

Schindler INTRUSS® Modernization Solution

A complete escalator upgrade

A woman in a red dress is walking up a modern, sleek escalator. The escalator has a dark frame and light-colored steps. The background shows a modern building interior with large windows and a glass railing.

Schindler INTRUSS® is an innovative solution for escalator upgrade

» **Minimizes building disruption**
Retention of existing truss allows the building to continue normal operations during installation.

» **Reduces tenant inconvenience**
Shortened lead and completion time returns escalator to normal service faster.

» **Enhances escalator performance**
New components and technology improve passenger comfort and safety as well as equipment reliability.

» **Improves aesthetics**
Contemporary design and stylish materials create a bold, fresh look.

» **Increases energy efficiency**
Technology upgrades significantly lower energy consumption.



Fully modernized escalators without the hassle

Using your existing truss, the Schindler INTRUSS® Escalator Modernization Solution can make your old, outdated escalators comparable to a new Schindler 9300, the industry's premier commercial escalator.

Modernized vs. new

In an occupied building, it's not always feasible to remove old escalators and install new ones. It can be more expensive if removing the old truss requires extensive general contracting work. And, while no two projects are exactly the same, an in-truss modernization can sometimes be completed in less time than installing a new escalator in the same building.

When modernizing is the best choice

For commercial escalators with a vertical rise of up to 40 feet, Schindler offers a systematic modernization that can turn any leading brand of escalator into a fully modernized Schindler unit. The Schindler INTRUSS® Escalator Modernization Solution delivers performance, safety, reliability and styling that is comparable to our industry-leading Schindler 9300 escalator.

Let Schindler show you the way

As a global leader in escalators, you can rely on our expertise to help you determine the best course for upgrading yours. Our experienced team will help you weigh your options and provide the best solution for transforming your old escalators into new, state-of-the-art mobility systems.



The Schindler team is ready to help make your escalator upgrade a smooth and simple process. We'll be with you from initial planning to new system startup.

An upgrade is advisable when your escalators:

- Are frequently not working requiring service
- Incur higher than normal maintenance costs
- No longer meet current safety standards
- Deliver a noisy, rough ride
- Show visible signs of wear
- Reflect an outdated appearance.

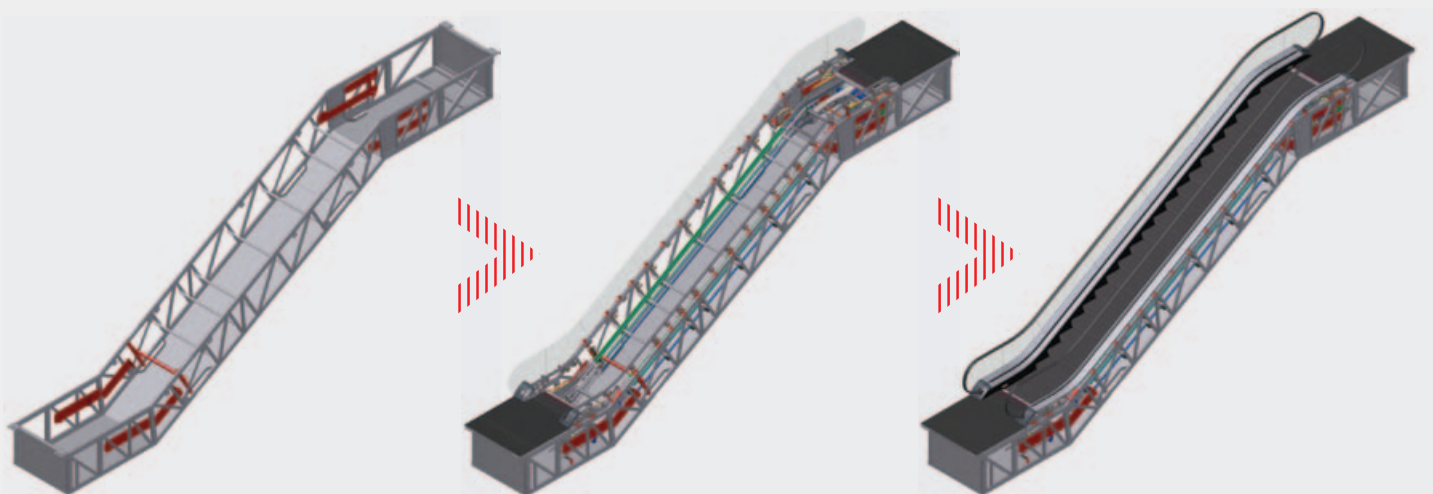
The benefits of a Schindler INTRUSS® Escalator Modernization Solution include:

- Getting a new escalator within your existing equipment footprint
- Improving performance, reliability and aesthetics
- Achieving full compliance with current safety codes and regulations
- Extending service life with all new components.

