailored to our customers' requirements.



COMPREHENSIVE SERVICE

We deliver projects from concept to completion, meeting our customers' needs.



MODERN MACHINERY

We use advanced manufacturing technologies that ensure repeatability and manufacturing precision.



EXPERIENCED TEAM

Our strength lies in qualified engineers and specialists with many years of industry experience.

CATEGORIES

A comprehensive range of solutions for modern rolling stock. Discover our reliable, durable and functional vehicle equipment. We design and manufacture products that meet the needs of operators and passengers, providing user comfort, high build quality and the possibility of individual configuration.

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01 ENGINEERING

FROM NEED TO FINISHED SOLUTION

We design equipment and vehicle components from the ground up or develop solutions based on customer documentation. We analyse needs, installation conditions and intended use to create a functional, safe product ready for efficient production.



SOLUTION
concept



DESIGN
and 3D model



PROTOTYPE
verification



TESTING
and optimisation



PRODUCTION
and implementation

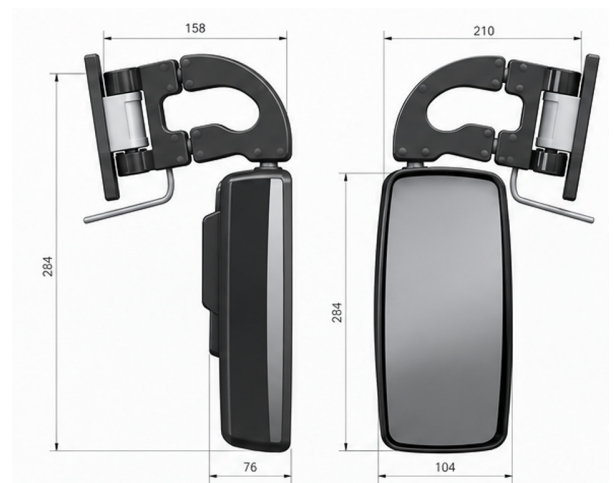
DESIGN PROCESS

- 01 NEEDS ANALYSIS**
specifications, operating conditions and vehicle integration
- 02 CONCEPT**
solution variants and technology selection
- 03 3D AND 2D DESIGN**
model, assembly and manufacturing documentation
- 04 CALCULATIONS**
loads, geometry, mass and material selection
- 05 PROTOTYPE AND TESTING**
functional verification and design corrections

OUR APPROACH

**ENGINEERING THAT BRINGS
FUNCTION, TECHNOLOGY
AND COST TOGETHER.**

From the design stage onwards, we identify improvements that enhance quality, reduce risk and optimise material consumption.



DESIGN FOR MANUFACTURING

ENGINEERING CAPABILITIES

Our designers and engineers collaborate at every stage, from initial assumptions through to series production. As a result, the documentation reflects actual manufacturing, installation and operating conditions.

01

CAD DESIGN

- 3D modelling
- assembly documentation
- manufacturing documentation
- sheet-metal flat patterns

02

ANALYSES AND CALCULATIONS

- verification of technical requirements
- analysis of loads and geometry
- material and technology selection
- mass and cost optimisation

03

SOLUTION VERIFICATION

- prototypes and functional trials
- strength tests
- ergonomic analyses
- pre-implementation corrections

WHAT THE CUSTOMER RECEIVES

3D MODEL

for concept and installation verification

2D DOCUMENTATION

detail drawings, DXF/DWG

VISUALISATIONS

clear presentation of the solution and installation

PROTOTYPE

physical verification before series production

IMPLEMENTATION SUPPORT

technical coordination and vehicle integration

DO YOU HAVE A TECHNICAL REQUIREMENT?

Let's discuss your project, calculations and implementation.

biuro@larisa.pl | larisa.pl

02 RAMPS

FOR LOW PLATFORMS

LA and LS ramps are intended to assist passengers using wheelchairs on routes equipped with low platforms, where there is a significant height difference between the platform level and the vehicle floor. Both ramp types meet the TSI PRM requirements for accessible rail transport for people with reduced mobility. An optional extension enables the ramps to be used in vehicles where the height difference between the floor and the platform is up to 700 mm.



high strength



fast installation



lightweight



easy access for people
with reduced mobility



safety



dimensions
tailored to customer
requirements

TECHNICAL DATA

MATERIALS

aluminium alloy

MAXIMUM LOAD

300 or 350 kg

LENGTH RANGE

up to 4 m

COMPLIANCE

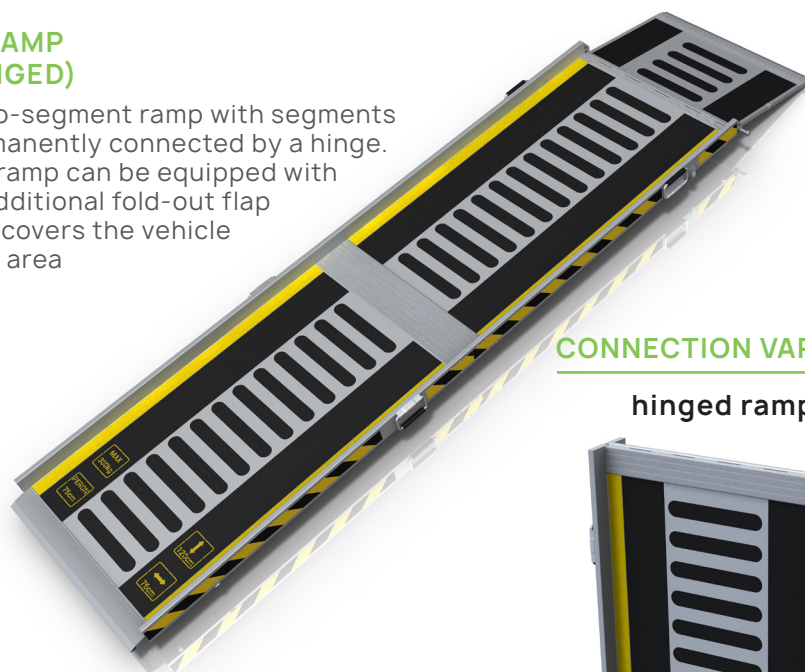
TSI PRM, EN 45545

SAFETY-ENHANCING FEATURES

non-slip surface, contrasting
markings and rubber ramp ends
preventing the ramp from moving
during use

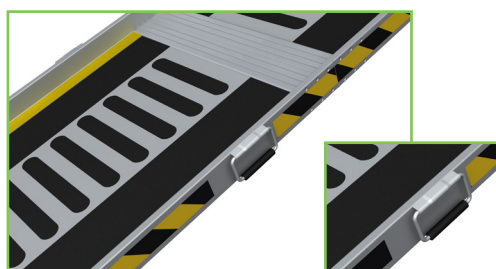
LS RAMP (HINGED)

a two-segment ramp with segments
permanently connected by a hinge.
The ramp can be equipped with
an additional fold-out flap
that covers the vehicle
stair area

