

next floor

Setting Our Sights



From the top of the tallest buildings to the four corners of the Earth, *Next Floor* explores some of the ways technology complements our lifestyles and our mobility.



Schindler



3

Practical Magic?

A message from Jakob Züger

4

Formula for the Future

Algorithms, Humana Waterside building in Louisville and Schindler's PORT Technology

8

Thoroughly Modern Mobility

30 Rock, NYC modernization

12

Technology on Track

Transit projects from New York and China

14

Servicing Technology

The Schindler Center for Service Excellence and service technician commitment

17

Shoppers' Oasis

The Dubai Mall

20

Technology That Moves

Liège-Guillemins TGV Railway Station in Belgium

24

New Dimensions in Building Design

Building Information Modeling, or BIM

26

Next News

Schindler news from North America and beyond

Cover photo: Top of the Rock observation deck at 30 Rockefeller Plaza, New York, NY. **Photo, page 2:** Schindler escalators at Liège-Guillemins TGV Railway Station in Belgium.

Next Floor is published by Schindler Elevator Corporation, Corporate Communications North America.

Correspondence: Schindler Elevator Corporation, *Next Floor* Editor, P.O. Box 1935, Morristown, NJ 07962-1935, uswebmaster@us.schindler.com.
www.us.schindler.com



Practical Magic?



Technology is described as the practical application of knowledge, and to many of us it seems that the pace of technological growth is traveling at breakneck speed. Each day it becomes more challenging to keep up with the latest developments in virtually every field of endeavor. Change appears so fast it's like sleight of hand; we don't see it happening, we see only the result — like magic.

The force that's driving this advance of technology is not magic; it's the exponential growth of human knowledge. The statistics are astonishing. For example, more than 1 million books are published each year, and 100 billion searches are conducted on the Internet each month. The first text message was sent over a cell phone in 1992, and the number of texts now sent each day exceeds the population of our planet. And it is estimated that the amount of data generated from the birth of humanity up to the year 2003 was five exabytes, or about the same amount of data the world generated in the last two days!


At Schindler, our research and development efforts contribute to the advancement of technology through the development of new elevator and escalator products and systems. Two recent introductions are illustrative of this. Our Personal Occupant Requirement Terminal, or PORT Technology, uses a touch-screen interface and actually learns passenger travel habits within a building, anticipating future needs for optimum tenant convenience. Schindler Destination Interface elevator modernization quickly and easily converts conventional elevator controls to Schindler ID® destination dispatch, allowing building owners to see performance improvements almost overnight. These advances are just the beginning of our efforts. To help ensure that our technicians acquire the knowledge required to service these cutting-edge products, our Center for Service Excellence conducts ongoing in-depth training and education programs. It's the practical application of their knowledge that assures our customers that their mobility needs are met seamlessly and dependably, because the future arrives every day.

A handwritten signature in black ink, consisting of stylized, overlapping loops and lines, representing the name Jakob Züger.

Jakob Züger
Chief Executive Officer, Americas

You've probably heard or seen the term "algorithm," but unless you've taken an advanced math course in school you may not be familiar with them or how they're used.

Formula for the Future

A close-up photograph of a modern elevator call button. The button is a rectangular panel with a digital display. The display shows a large white 'C' with an upward arrow, and the text 'Floor 11' below it. Above the 'C' is a small icon of a person and the text 'Please use lift'. A hand is shown tapping a white card on the bottom of the button panel. The background is a blurred view of an elevator shaft with wooden walls and a metal handrail.

So, what exactly are algorithms? In their simplest form, they can be described as a series of "if ... then" instructions. When your Internet search engine lists results or your computer's spreadsheet program adds up nicely, there's an algorithm at work. If traffic is moving smoothly through city streets, thank an algorithm. And, when an elevator takes you efficiently to your destination, there's probably a variable algorithm behind the scenes.



Algorithms in action

A good example of algorithms at work can be found in Louisville, Kentucky, at the Humana Waterside building, originally constructed in 1923 and refurbished in 1985. According to Mike Roberts, workplace solutions operations manager, "At the time the building was refurbished, it accommodated about 3,000 associates, but today it houses almost twice that number. In fact, this 12-story building moves as many tenants as some skyscrapers." Steve Evans, associate experience leader, points out, "With an elevator system designed 25 years ago, it's easy to see why our Humana associates were at times forced to wait five, 10, even up to 25 minutes for an elevator to take them to their desired floor." John Brown, Humana's vice president of Medicare Service Operations, described the general situation as "chaotic." Beyond the obvious inconvenience, the problem was a loss of productivity, and the solution would be found in very sophisticated algorithms. ►



The Humana Waterside building with nearby Louisville skyscrapers in the background



Photo left: The Schindler PORT terminal employs touch-screen and card reader interfaces. Photo right: PORT Technology adapts to passenger schedules and requirements.