Advantages include:

- No structural changes to the building
- Building remains in normal operation during construction
- All new components are manufactured in our award-winning escalator plant
- Orders are processed and shipped quickly
- All parts meet current safety codes
- The modernization is performed by a team of specially trained technicians
- All components are welded directly to the truss
- Technicians adhere to strict safety procedures to help ensure their safety and the safety of anyone in the vicinity of their work.

Schindler INTRUSS® Escalator Modernization Solution Process



1. The existing truss is stripped of all old components and cleaned. Old x-members are replaced with new ones.

2. The old truss is repainted and all new components are securely fastened to the new x-members.

3. Once completed, your stylish new Schindler escalator is ready for years of smooth, reliable and safe operation.

Minimizes building disruption

For populated buildings in daily use, modernizing escalators offers distinct advantages.

No structural changes means normal operation

Leaving the existing escalator truss in place eliminates the need to physically detach and remove it from the building. That process can be intrusive, noisy and messy. In most commercial or retail environments, it is highly desirable to avoid this kind of imposition on the building's tenants and visitors. Schindler's INTRUSS® Escalator Modernization Solution can be a far more tenant-friendly solution. The escalator is systematically dismantled and rebuilt in place. All work stays confined to a designated work area.

A safe work environment

Careful steps are taken to isolate the work area from the normal flow of building traffic to help ensure everyone's safety during the modernization. It also gives installers the freedom to manage their workflow and adhere to the most efficient work schedule.



Reduces tenant inconvenience

Schindler's INTRUSS® Escalator Modernization Solution is not only less disruptive; it may return your escalators to service sooner.

Plan for success

Thanks to a step-by-step installation process that doesn't require significant structural changes, your building can remain open during the entire modernization process. Neither you nor your tenants need to incur any expenses as a result of lost business.

In addition, the Schindler INTRUSS® Escalator Modernization Solution process often achieves a shorter completion time. Careful planning and a structured approach help accelerate component ordering and delivery. This, combined with thoroughly trained and experienced technicians, helps to expedite a smooth and uninterrupted installation.

Value added feature

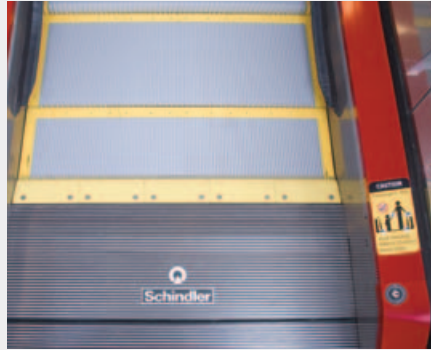
Schindler remote monitoring provides around-the-clock monitoring of the escalator's operational status. In the event of system interruption, your Schindler technician will be able to quickly identify the precise source of the problem and return the escalator to service. Less downtime will mean fewer tenant complaints.



The Schindler INTRUSS® Escalator Modernization Solution incorporates the latest technological advances, turning your old escalators into better than new condition. Our systematic approach allows this to happen while your building remains open. Normal activities and business can be conducted throughout the entire process.

Enhances escalator performance

One look and passengers will see your escalator's visual transformation. One ride and they'll feel the improvements in quality. You'll enjoy knowing they are also safer.



Escalators are in every sense of the word a "moving" experience. The Schindler INTRUSS® Escalator Modernization Solution improves everything a rider sees, hears and touches. Your new escalators will be quieter, smoother, safer and more reliable.

Looks and feels like new

Everything that riders see and touch is new including:

- Steps
- Handrails
- Balustrades
- Skirts, and more.

They will also notice your modernized escalators have a much smoother, quieter ride. This is made possible by new components like:

- Rollers
- Full-mesh gearbox
- High-performance drive
- Adjustable comfort start feature.

