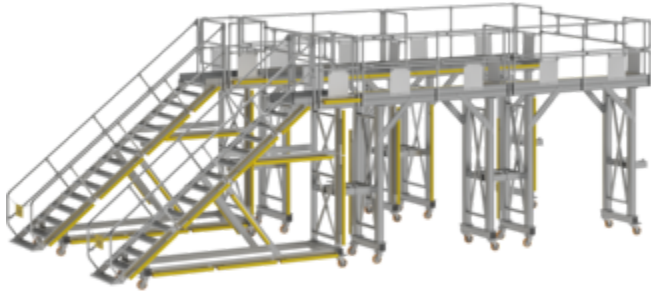


Order no.: REF-30243146

## Platform stairs, mobile and linkable, with end railing



### Specification

Business division MUNK Günzburger Steigtechnik	Sector Commercial vehicles	Type mobile	Height fixed
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### Facts

- Platform stairs: Platform length (PFL): 1,230 mm
- Platform stairs: Platform width (PFB): 1,050 mm / 850 mm
- Platform stairs: Platform height top edge (PFH): 2,800 mm
- Platform stairs: Total width (B): approx. 1200 / 1050 mm
- Platform stairs: Step width (SB): 1,000 mm / 800 mm
- Platform stairs: Step depth (ST): 300 mm
- Platform stairs: Inclination (W): 38°
- Platform stairs: Projection (A): approx. 4,200 mm
- Platform stairs: With safety gates

### Description

#### Client's Request and Task

A manufacturer of fully electric city buses required a specialized work platform for battery replacement. The requirements included a platform ladder with a special inclination for comfortable ascending and descending, a modular structure for different vehicle sizes, foldable railings for crane transport of the batteries, as well as an ergonomic and safe working environment for the employees. Additionally, a stable, reliable, and standard-compliant execution was essential.

#### Customer Requirements

- Work platform for battery replacement in electric city buses
- Modular and ergonomic platform ladder
- Foldable railings for crane operations

- Platform steps - Chassis: Fixed castor on support section Ø 160 mm with Ideal Stop
- Platform steps - Chassis: Swivel castor on the steps (1) Ø 160 mm
- Platform steps - Chassis: Flush beam width (FB)
- Platform stairs - Chassis: Castors for concrete floor
- Platform stairs: Decking: Aluminium grooved
- Platform stairs: Handrail and balustrade: rigid, only balustrade front side pluggable
- Platform stairs: Rubber protection tube on the long side rails and the long sides of the platform (on both sides)
- Surface load: 1.5 kN/m<sup>2</sup>
- Step load: 150 kg
- Platforms: Platform length (PFL): 3,060 mm
- Platforms: Platform width (PFB): 1,050 mm / 850 mm
- Platforms: Platform height top edge (PFH): 2,800 mm
- Platforms: Overall width (B): 1,150 mm / 1,050 mm
- Platforms - Chassis: 4 swivel castors Ø 160 mm with Ideal Stop
- Platforms - Chassis: Flush chassis beam width (FB)
- Platforms: Railing: side facing away from bus rigid, from height 550 mm knee rail can be folded inwards, front side with holder for plug-in railing; side facing the bus with rubber protection strip
- Total load: 300 kg

- Stable and standard-compliant construction

#### Our Solution

##### **Modular Platform Ladder**

We developed two platform ladders and four mobile platforms that can be coupled using hook tensioners. Each platform features a gap plate for transition and additionally includes two attachable, telescopic railings, as well as four plug-in railings at the front of each platform. The stairs and platforms offer a comfortable inclination of 38° and are equipped with safety doors.

##### **Technical Details**

The platforms of the platform ladders have a length of approximately 1200 mm and widths of approximately 1000 mm and 850 mm, with a platform height of 2800 mm. The platforms are 3060 mm long and available in widths of 1050 mm and 850 mm, with a total width of 1150 mm and 1050 mm. Both constructions are designed for a surface load of 1.5 kN/m<sup>2</sup> and can bear up to 150 kg per step.

##### **Safety and Comfort Features**

All platforms and stairs are equipped with a chassis with wheels suitable for concrete floors. The railings are partially foldable and equipped with rubber protection tubes to prevent damage to the vehicle. The decking is made of ribbed aluminum.

##### **Conclusion**

The mobile and connectable platform ladder offers a flexible, safe, and ergonomic solution for battery replacement in electric city buses. With its modular design, adaptable railings, and stable construction, it effectively supports maintenance work and contributes to the enhancement of occupational safety.

## Information on sustainability criteria

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- Corporate certification: ISO 9001

- Corporate certification: ISO 14001
- Corporate certification: EN 1090
- Corporate certification: EcoVadis
- RoHS
- REACH
- The MUNK Group complies with a Code of Conduct
- The Supply Chain Act does not apply due to our size
- The materials used are listed in the technical specification
- Resource-saving production: own photovoltaic systems
- Energy-efficient consumption during production: LED lighting
- Repairability, durability and quality: 15-year warranty on series products made in Germany
- Recyclability: Our products are mostly made of aluminium, steel or wood and can be fed directly into the recycling process.
- Socially acceptable working conditions in production: fair wages, gender equality
- Economical and recyclable packaging: no use of polystyrene, predominantly use of wood and cardboard, small amounts of plastic
- No health hazards for the users

More product pictures

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## Added value

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**Trust in us as your competent partner in the field of individual access equipment solutions. We are industry leaders from analysis to conception and design to first-class after-sales service.**

★ Analysis

We set standards in the evaluation of access equipment requirements. Our experts take sufficient time to understand your specific needs. After a thorough analysis, we will present you with a tailor-made design that is perfectly tailored to your individual circumstances. Rely on us to identify your challenges and solve them in an innovative way.

★ Concept

We are leaders in the planning of special designs. With creativity, technical know-how and a deep understanding of access equipment, we develop pioneering concepts. Our experienced team designs outstanding solutions that meet the highest safety standards and maximise your efficiency and ergonomics. Let yourself be impressed by our competence and innovative strength.

★ Design

We set the bar high in design. Our engineers and production planners have unique specialist knowledge and many years of experience in the field of access equipment. With the latest technologies and high-quality materials we realise your concept down to the smallest detail. Precision and quality are the first priority – for your special designs that meet the highest demands.

★ Production

In our modern production halls at our headquarters in Günzburg, we can implement your planning and wishes professionally and efficiently. Our specialists in access equipment, electronics and mechanics always have only one thing in mind: Quality that delivers what it promises. That's why every design, whether large or small, is

From decades of experience, we know that individual requirements require special solutions. That's why we are here to help you realize your custom construction.

Get inspired by our reference products and make your unique idea a success. We look forward to supporting your project with our expertise and dedication. Contact our competent team for more information and assistance.

With MUNK Group by your side, your custom construction becomes a reality: Safety. Made in Germany.

What we offer

- On-site consultation and project planning
- Custom development according to your requirements
- Precision manufacturing
- Functional and cost-effective access solutions
- Maximum workplace safety
- Fast delivery
- Compliance with all relevant German, English, and international standards and regulations, such as BetrSichV, DGUV regulations, Machinery Directive 2006/42/EC

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manufactured with the highest quality and precision and thoroughly tested before shipment.

★ After sales

Our commitment does not end with the completion of the special design. We are unbeatable in after-sales service. With assembly, maintenance, testing and repairs, we ensure that your special design always remains in perfect condition. Our reliable team provides you with superior customer service and ensures that your satisfaction is first and foremost.



## Corporate certifications

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on sustainability criteria



Management System  
ISO 9001:2015  
ISO 14001:2015  
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