- The first of these advanced algorithms was one used by Schindler ID®, which improves elevator service through destination dispatching by grouping passengers headed for the same or nearby floors together. This minimizes unnecessary stops and reduces passenger journey times. Now Humana has installed Schindler’s PORT Technology, short for Personal Occupant Requirement Terminal, which is the successor to Schindler ID that uses the newest generation of smart elevator dispatching systems.

Through a touch-screen PORT, the system recognizes building occupants and offers them a personalized menu of their most frequently visited destinations. When a floor is selected, the system provides passengers with a seamless journey, using the optimal route with the shortest possible time to complete it. When a building visitor selects a destination floor, the PORT Technology follows the same procedure, and adds the benefit of controlled access for enhanced security. The PORT system’s effortless touch-screen interface belies the complexity of the underlying algorithm that calculates innumerable “what if” scenarios at the speed of light. Mike Roberts adds, “We love the PORT system. Because of its cutting-edge technology, we’re using our elevators more efficiently, and we’re seeing real energy savings which support our ongoing sustainability efforts.”

Variety, the spice of algorithms

While many of us would not describe the language of mathematics as colorful, algorithms have some interesting names: backtracking, brute force, greedy, and divide and conquer. The algorithm behind Schindler’s PORT Technology might be best dubbed: Wow!

Photo below, top: Steve Evans, associate experience leader for Humana. Photo below, bottom: A Schindler technician inspects the PORT computer that controls the elevator destination-dispatch system.





Color This Technology Green

Schindler's PORT Technology brings abundant energy-saving features in addition to its advanced dispatching capabilities.

Each PORT terminal's proximity sensor tells it when to be active and at all other times puts it into low-energy consumption mode.

When the terminal screen illuminates, an ambient light sensor determines only the brightness level required, again optimizing energy usage.

The PORT Technology ensures elevator trips are as efficient as possible. This produces a very resourceful use of energy, even during heavy traffic.

During light traffic, the PORT Energy Control Option places nonessential elevators into an energy-conserving standby mode. ■

Thoroughly Modern Mobility

Modernization can be defined as the act of improving something. As a product starts to lose its efficiency, measures can be taken to restore or exceed its original performance level without the need to replace it.

Modernization makes sense

One of the advantages of modernization lies in its economics. This is certainly the case when considering the future of high-rise buildings in congested urban settings. Complete teardowns and rebuilds are rarely practical or financially viable options. However, if such buildings are going to continue to attract and support tenants with the latest technologies and systems, modernization programs must be undertaken. Schindler is constantly working to find ways of applying our latest technological developments to our older products. The ability to bring new technologies to older systems is the essence of effective modernization.

This 15-foot tall statue of Atlas has stood at the main entrance to Rockefeller Plaza since it was installed in January, 1937.





Photo above, top: Skaters take a spin around the world-famous Ice Rink at Rockefeller Center, one of New York's most celebrated attractions. Photo above, bottom: The Weather Room at the Top of the Rock hosts receptions for guests and provides magnificent views of the Manhattan skyline.

The mezzanine-level sky shuttle lobby features a sparkling Swarovski crystal waterfall chandelier.

Higher and higher

An excellent example of how a Schindler modernization works for the benefit of building owners can be found at 30 Rockefeller Plaza, a 70-story building that many will recognize as the skyscraper that soars majestically behind the Rockefeller Center ice skating rink. Having acquired Westinghouse Elevator Company, Schindler has been the building's sole provider of mobility systems, service and modernization since it was originally constructed in 1932. Always a popular landmark, "30 Rock" has become an even more popular New York destination with its recently completed Top of the Rock indoor and outdoor observation decks on the 70th floor. In addition to offering spectacular views of Manhattan, there's a unique venue with open-air terraces called the Weather Room, where special events can be hosted.