As safe as new

You can relax knowing your modernized escalator meets the latest safety standards and incorporates all the safety features found on the Schindler 9300 escalator. They include:

- Controlled stop braking system
- Step-to-skirt gap guidance system
- Continuous roller monitors
- Lower-friction handrail guidance system
- Foot deflector brushes on skirts
- Yellow safety combfingers at step entrance and exit
- Step demarcation lighting
- Signage reminds passengers of safe-riding rules.



The Schindler INTRUSS® Escalator Modernization Solution will bring your escalators into full compliance with the safety and safeguards required on new escalators by ASME A 17.1.

Improves aesthetics

A stylish modernized escalator creates a striking visual impact in any building.

Favorable first impression

A full modernization can transform the look of your old and worn escalator. With the Schindler INTRUSS® Escalator Modernization Solution you can even add new optional upgrades that can take your escalators to the highest levels of contemporary styling.

- Attractive, robust deckings in a choice of finishes
- Optional lighting for visual impact and safety
- Color choices for steps, deckings, skirts, newel end caps and handrails
- Colorful powder-coated balustrades are also available.

Using standard variants and options available in the Schindler INTRUSS® Escalator Modernization Solution, you can completely transform the dated look of your older escalators.

Optional LED lighting can add both sophistication and safety to modernized escalators.



Increases energy efficiency

In addition to meeting your highest expectations for performance, safety, and reliability, your modernized escalators will help lower your operating costs.







New technology means savings

There are three ways to reduce power consumption of escalators and Schindler employs all three:

- **More efficient drive systems.** An optimized, compact drive system is perfectly matched to the demands of the rise to reduce power consumption by up to 30 percent.
- **Components requiring less power.** Components like our single piece aluminum steps are designed to be

strong yet lightweight. Aluminum steps achieve a total weight reduction of 40 percent compared to steel steps so they require less energy to move them.

- **Intelligent power management software.** Schindler's ECOLINE power management packages can reduce power consumption by up to 36 percent compared to conventional operating systems.

ECOLINE Power Management Packages*			
ECOLINE	ECO	ECO Plus	ECO Premium
			
Energy Consumption	-3,001 kWh -25% 	-4,273 kWh -36% 	-3,888 kWh -32% 
Operation Mode	Continuous operation with ECO power feature: – Motor power adjusts based on passenger load	Stop-and-go operation with ECO power feature: – Escalator stops when no passengers are on it	Slow-speed operation with ECO power feature: – Escalator slows down when no passengers are on it
Application	For continuous medium to heavy passenger traffic	Intermittent flow including periods of zero passenger flow Non-commercial applications	Intermittent flow including periods of zero passenger flow Commercial applications
Benefit	<ul style="list-style-type: none"> – Maintains passenger flow – Power consumption reduced by up to 25% – Reduced power plant CO2 emissions – Short amortization period 	<ul style="list-style-type: none"> – Power consumption reduced by up to 36% – Reduced power plant CO2 emissions – Increased escalator lifespan 	<ul style="list-style-type: none"> – Passenger flow maintained, as escalator is in motion when passengers are approaching it – Power consumption reduced by up to 32% – Reduced power plant CO2 emissions – Reduced wear & tear on components
CO ₂ Footprint	Minus 4500 kg per year	Minus 6410 kg per year	Minus 5830 kg per year
Amortization	3 months	16 months	24 months

*Notes

1.) Values based on theoretical calculations for one Schindler 9300 escalator. Average value for up and down operated escalator pair:

4.5 m. Step width: 1000 mm. Speed: 0.5 m/s. Load profile: 11 hours per day, 365 days per year. 2.5 hrs – 0%. 7 hrs – 25%. 1 hr – 50%. 0.5 hrs – 75%. 0 hrs – 100%.

2.) Standard Operation Mode: 11,967kWh, 100% continuous running.

3.) ECOLINE packages are available where permissible by code. Please contact your Schindler representative for availability in your area.





Schindler – We Elevate

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For more information, including the location of the Schindler office nearest you, please visit:

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Schindler has received renewal to ISO 9001 and ISO 14001 certificates.



Schindler prints with vegetable-based ink on paper containing post-consumer waste fiber.
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