

SEMPERIT 

**HIGH QUALITY
HANDRAILS**

RELIABLE AND SAFE



SEMPERIT

**developing, manufacturing and installing
handrails for more than 60 years.**

Our know-how, experience and the quality of our products
make us one of the world's leading companies in the handrail industry.



HIGH QUALITY

Our ability to produce high quality handrails is one of our key success factors and all major escalator manufacturers rely on Semperit products and services. To maintain high quality standards in a competitive environment, an in-depth knowledge of materials and manufacturing processes is necessary. All key processes are undertaken in-house, and well-defined processes and standards, ongoing tight quality control and continuous improvements are essential.

Process-Oriented Management System

Semperit is the world's first handrail manufacturer to be certified by ISO 9001:2015 and the only handrail manufacturer to be certified by ISO 14001:2015 and ISO 45001:2018.

All production sites are operated in compliance with strict and globally applied Semperit quality standards. Regular audits carried out by DNV and our re-certification confirm that we continuously fulfil these requirements.

High-Quality Material

To ensure our products are of the highest quality, Semperit uses best in class suppliers and materials. All materials and semi-finished goods are tested in Semperit laboratories equipped with state of the art test facilities. Static, dynamic and performance tests are conducted for both developments and serial production while relevant EN, ISO or DIN standards as well as internal requirements and specifications are applied.

Compounding

To ensure product durability, Semperit has developed rubber compounds with high resistance against environmental and operational stress. These compounds are best in class and produced in one of Semperit Compounding Departments. This gives us full control over raw materials as well as the compounding process and fits perfectly to successive processes.



Research & Development

Our chemists, textile and process engineers, as well as the department for product development provide technical advice and service. Thus all handrails are under permanent dynamic examination. We operate test centers in Austria and in China.



SEMPERIT

In a world that never stands still, our highly specialised polymer products keep our customers' technology and infrastructure running.

OVER 200 YEARS COMPANY HISTORY

1/3 of all escalators & travelators around the globe are running with Semperit handrails

3 HANDRAIL SITES WORLDWIDE

Newnan/USA, Wimpassing/Austria, Shanghai/China



Assistance by more than 100 service companies

Distributed in more than 80 countries

PRODUCING HANDRAILS SINCE 1955



Certified Management Systems: Environmental, Quality, Health & Safety

SUCCESS FACTORS: Quality, Innovation & 100% Customer Focus



We are testing our products from tensile strength, flexural behaviour, adhesion strength, sliding friction coefficient to behaviour under extreme ambient ozone concentrations."

Slavi Tanov, Head of Product Development, Handrails

State-of-the-Art Production Sites

All key production processes are conducted in-house: compounding, extrusion, rubberization of fabrics, vulcanisation, finish and packaging. As the first handrail supplier Semperit implemented a fully automated assembly process and independently from the production site handrails are vulcanised with the same press technology. Constant process control helps us to achieve the required grade of precision and reproducibility. Every produced handrail is shipped with a test certificate indicating the dimensions and the compliance with tolerance limits.

Skilled Staff

Continuous training of our staff ensures strict compliance with specified parameters and instructions in the entire production process.

Packaging

We offer several types of handrail packaging, developed for the different handrail types and lengths. Our goal is to send our quality products safely packed.

ADVANTAGES OF RUBBER

The first escalators were already equipped with handrails made of rubber. Up to 20 bending changes per one circulation of the escalator cause heavy loads for the handrail components. Assuming that a high quality handrail circulates over 2,000,000 times before being exchanged, the handrail has to resist more than 40,000,000 bending changes.

Best choice for escalator handrails

Semperit handrails were developed over the past decades in close cooperation with all well-known escalator manufacturers. The future requirements of handrails will further increase due to the continuing trend of reduced bending radii in the escalator industry. Rubber has this capability to resist such high strains while having excellent flexibility which results in smooth and energy efficient operation.



Safe operation due to dimensional accuracy



Smooth operation



Excellent Reliability



Flame resistance



Resistant to UV and Ozone



Easy to install



Non-staining



Proven & reliable technology – released by all escalator manufacturers

HANDRAIL STRUCTURE

Due to the smart combination of handrail structure and layer material our handrails can be used indoors as well as outdoors, while resisting heavy loads and remaining dimensionally stable.

Layer material

The material of the handrail layers can vary depending on handrail type and requirements. For more information on choosing the best product for your application please contact your responsible sales representative.

- Cover _____ ●
- Inner Layer _____ ●
- Stretch Inhibitor _____ ●
- Inner Layer _____ ●
- Sliding Layer _____ ●



HANDRAIL END PREPARATION

Semperit handrails are tailored to your specific application and are available with different pre-fabricated handrail ends for quick and easy installation.