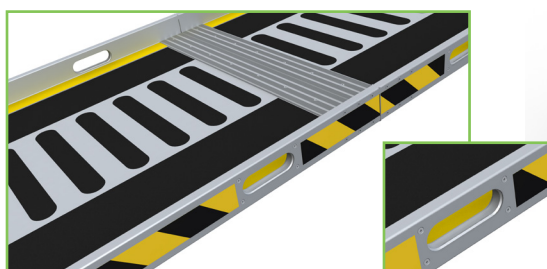


CONNECTION VARIANT

hinged ramp



external



recessed



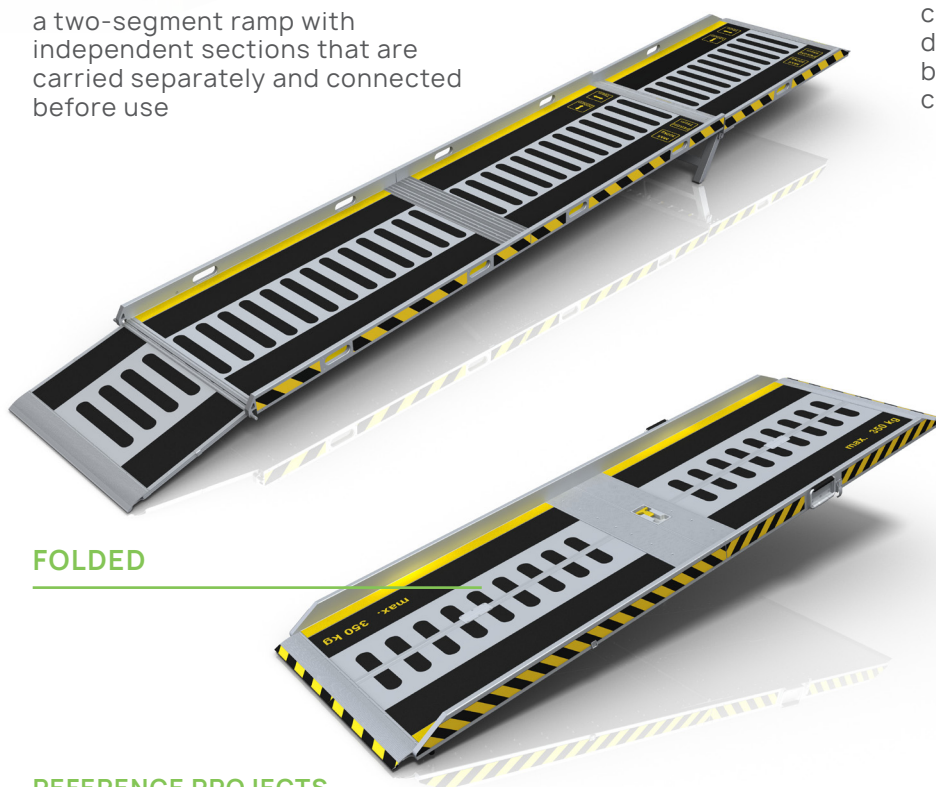
LS RAMP (SPLIT)

a two-segment ramp with independent sections that are carried separately and connected before use

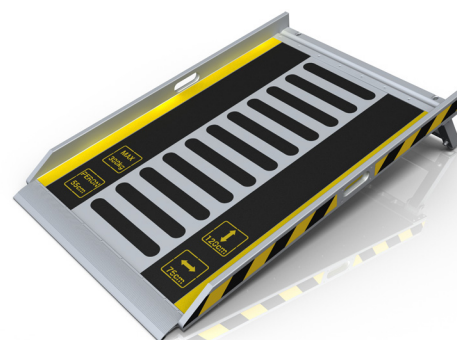


RAMP WITH EXTENSION

for very low platforms, an extension can be added. Depending on the height difference to be accommodated, it can be fitted as required. The extension is compatible with LS and LA ramps



FOLDED



CONNECTION VARIANT

split ramp

REFERENCE PROJECTS



02

COMPACT RAMPS

Compact ramps are used as equipment for rail vehicles operating on routes where the platform is at a different height from the vehicle floor. Their low weight and optimised design allow the ramp to be deployed in a few seconds. Different designs make it possible to select the appropriate type depending on the available storage space.



high strength



fast installation



lightweight



easy access for people with reduced mobility



safety



dimensions tailored to customer requirements

TECHNICAL DATA

MATERIALS

aluminium alloy

MAXIMUM LOAD

300 or 350 kg

LENGTH RANGE

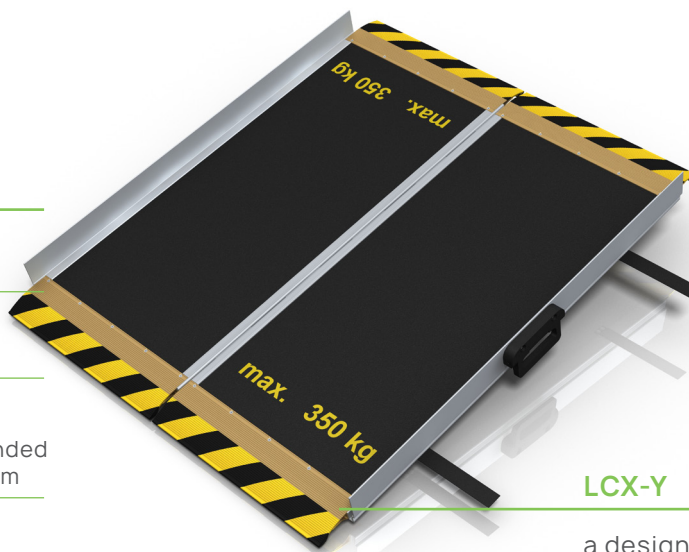
according to order; recommended for usable lengths of up to 1.8 m

COMPLIANCE

TSI PRM, EN 45545

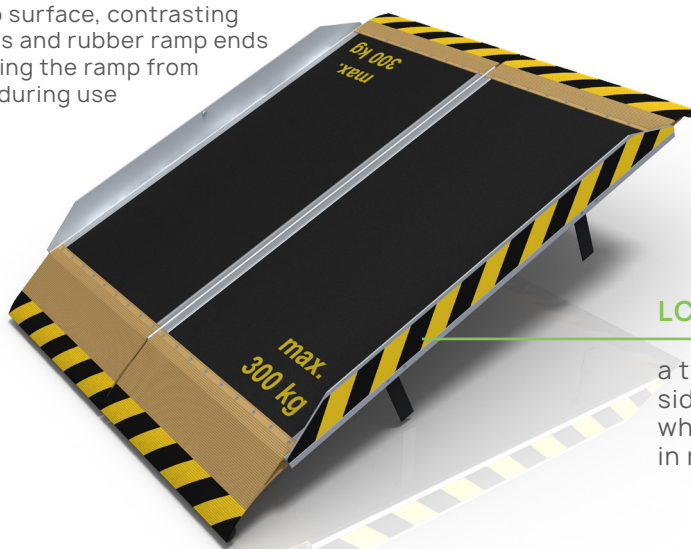
SAFETY-ENHANCING FEATURES

non-slip surface, contrasting markings and rubber ramp ends preventing the ramp from moving during use



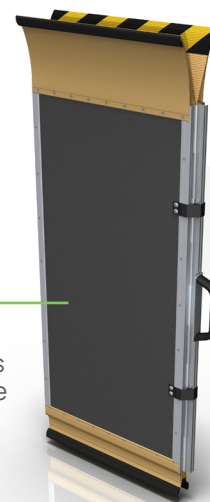
LCX-Y

a design consisting of two modules connected by a hinge



LCX-YF

a two-module design with folding sides, ensuring minimal thickness when folded and enabling storage in narrow spaces



MOUNTING AND DEPLOYMENT ASSISTANCE SYSTEMS

We offer solutions that complement our portable ramps - vehicle mounting systems and deployment-assistance systems that increase safety, ease of operation and reliability in everyday use.

PC-01

PC-01 kit combines a portable ramp with a stable mounting frame that assists with deployment and refolding. The complete assembly is permanently installed in the vehicle. This solution makes ramp operation effortless and very straightforward. For passenger safety and to prevent unauthorised interference, the assistance mechanism is fitted with a key-operated lock securing the ramp and a sensor confirming that the locking latch is correctly closed. The system assists with ramp deployment and folding, reducing the time required to prepare the ramp for use and returning it to the transport position.



LWXX-04

A four-panel design with interconnected panels provides minimal width when folded.

RAMP DEPLOYMENT-ASSISTANCE SYSTEMS

This ramp is based on the standard LWXX-04 ramp models. The main difference is the mechanism used to permanently attach the ramp to the vehicle. It also serves as a system supporting ramp deployment and folding, reducing the time required to prepare the ramp for use and return it to the transport position. Thanks to this unique design, the ramps can be operated by one person with minimal effort. A different surface design is also used here than on the other LS-series ramps: perforated sheet metal coated with high-friction non-slip paint. Because of the installation location and the ramp's accessibility, the assistance mechanism is secured with a key-operated lock to prevent unauthorised use.