Creating the Top of the Rock was a challenge for the building owner. The famous Rainbow Room restaurant and elevator machine rooms on the 65th floor blocked elevator access to the 69th and 70th floors. To solve this challenge, Schindler engineers developed a modernization plan that upgraded eight passenger and four service elevators. Several were transformed into "sky shuttles" to take both tourist and general office traffic to the 67th floor. ►

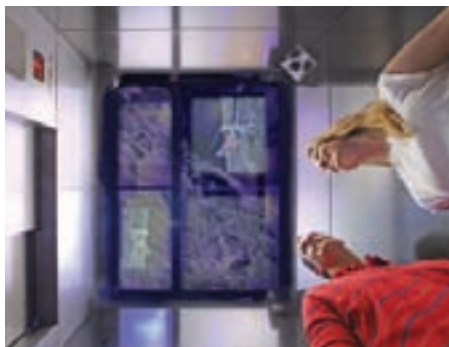




Schindler escalators transport visitors from the 67th floor indoor observation area to the 69th floor Top of the Rock observation deck.

Photo right: Hoisted in modules to the 67th floor, all Schindler escalator sections are aligned for assembly and installation.

Photo below: Passengers enjoy a historical video of Rockefeller Plaza projected onto the dome of the sky shuttle elevator car as it travels to the Top of the Rock observation deck.



► Reaching the top

Bringing the new equipment to the machine rooms on the upper floors presented a major challenge. Would helicopters be required? Perhaps a crane atop the building could do the lifting? Instead, Schindler's unique modular elevator hoist machines were disassembled into five parts with each designed to fit inside an existing service elevator car. When the sections were brought to the machine room, they were reassembled. In order to bring the escalators to the upper floors, a similar approach was employed. A part of the building had to be opened, and new, modular Schindler escalators were disassembled and then lifted through the elevator hoistways to the 67th floor. Finally, they were reassembled and installed to bring passengers to the 70th floor observation area.

Having serviced the elevators since 1932, Schindler continues to maintain the modernized system, which operates 365 days a year from 8 a.m. until midnight. The modular escalators weren't the only innovations. New Schindler computer-controlled destination-dispatch systems have been added to the eight service and passenger elevators, and four sky shuttles to improve passenger convenience and system efficiency.