Preparation of handrails to meet customer needs

In close co-operation with our customers and designers we develop and produce handrails of different cross-sections for many types of applications and a wide range of escalators and moving walkways made by the world's largest manufacturers. We offer several shapes and colours as well as specially prepared ends depending on the application.



EL – Endless

Application: precise length of the endless handrail is known; it is installed as an endless handrail; no further vulcanisation needed.



EO – One End Prepared

Application: precise length is not known; one end with a prepared end and the other fully cured and cut straight. On-site vulcanisation.



BO – Both Ends Prepared

Application: precise length is known, but cannot be installed as an endless handrail, fast and easy splice, on-site vulcanisation.



OV – Both Ends Vulcanised

Application: precise length of the endless handrail is not known beforehand, usually taken from reels (e.g. 400m), both ends must be prepared, spliced and vulcanised on-site.

HANDRAIL CUSTOMISATION

If you are interested in offering a more visible or individual handrail, we offer several possibilities to address your specific needs.



COLOUR

Semperit offers a variety of coloured handrails. The choice of high-performance pigments ensures extraordinary resistance to discoloration if exposed to sun or artificial UV-light.



DESIGN

Motion indicators on the handrail surface, in white, yellow or gray, show operation, speed and direction of travel. **Colored pictograms or logos** can be permanently vulcanized on the handrail surface for safety or advertising purposes.



NON-STAINING

Specially designed compounds ensure that the handrail remains stain-free even when exposed to

- high temperatures,
- ozone and
- UV environments.

CUSTOMER SERVICE

My first priority in my daily work is to meet my customer’s needs. I enjoy having direct contact with my customers and do my best to provide them with prompt service every day.”
Penny Pan, Customer Service Semperit China



GLOBAL NETWORK OF CERTIFIED SERVICE PARTNERS

Semperit cooperates with splicing companies all over the world. Their employees undergo a special training according to Semperit standards to install and repair our handrails. Being local to you they are available at short notice for on-site service (vulcanisation and/or repair work).



CUSTOMER FOCUS

At Semperit it is of great importance to have a close cooperation with our customers. This includes not only advice on handrail products, but also services regarding technical and operational issues. In this respect, we can rely on a well-trained team of sales staff, technicians and chemists.



VULCANISATION & HAND TOOLS

Semperit provides not only handrails but also all tools needed to obtain the required quality whenever handrails have to be connected endless on the escalator. Semperit offers all the tools for preparation of the handrail ends, as well as light-weight vulcanisation moulds with automatic temperature control maintaining the ideal working conditions for on-site vulcanisation.



CLEANING & CARE

Semperit offers special cleaning and sealing products for handrails. These ecologically safe fluids should be applied with a lint-free cloth or soft sponge. The cleaning fluid removes dirt, waxes and oil. This provides excellent polish and mechanical protection. The sealer should be especially applied after grinding and polishing of reworked sections of the handrail surface.



INFORMATION SERVICE

Semperit has published a series of data sheets with important handrail information such as „Measurement of the handrail length“, “Storage of handrails“, “Recycling & Incineration of handrails“. Please contact your sales representative to get further information.



RANGE OF APPLICATION

At +50°C in Las Vegas or -20°C in the Austrian Alps, escalators are installed in challenging environments. However, escalator manufacturers and passengers expect safe* and reliable functioning of the handrail in every field of application, which the Semperit product portfolio offers.



PUBLIC TRANSPORT

Due to the extraordinary high demands on the handrails in public transportation applications, Semperit's high quality handrails are the first choice. Semperit handrails are installed in metros, airports and train stations worldwide.



OUTDOOR APPLICATION

Semperit handrails are operated in outdoor conditions around the globe. Longtime field experience and customer feedback confirm that despite high ozone concentration and ambient pollution Semperit handrails are running constantly.



COMMERCIAL APPLICATION

The number of installed escalators in commercial areas like shopping centers, offices and hotels has been growing rapidly in recent years. Due to their reliable and energy efficient operation, Semperit handrails are installed on the majority of high quality escalators on the market.

*safe according to requirements of DIN EN115.

All specifications, numbers, calculations, test values, and data mentioned here – which are the basis for our customer consultation – are in accordance with the current state of the art and are the result of many years of tests and trials. As the individual operating conditions have an influence on product application, it is the sole responsibility of the customer to check the application conditions of each individual case, and whether the specified quality criteria of our products are adequate for the intended purpose. Improper use, excessive loading, or exposure to impermissible media can impair the product's function. Our experts will be happy to answer any questions you might have. Text and pictures, etc. remain in the ownership of Semperit Technische Produkte Gesellschaft m.b.H. The pictures and graphics shown are only representative images. No liability is accepted for mistakes or printing errors and data is subject to change at any time. Copying and distribution in any form whatsoever, in whole or in part, only with the express written consent of Semperit. Copyright © Semperit Technische Produkte Gesellschaft m.b.H., 03/2024, Version 4.0. All rights reserved.

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