02 RAMPS

FLAP

Flap ramps are used primarily in trams. This type of ramp is permanently installed in a suitably prepared opening in the vehicle floor. Deployment takes place by opening a flap which forms the floor finish on one side and the boarding surface on the other. The selected materials protect the ramp against weather conditions. In addition to standard products, the ramp can be designed in accordance with customer requirements. Our range includes a ramp certified for compliance with TSI PRM requirements, which can also be used in trains.



high strength



fast installation



lightweight



easy access for people
with reduced mobility



safety



dimensions
tailored to customer
requirements

TECHNICAL DATA

MATERIALS

aluminium alloy

MAXIMUM LOAD

350 kg

ADDITIONAL EQUIPMENT

front extension lip and the option
of operation using a dedicated hook

COMPLIANCE

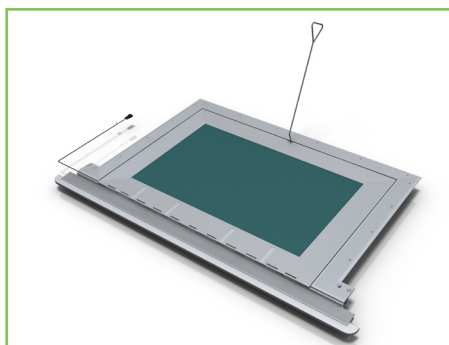
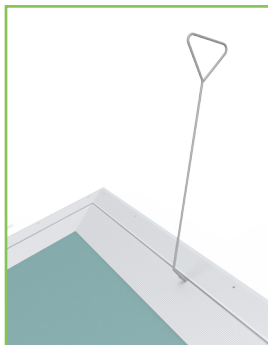
EN 45545

OPTIONAL EQUIPMENT

locking latches;
opening-assistance hook;
inductive sensor indicating
the position of the ramp flap;



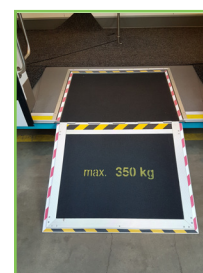
ADDITIONAL EQUIPMENT



front extension threshold and operation via a dedicated hook



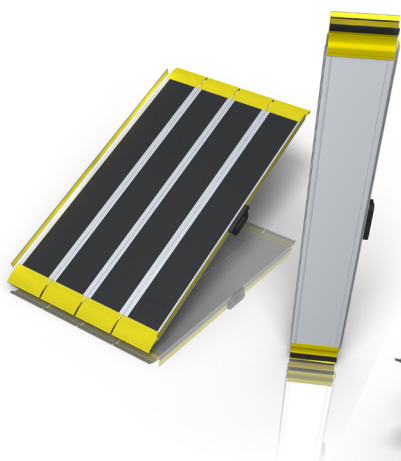
FOLDED



UNFOLDED

OPTIONS

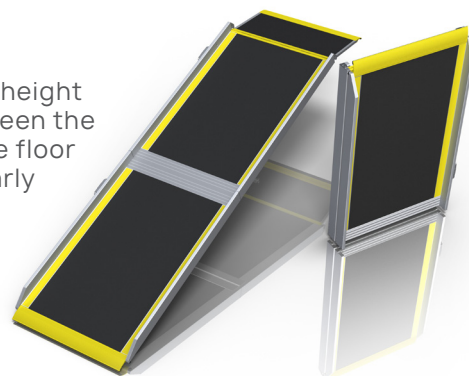
We design ramps that combine functionality, durability and aesthetics, harmoniously integrating into rail vehicle interiors.



LWXX-04
the lightest mobile design

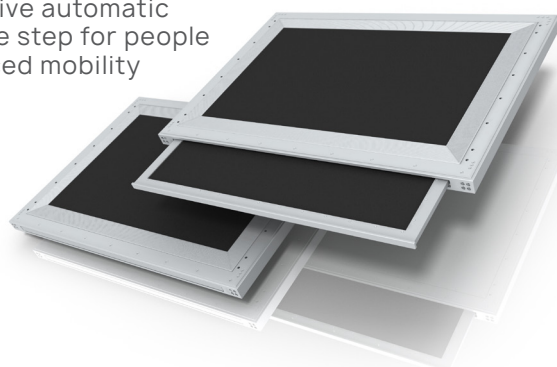
LSXX-02

used where the height difference between the platform and the floor level is particularly large



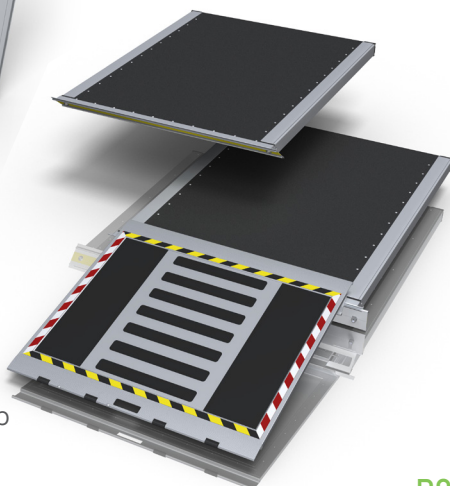
APW-03

an innovative automatic retractable step for people with reduced mobility



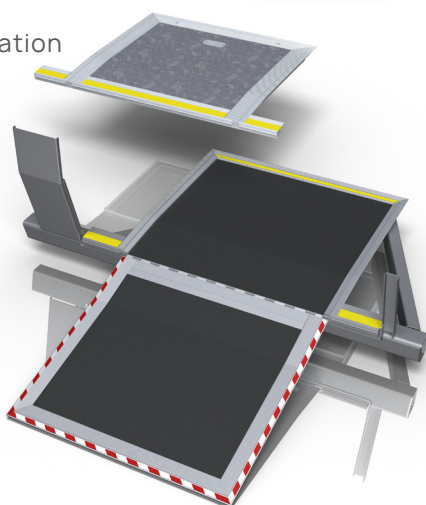
R09-02

an under-floor retractable ramp



P95-01

a fixed flap ramp designed for installation in the vehicle floor



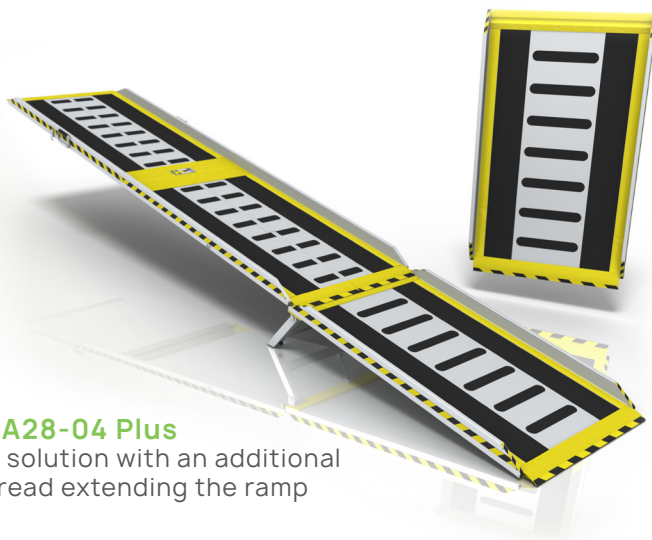
System for LC-type ramps

if the vehicle does not require a long ramp and ease and speed of operation are key, it can be equipped with an LC ramp and a deployment-assistance system. The compact dimensions of the LC ramp allow for easy installation in the vehicle



System for LS-type ramps

the system supporting deployment of an LS ramp can significantly simplify the deployment of even the longest models. Assistance can be provided by a torsion spring or a gas spring. The system mounting can be adapted to the vehicle



LA28-04 Plus

a solution with an additional tread extending the ramp

03

LUGGAGE RACKS

ADVANCED SOLUTIONS FOR TRAVEL COMFORT

Modern public transport requires solutions that combine the highest safety standards with uncompromising passenger comfort. LARISA luggage racks respond to these challenges redefining the notion of travel comfort. Designed for installation in the passenger compartments of modern vehicles, they combine advanced material engineering with high level of aesthetics appeal. They are a key element of interior equipment that not only optimises space but also improves the prestige of the vehicle.