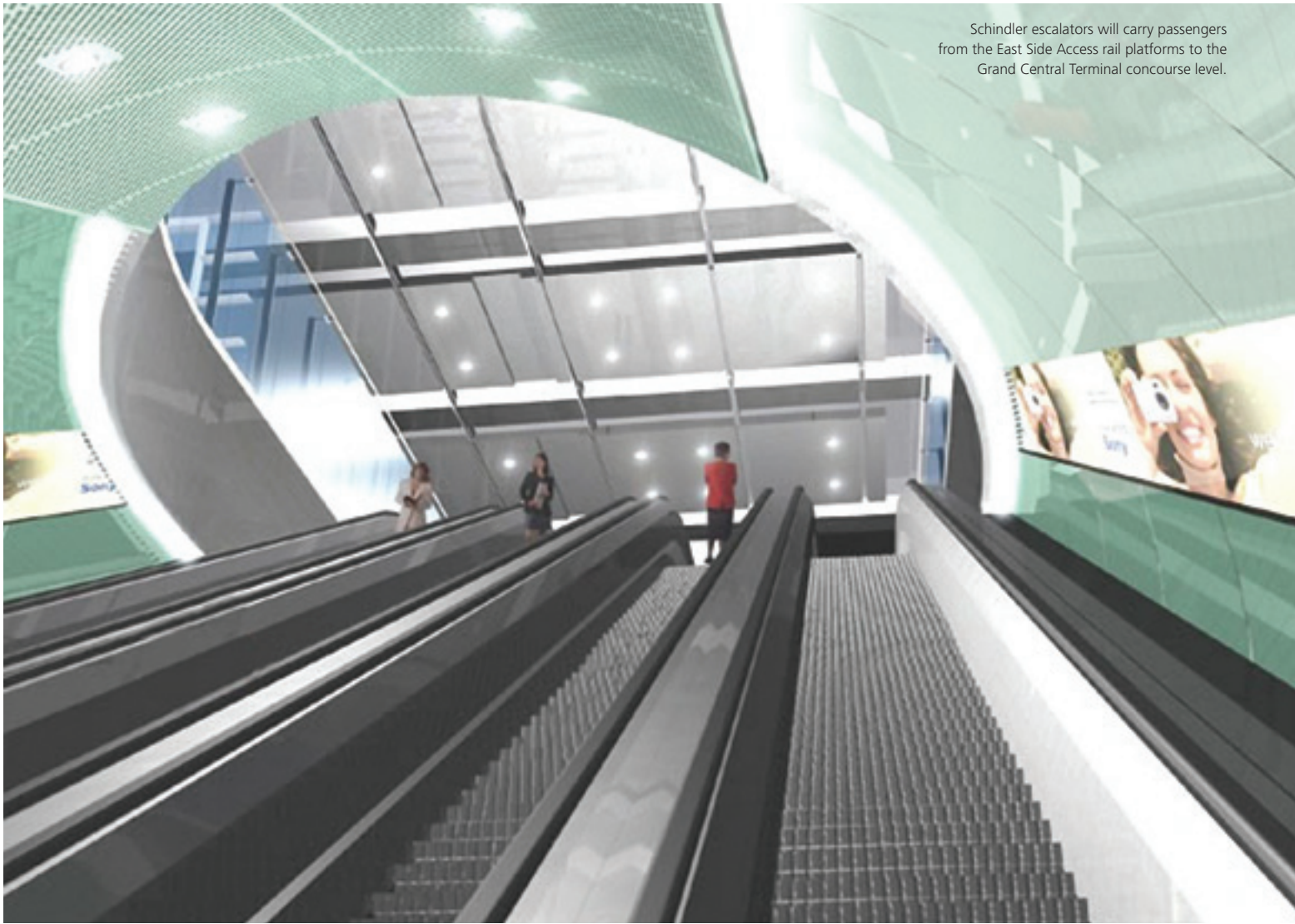


Top of the Facts

Height:	Upper decks are 850 feet above street level
Area:	Three levels, 55,000 square feet
Design:	Styled after decks of 1930s ocean liner
View:	360-degree view of New York City skyline
Cost of renovation:	\$75 million
Hours of operation:	Daily, 365 days a year, 8:00 a.m. to midnight
Tickets:	www.topoftherocknyc.com/tickets , or at box office located on 50th Street between 5th and 6th Avenues, or by phone 877.NYC.ROCK.

A visitor exits a Schindler escalator at the 69th floor Top of the Rock observation deck.

Today, a phased approach to elevator and escalator system modernization can produce seamless upgrades in performance with no tenant inconvenience. Everything from modular assembly to the virtual instantaneous integration of advanced destination-dispatch electronics with existing elevator controllers is available to building owners and operators. It's never been easier for an older building to compete with a young upstart. ■



Schindler escalators will carry passengers from the East Side Access rail platforms to the Grand Central Terminal concourse level.

Technology on Track

From Grand Central to Guangzhou

New York's Long Island Rail Road (LIRR) and Grand Central Terminal (GCT) are separated from China's nationwide rail system by more than 11,000 miles, but both have something in common — Schindler. Two new projects are under way. The one in New York will connect the LIRR to Grand Central Terminal and is known as the East Side Access project. The China project will connect 17 stations stretching from Changchun in the far north to Guangzhou on China's south coast, a distance of more than 1,800 miles.



The mezzanine level of East Side Access will serve as a link to rail platforms, concourse and street levels of New York's Grand Central Terminal.

A faster commute

Slated for completion in 2016, the East Side Access project will create a faster commute from Long Island to the east side of Manhattan. Currently, the only Manhattan service that the LIRR operates is to Penn Station. The creation of the new LIRR terminal underneath Grand Central will increase train capacity to and from Manhattan, and will create a direct trip from Long Island to East Midtown Manhattan.

Schindler's contract for the project includes options for the installation and maintenance of up to:

- 22 elevators, including eight traction and 14 hydraulic units
- 47 escalators, 17 of which will be 91.5 feet long and more than six stories tall.

All of the elevators and escalators will be manufactured in the United States, and will comply with Buy America requirements specified by New York's Metropolitan Transportation Authority.

A greener terminal

The Schindler escalators and elevators will be among the greenest in the LIRR system, and will help contribute to the overall energy efficiency of Grand Central Terminal.

The escalators utilize standard high-efficiency motors and regenerative drives that can return energy back into the building's electrical system, thus reducing the overall carbon footprint of the project. Additionally, optional intermittent operation features can save more than half of the total energy usage of the escalator by operating at crawl speed when there are no passengers. All of the Schindler elevators and escalators feature remote monitoring 24 hours a day, for immediate callback response and continuous operational analysis.