BENEFITS

Why choose our solutions



DESIGN

The aesthetic design fits perfectly with current trends in rail and bus interior design



CONFIGURATION FLEXIBILITY

Ability to fit optional features that enhance the basic functionality of the luggage racks



VISIBILITY

A well-considered design gives passengers full control over their luggage



SAFETY

A stable construction protects against uncontrolled movement of luggage

RACK WITH ROLLER BLIND

Linear and spot lighting systems provide passenger comfort and safety.



FUNCTIONALITY AND DESIGN

We offer a wide range of luggage racks intended for rail vehicles. Each solution is designed with user safety, ease of operation and long-term reliability in mind.

TECHNICAL DATA

MATERIALS

aluminium, glass

LOAD-BEARING SURFACE

glass, rungs, perforated sheet metal

DESIGN

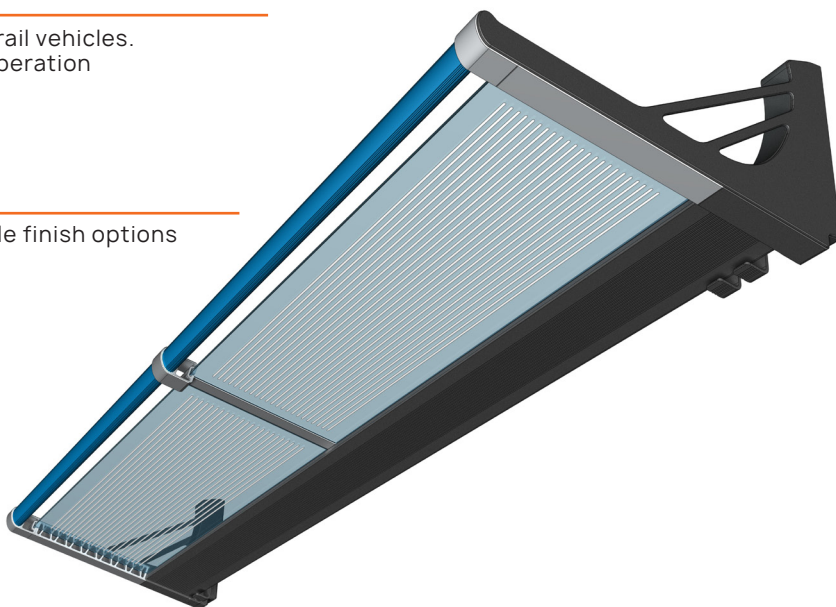
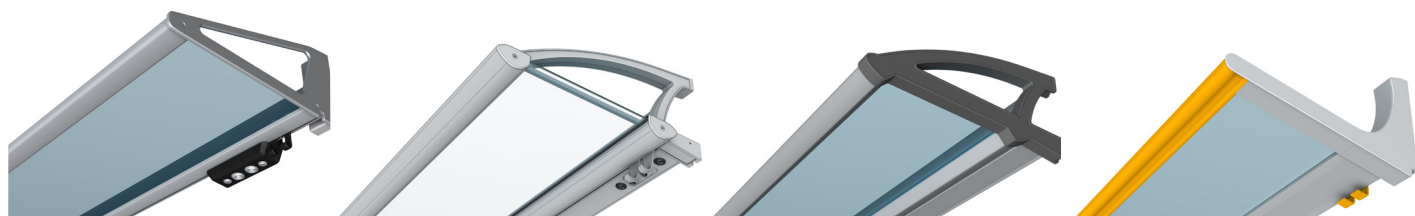
can be adapted to the style of the vehicle interior

ADDITIONAL OPTIONS

lighting, displays, coat hooks, roller blinds

VARIANTS

different profile finish options



high strength



fast installation



lightweight



safety

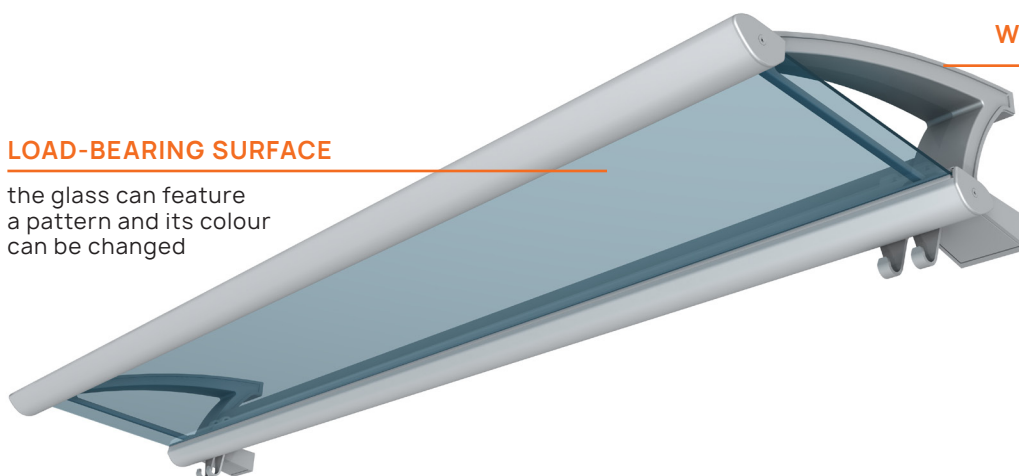
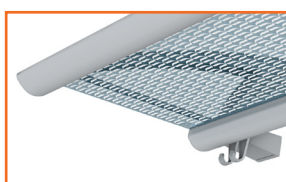
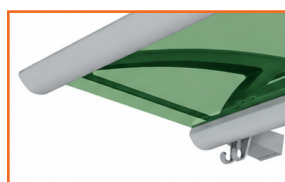
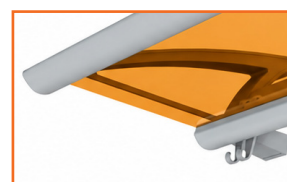


dimensions
tailored to customer
requirements

WIDE BRACKET

LOAD-BEARING SURFACE

the glass can feature
a pattern and its colour
can be changed



EQUIPMENT OPTIONS

The luggage racks can be fitted with integrated lighting systems and passenger-information displays. These solutions are designed as an integral part of the structure, ensuring the functional and aesthetic consistency of the vehicle interior.

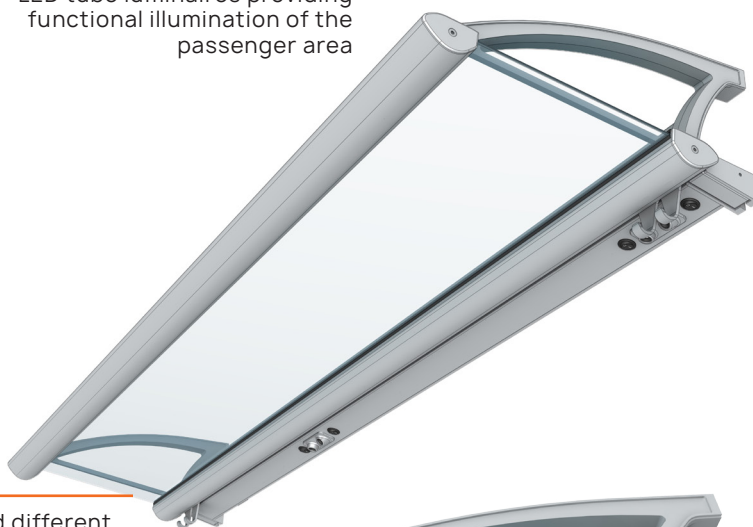
COLOURS

a range of colour and finish options, allowing the rack to match the interior design



LIGHTING

LED tube luminaires providing functional illumination of the passenger area



DISPLAYS

integrated directly into the rack structure

VARIANTS

structural variants and different methods of integrating the lighting



LIGHTING

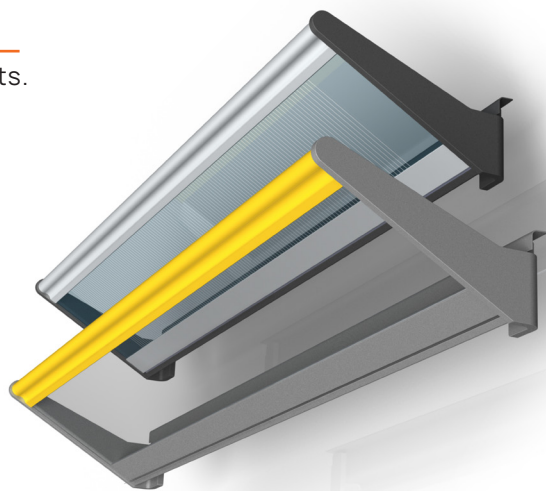


SEAT MARKING SYSTEM



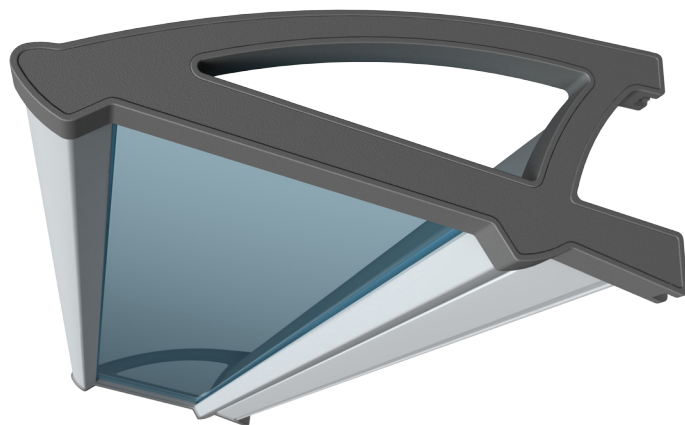
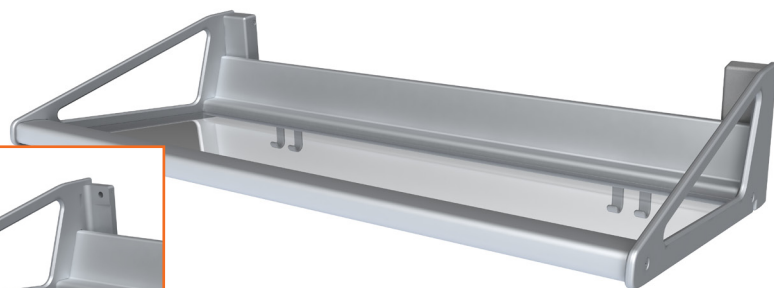
FIT AND CUSTOMISATION

Every vehicle interior project presents different requirements. Our luggage racks can therefore be adapted to the interior layout, the installation method and the styling concept. We design the shape of the brackets and load-bearing surface individually, select materials, colours and finishes, and prepare solutions tailored to the specific vehicle.



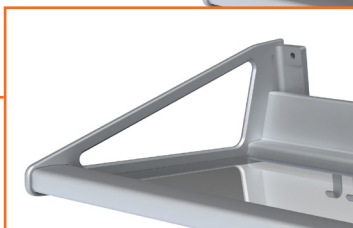
DESIGN

the appearance of the mounting brackets and load-bearing surface can be customised



MOUNTING

side-mounted under a cover that neatly conceals the fixings and gives the installation a coherent appearance



REFERENCE PROJECTS



04

ARM-MOUNTED MIRRORS

A tram mirror is a traditional and versatile item of rail vehicle equipment that enables the tram driver to observe the surroundings of the vehicle, with particular emphasis on the entrances. Combining simple operation with elegant finishing, it is an ideal addition to the vehicle's equipment. The mirrors in our range can be mounted either on a front-end mounting pod or in a dedicated recess.



excellent visibility



compatibility with different supply voltages



vibration resistance



resistance to temperature fluctuations



bespoke housing design



safety



dimensions tailored to customer requirements

TECHNICAL DATA

APPLICATION

rolling stock

HOUSING MATERIAL

glass-reinforced polyester

ARM MATERIAL

aluminium, stainless steel

OPERATING TEMPERATURE

-20°C to +50°C

FOLDING ANGLE

20-64 degrees, adjustable

DRIVE

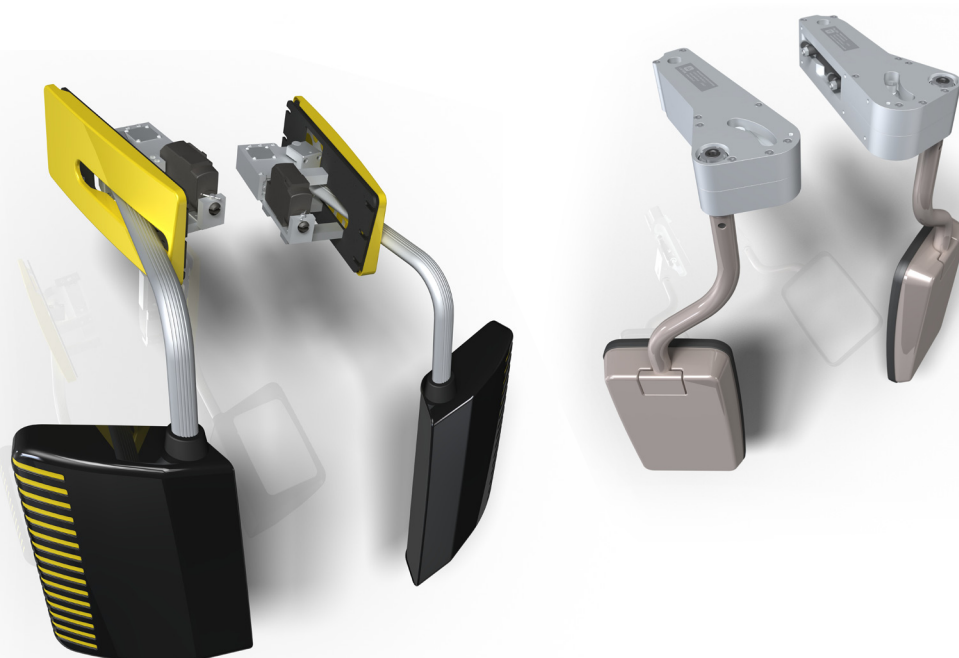
manual, electric, pneumatic

SUPPLY VOLTAGE

- 24V DC

ADDITIONAL FUNCTIONS

additional panoramic mirror
heated mirror glass
emergency folding clutch
mirror design in accordance with individual customer requirements



HOUSINGS

the mirror housing and the mirrors themselves can be adapted to customer requirements



OPTIONS

We offer a wide range of mirrors intended for rail and road vehicles

EXTERNAL BODY MOUNTING

A mirror mounted on the outside of the vehicle body enables the quick, non-invasive retrofitting of existing trams without modifying the internal structure

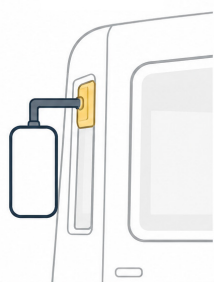
MANUAL FOLDING SYSTEM

For limited installation spaces or budget-sensitive projects, a manual folding system can be used instead of a mechanical folding mechanism

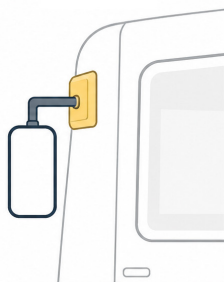
MECHANISM INSTALLED IN A RECESS

Ensures minimal protrusion of the mechanism beyond the vehicle profile, providing a high level of aesthetic finish; primarily designed for trams. The arm housing can also be custom-shaped

INSTALLATION TYPES



RECESS-MOUNTED



ISLAND-MOUNTED

BESPOKE ARM SHAPE

The arm housing can be custom designed to match specific requirements

MOUNTING ALONG THE MECHANISM AXIS

The arm can be mounted along the axis of the folding mechanism, creating a compact design that is particularly suitable for installation on trains