A massive project

The Ministry of Railways project in China involves eight regional railway companies and spans the length of the country from north to south. Among the 17 stations to be equipped with 353 Schindler escalators are some of China's most important railway junctions, such as Shenyang and Tianjin. All 353 escalators will come from Schindler's production facility in Shanghai, and include both indoor and outdoor installations. Schindler is one of the few companies in the world that can handle a contract of this scale and complexity, thanks to the company's production capacity and its extensive network of branches throughout China. Schindler is also working to a very tight schedule, with a target date for completion by May 2011. ■



New stations offering regular, high-speed and express service are being constructed along the extensive rail line network to meet ever-increasing mobility needs within China.





The Schindler Center for Service Excellence in Holland, Ohio, provides technical support for our service business throughout North America.

Schindler technicians receive extensive training required to service the world's most advanced escalators and elevators.

Servicing Technology



Photo left: Rigorous and continual training ensures our technicians will deliver service excellence. Photo right: Even our most senior and expert technicians receive additional instruction to hone and expand their knowledge of maintenance and repair techniques.



Our demands for mobility rely on hundreds of thousands of elevators and escalators already in operation, moving masses of people from one place to another, day in and day out.

Located in Holland, Ohio, is Schindler's command center for service operations, the Center for Service Excellence (CSE). There, Schindler technicians acquire the skills needed to maintain the highest level of service expertise on all brands of elevators and escalators. In addition, the CSE continuously

applies the technologies of tomorrow to older elevators and escalators in the Schindler Service portfolio. Energy-saving features, usage-based maintenance modules, remote monitoring, and improved safety and reliability are constantly being adapted to existing equipment.

Efforts at the CSE include the development of intelligent traffic management, state-of-the-art maintenance methods and real-time, dynamic customer solutions, as well as new safety and ride-comfort products and services. Schindler

researchers also work closely with leading institutes of technology, and collaborate with industry partners in airline, shipbuilding and other sectors.

New technologies are also being applied in the daily maintenance activities of Schindler technicians. Advanced wireless devices keep the technicians in constant contact with national and international troubleshooting resources, as well as customer service and dispatching associates. ►





► **Up close, from afar**

Imagine a field engineer in New York City receives a message that a technician servicing an elevator in San Diego, California, needs assistance in diagnosing a problem. The elevator in question experiences a fault and automatically transmits the data to Schindler's Remote Monitoring Center, which, in turn, can dispatch a technician, along

with troubleshooting hints. Now imagine that the New York City field engineer can remotely view an entire year's event log on that particular elevator, along with all the data related to the current issue. In fact, the engineer in New York is able to download and analyze the data as the technician is working on that same elevator. Sound like science fiction? It's not. It's called Schindler Remote Monitoring™, and here's how it works.

Onboard sensors monitor the elevator's operation 24 hours a day. If a problem is detected, Schindler's Remote Monitoring Center is automatically and immediately notified. All problems are routed

through an advanced diagnostic system. This "intelligent" system analyzes the problems, and where needed, generates a corrective action plan for the technician. The system then communicates that plan automatically to the technician's FieldLink™ hand-held computer. The technician receives this data, which includes detailed information about the issue to be addressed and the corrective action plan. The result is up to a 22 percent faster return to service time versus conventional troubleshooting. Customers can also see all of this performance data at any time because it is uploaded in real time to their Schindler Customer Score Card™ account at www.us.schindler.com. ■

Photo above: When their expertise is required, Schindler field engineers are available for advanced troubleshooting. Photo below: Field engineers can immediately access a wide range of data on the specific equipment requiring service. They can provide the technician with the guidance needed to quickly return the equipment to service.



Shoppers' Oasis

The Dubai Mall is at the heart of a 500-acre mega-development —
Downtown Dubai — in the port city of Dubai. ►



For shoppers, this is indeed a paradise with 1,200 upscale shops offering the latest in fashion and accessories. In terms of area, The Dubai Mall is one of the largest in the world, occupying a space that could encompass 50 soccer fields. Of course, exploring its seemingly endless retail outlets is likely to work up shoppers' appetites, which are satisfied by more than 160 eateries offering everything from fast food to gourmet meals. For a diversion from shopping, there's Dubai Aquarium & Underwater Zoo, featuring more than 33,000 aquatic animals and the world's largest acrylic viewing panel; the Olympic-sized Dubai Ice Rink; the UAE's largest megaplex with 22 movie screens, Reel Cinemas; the region's largest SEGA indoor theme park, SEGA Republic; and the award-winning children's edutainment concept, KidZania®. The Dubai Mall attracts more than 750,000 visitors each week, so it's easy to see how keeping everyone moving comfortably and reliably through this massive environment is vital to operations.