REFERENCE PROJECTS



04

INTEGRATED MIRRORS

An integrated mirror is a traditional and versatile item of rail vehicle equipment that enables the driver to observe the surroundings of the vehicle, with particular emphasis on the entrances. Each solution is designed for a specific vehicle family (platform), making the mirror an integral part of the vehicle body. When folded, it remains flush with the body surface, preserving the vehicle's character and aesthetics.



excellent visibility



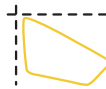
compatibility with different supply voltages



vibration resistance



resistance to temperature fluctuations



bespoke housing design



safety



dimensions tailored to customer requirements

DRIVE OPTIONS

The integrated mirror can be equipped with an electric or pneumatic drive, depending on the requirements of the vehicle platform

ELECTRIC DRIVE

- an electric actuator extends and retracts the mirror
- precise control
- quiet operation
- easy integration with the vehicle electronics

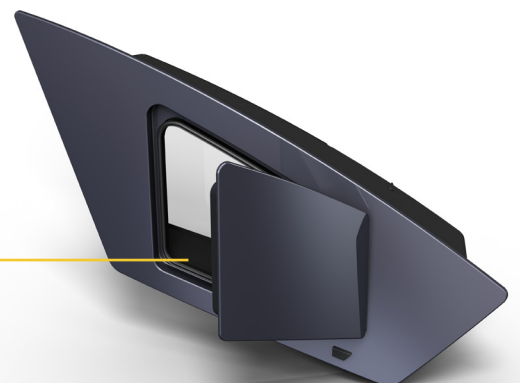
PNEUMATIC DRIVE

- a pneumatic actuator deploys and folds the mirror
- high reliability
- resistance to environmental conditions
- an ideal solution for rail vehicles



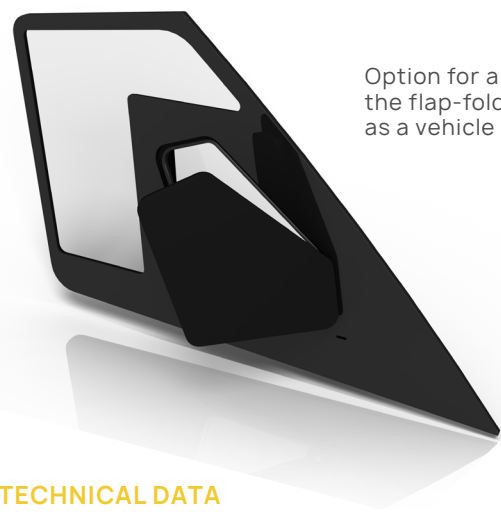
CUSTOM MIRROR-GLASS SHAPE

The shape of the mirror glass can be adapted to the body line, side window and aerodynamic features of the vehicle

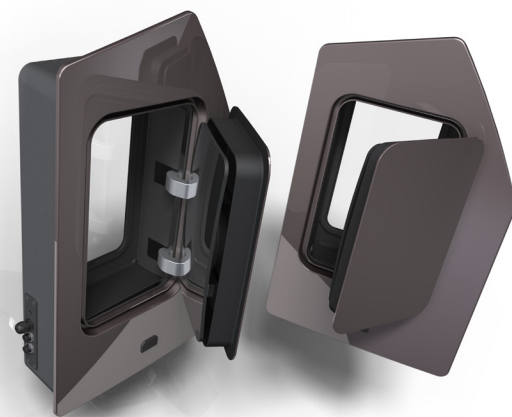


OPTIONS

We offer a wide range of mirrors designed for rail vehicles. Every solution is engineered with user safety, ease of operation, and long-term reliability in mind. We also provide bespoke mirrors with custom glass shapes



Option for a glass housing that holds the flap-folding mechanism and serves as a vehicle window



TECHNICAL DATA

APPLICATION

rolling stock

MATERIALS

glass-reinforced polyester,
aluminium, glass

OPERATING TEMPERATURE

-40°C to +50°C

FOLDING ANGLE

on request

DRIVE

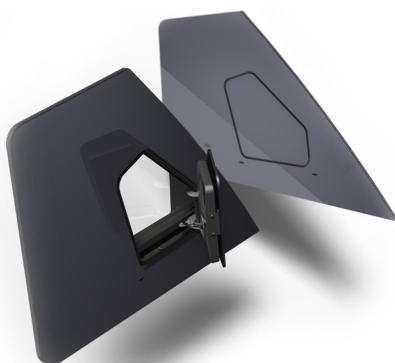
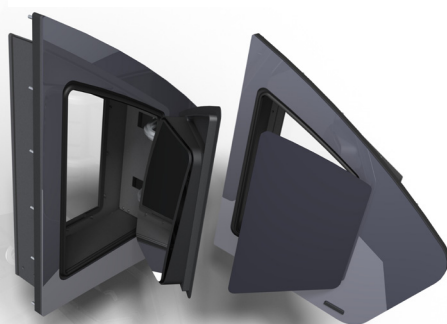
electric
or pneumatic

SUPPLY VOLTAGE

24V DC

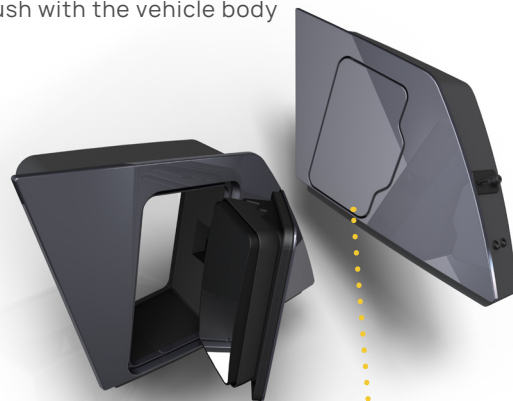
ADDITIONAL FUNCTIONS

heated mirror glass
emergency folding clutch



FLUSH FIT

when closed, the mirror sits
flush with the vehicle body



REFERENCE PROJECTS



05

FOLDING TABLES

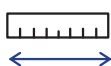
Folding tables combine an elegant finish with a compact design, reducing overall dimensions through folding side leaves. SDS tables are intended for installation in rail vehicles and meet requirements for maximum loads and fire performance.



safety



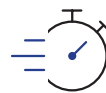
high durability



dimensions tailored to customer requirements



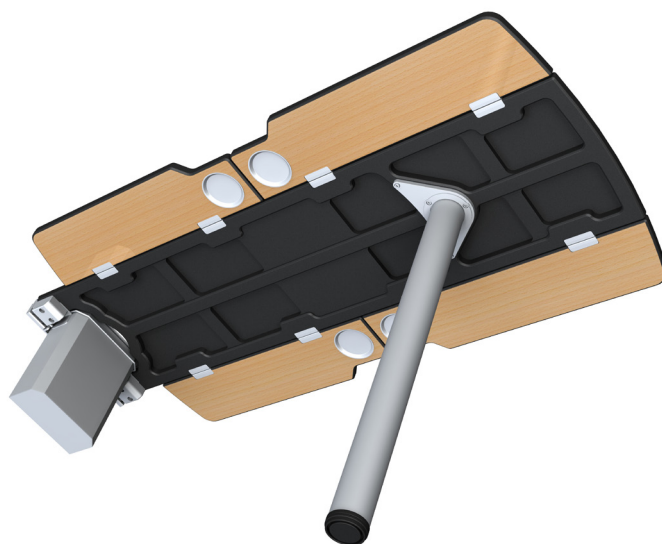
easy emptying



fast assembly

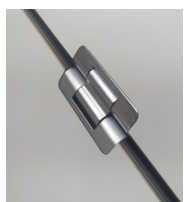


aesthetics



HINGES

Premium version (with or without resistance during movement) or Economy version



PREMIUM



ECONOMY

COMPACT DIMENSIONS WHEN FOLDED

Easy-folding side leaves for maximum space saving



STANDARDS



UIC 566



UIC 567



EN 45545-2

TECHNICAL DATA

TABLE TYPE

folding table

DIMENSIONS

according to requirements

TABLETOP THICKNESS

standard 20 mm

TABLETOP MATERIAL

HPL compliant with EN 45545-2

FINISH

standard (matt)
wood-effect
solid colours
custom prints
increased resistance
to stains and
fingerprints

OPTIONAL EQUIPMENT

waste bin
mounting bracket
wireless/wired charger
anti-slip ridges

LEG

standard, adjustable
floor-mounted



Finger recesses on the edges of the leaves



Wired charger



Recesses for drinks
(painted or stainless steel)



Underside cut-outs in the main tabletop reducing weight



Wireless charger



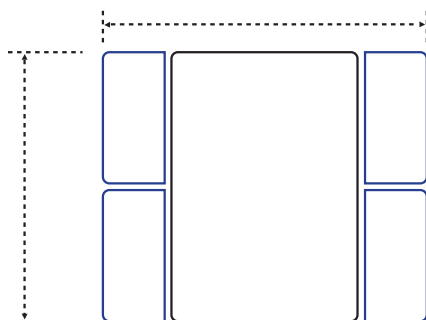
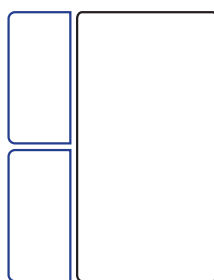
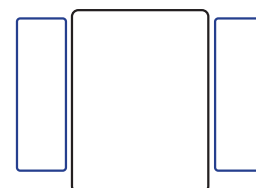
Screen recess



Optional safety lips
preventing objects
from sliding off

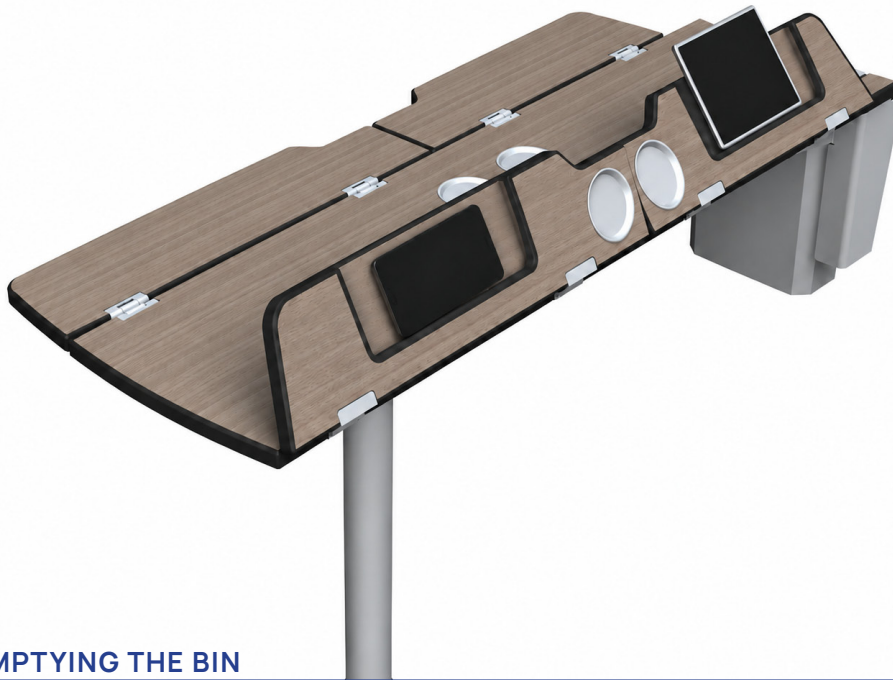
CONFIGURATION

Table shape and side leaf configuration fully customizable to customer needs



FUNCTIONALITY

Recesses in the tabletop provide a place to rest a phone or tablet

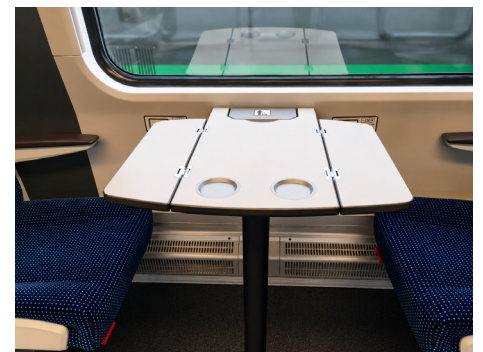


EMPTYING THE BIN

A simple 180° tilting mechanism facilitates emptying and cleaning



REFERENCE PROJECTS



05

SMALL TABLES

A COMPACT SOLUTION FOR PASSENGER AREAS

Small tables are designed for passenger comfort and efficient use of space in rolling stock. Their compact form provides additional usable surface without restricting the space around the seat. The variety of available shapes, materials and finishes makes it possible to adapt the table to the individual character of the vehicle interior. The tabletops can also be equipped with practical cup holders, increasing everyday comfort.



safety



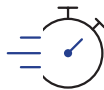
high durability



dimensions tailored to customer requirements



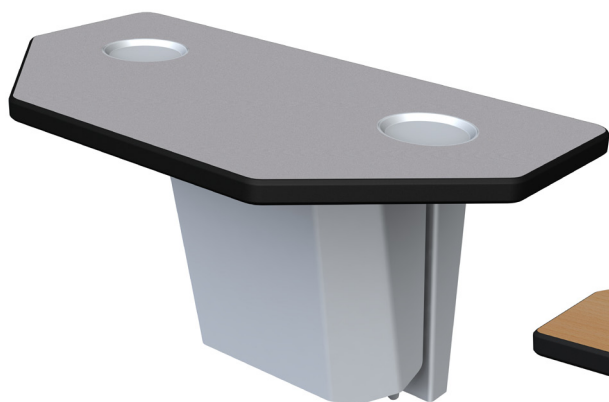
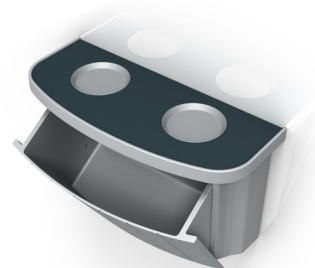
easy emptying



fast assembly



aesthetics



TABLETOP VARIANTS

The tabletop finish materials can be selected to suit the project



06

ACCESSORIES

EVERY DETAIL HAS A PURPOSE

Comprehensive vehicle interior equipment is not limited to large-scale solutions. It also includes details that affect the comfort, safety and functionality of the space. Every element matters and serves a purpose.

If you require a solution not included in the catalogue, we can also prepare and fulfil a bespoke enquiry in accordance with the requirements of the specific project.



easy
emptying



high
strength



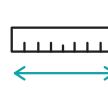
fast
installation



resistance
to temperature
fluctuations



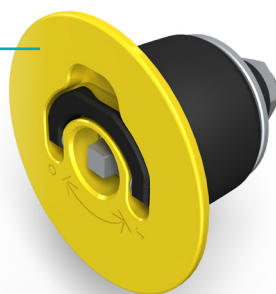
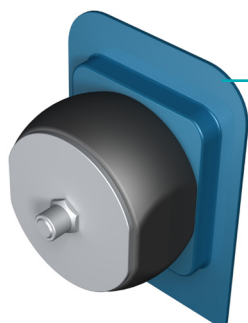
safety



dimensions
tailored to customer
requirements

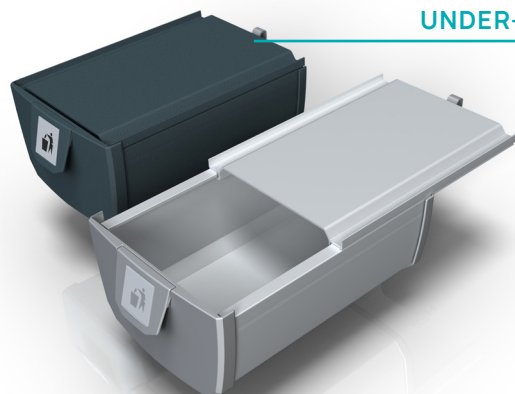
SAND FILLER CAP

A universal product that can be adapted to the diameter of the sand-box filler opening. The metal components and the seal made using expanding-elastomer technology ensure resistance to adverse transport conditions. The colour of the front cover can be individually matched to the vehicle body