Shoppers on the move

Schindler mobility solutions within the expansive, multilevel mall and its parking area keep visitors moving. The 150 Schindler escalators and four moving walks are well integrated into the mall's design — finishes ranging from gypsum to metal cladding to wood closely match area aesthetics. All escalators are easily seen and accessible for reaching the mall's various levels; some are fully panoramic, revealing their intricate inner workings to passengers. The 90 Schindler elevators are located near major pathways beside the parking area, aquarium, ice rink and atria. Most of the elevators are equipped with LCD panels that can be programmed to provide passengers with information regarding mall attractions, events, news and weather.

Luxury by the Numbers

Grand inauguration on May 8, 2009

37 million visitors in its first year in operation

5.9 million square feet of interior floor space

More than 160 restaurants and cafes

22-screen cinema

2.6-million-gallon aquarium

150 Schindler escalators

90 Schindler elevators

4 Schindler moving walks

14,000 car parking capacity

Photo below: This graceful waterfall with sculpted divers provides movement and a natural backdrop in the mall lobby.



Photo far left: Shoppers take a refreshing break on the mall's Olympic-size ice skating rink. Photo left: The Gold Souk atrium immerses visitors in time-honored Arabic design.

Connected to luxury

The Dubai Mall is home to many of the most famous names in fashion: Armani, Burberry, Chanel, Dior, Fendi and Ralph Lauren, to name a few of the 70 haute couture stores. The mall also houses one of the world's largest indoor gold souks, a traditional Arabian market focused on gold and jewelry. With 220 gold and jewelry retailers, the Gold Souk highlights in sculpture, art and decor the journey of traveling merchants who crossed the desert to trade gold and other precious commodities thousands of years ago. Dubai's pioneering architecture and chic tourist appeal have made it the premier destination within the United Arab Emirates, a sparkling gem on the Arabian Gulf. ■

The spectacular aquarium contains more than 33,000 living animals representing 85 different species — one of the most diverse collections in the world.



Technology That Moves



Products and equipment that must work in the great outdoors, where they may face extreme heat and cold, moisture, vibration and rough treatment, need to be built to more rigorous specifications. When it comes to mobility, public transportation applications place significant burdens on all manner of equipment. First, there are heavy passenger loads combined with exposure to the elements that include blazing heat, wind-blown dirt, snow, rain and subzero temperatures. Not only are airplanes, trains and buses subjected to these conditions, but so are transport terminals like the majestic Liège-Guillemins TGV Railway Station in Belgium.



Photo above, left: The sweeping design of the Liège-Guillemins station presents an elegant complement to the surrounding countryside. Photo above, right: A Schindler escalator connects passengers to the rail departure and arrival level.

As a centerpiece in the region's transportation network, the station must meet the constant requirements of getting people to their connections smoothly, reliably and efficiently. Because the elevators and escalators moving passengers in, out and through this terminal would have to withstand punishing conditions, choosing the right supplier is crucial.

Schindler is up to the challenge

Schindler has been moving passengers safely and efficiently for more than 135 years. Our products incorporate the latest technological advances and endure exhaustive testing to meet the demanding requirements of transportation facilities around the world. Attractive on the outside but tough on the inside, Schindler elevators and escalators are built with drives and components manufactured to the highest engineering and quality standards, and they stand up to the most challenging workloads. ►



Exposed to the elements, rugged yet graceful Schindler escalators bring visitors and passengers in and out of the Liège-Guillemins station.