RERAILING CHANNEL COVERS

Rerailing channel covers complement the vehicle bodywork and enhance its aesthetic qualities. They also protect the profile used to lift the vehicle against harmful external factors



UNDER-SEAT WASTE BINS

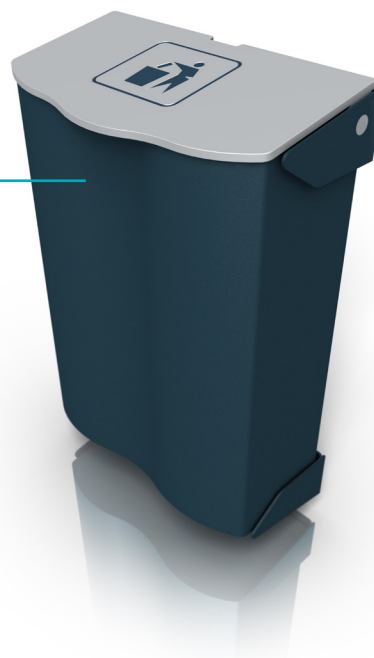
DRAUGHT SCREENS

The draught-screen system protects the vehicle against unwanted temperature changes inside the compartment and improves passenger comfort by shielding passengers from draughts. We manufacture draught screens from stainless steel and toughened glass, as well as extruded profiles made of lightweight aluminium alloys. They can additionally be equipped with a heater and 16-20 l waste containers

WASTE BINS

Waste bins manufactured by PPHU „LARISA“ are universal products intended for installation in public transport vehicles. The range includes both independently mounted versions and versions designed as additional equipment for tables. Volume range: 0.5 to 5 litres.

For most bins, we offer disposable plastic inner bins as additional equipment. They provide an aesthetic and functional alternative to plastic bags



TRAM DRIVER'S CAB

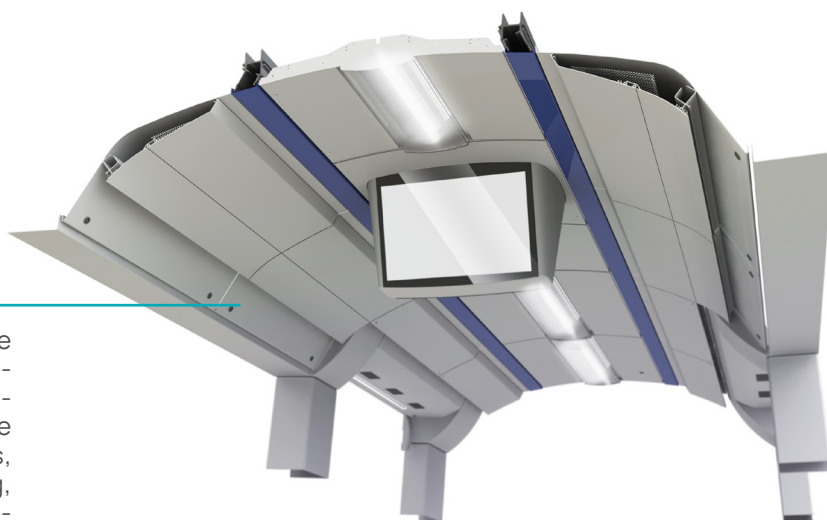
TRAIN DRIVER'S CAB

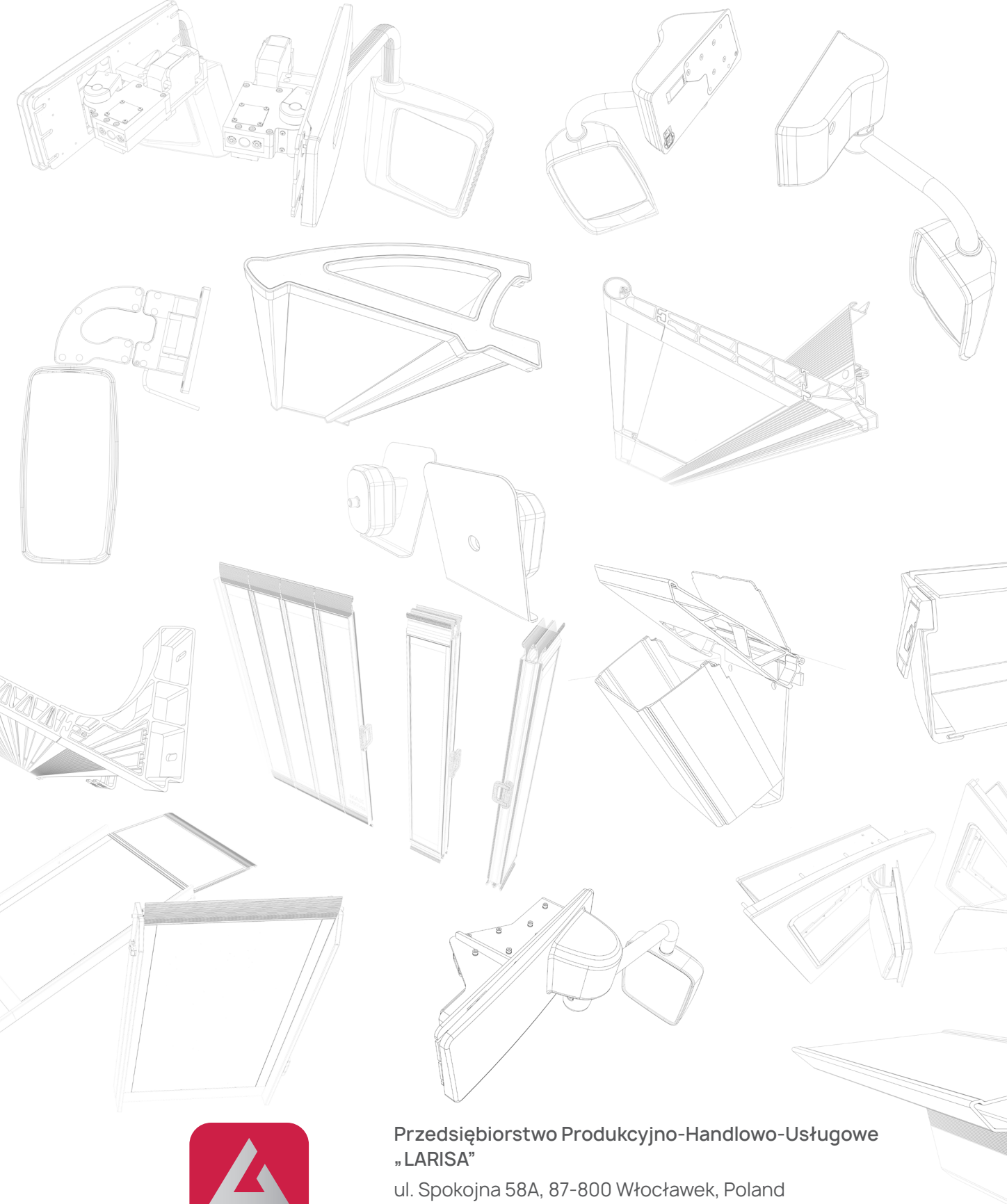
Train driver and tram driver cab doors manufactured by PPHU „LARISA“ are optimal solutions developed based on practical vehicle equipment analysis. They combine ergonomics, safety, and high aesthetic quality. A key advantage of our doors is the flexible configuration of equipment, including locks, latches, glazing, intercoms, drop trays, as well as a wide range of surface colours



CEILING SYSTEMS

In response to customer interest, we have expanded our range to include durable, lightweight and aesthetically pleasing ceiling systems made from aluminium profiles, with the option of integrating air-conditioning ducts, lighting and structural elements for mounting, for example, handrails. Thanks to their modular design, these systems can be adapted to the individual geometry of the interior





Larisa

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ISO 9001

LL-C (Certification)

In 2013, LARISA implemented and has maintained a quality management system in accordance with ISO 9001