Fast Facts on the Liège-Guillemins TGV Railway Station

Architect: Santiago Calatrava
Structure: Steel, glass and concrete cast on-site
Size (including tracks): 527,000 square feet
Span: 590 feet
Height (above tracks): 115 feet
HVAC: None, naturally ventilated
Cost: \$410 million
Rail: Nine tracks, five platforms, 21,000 passengers
Bus: 1,620 buses daily, 15,000 passengers
Schindler elevators: 12
Schindler escalators: 40
Schindler moving walks: 10

► A mobility masterpiece

As robust as Schindler products are on the inside, they are stylish and sophisticated on the outside. The twenty pairs of Schindler escalators and twelve Schindler elevators in the striking Liège-Guillemins TGV Railway Station are an excellent example. Completed in September 2009 and designed by architect Santiago Calatrava, the Liège-Guillemins TGV Railway Station is the main rail and bus terminal serving the city of Liège and a vital hub in Belgium’s transportation network enhancing urban mobility. In addition to the national traffic, the Liège-Guillemins station connects Liège to Paris, Aachen, Cologne and Frankfurt.

The Schindler escalators, some of which are exposed to the rain and snow of Belgian winters, have been visually integrated into the station’s design. Glazed balustrades and stainless steel finishes work in concert with the station’s structural elements to create an appearance that has been described as revolutionary, futuristic, daring and even dreamlike. The escalators are symmetrically placed at the foot of the main roof of the station and lead passengers to large overpasses, where the Schindler moving walks connect them to interior sections.

In the transition from the passenger terminal to a mall across the station ground floor, the elevator system is an important element of visual continuity. Here, the curved lines of the terminal’s interior are complemented by six circular, panoramic Schindler elevators. Unseen beneath the graceful lines and shimmering materials in these Schindler elevators, escalators and moving walks is the advanced technology and durability demanded for reliably moving 36,000 passengers each day through the station and up into the fascinating landscape of Liège. ■



Photo right, above: Dramatic lighting accents these Schindler escalators that carry passengers to and from the track level of the station.
Photo right, bottom: A Schindler elevator opens to the station’s upper level.



A uniquely designed, glass-encased Schindler elevator highlights the futuristic interior of the Liège-Guillemins station.



New Dimensions in Building Design

Buildings are immensely complex structures that incorporate multiple interconnecting systems for electrical service, plumbing, heating, cooling, fire suppression, lighting and mobility, among others.

Architects prepare two-dimensional drawings and blueprints of planned buildings, and then pass this information along to general contractors. The general contractors supervise subcontractors, who specialize in specific structural and service areas. Tremendous care is applied in designing, coordinating and scheduling the thousands of details related to the construction of a building. However, it would not be surprising to hear a contractor utter something like, “Can someone tell me why there’s a 6-inch water service pipe running through the middle of what’s supposed to be an elevator hoistway?” or “Why is a beam poking through that wall?” While these types of problems don’t happen often, when they do they’re costly to fix — almost \$16 billion annually, according to the U.S. Department of Commerce Technology Administration.

Enter Building Information Modeling

Building Information Modeling, or BIM, is a computer-based modeling technique that employs 3-D, 4-D and even 5-D. The 3-D modeling permits visualization of a building as a three-dimensional, semi-transparent object that depicts interior structures. As the architect draws floor plans, the software automatically creates elevations, and materials schedules are automatically generated from



Image above: BIM allows all design and construction team participants to visualize what is to be built in a strikingly realistic, simulated environment.

musical vocal group, you'd be correct; but in BIM, 5-D represents cost. Think of it as a forecast of capital outlays.

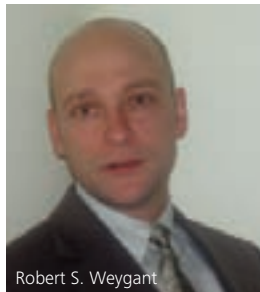
As software, BIM can be shared among architects, contractors, subcontractors and materials suppliers, with each person adding relevant input, and creating an evolutionary, detailed construction model and a rather large electronic file, or files, in the process. BIM is a rapidly growing technology thanks to increases in computing power, and it is available from a number of architectural software suppliers.

What they're saying

Architects, building owners and developers are enthusiastic about the benefits of BIM. According to John Moebes, director of construction at Crate and Barrel, "BIM is a necessity, just like a cell phone and e-mail. And if a company doesn't have it in the next two years or so, they will be left behind."



John Moebes



Robert S. Weygant

information built into the BIM objects. The model can be rotated 360 degrees or viewed from an overhead or bottom-up perspective. This type of visualization can be extremely helpful in determining the best location for building systems and for spotting potential conflicts; the software even provides conflict alerts. A 4-D model animates the construction of the 3-D building model over time, which aids in determining who does what, when. And if you thought the Fifth Dimension was a popular 70s

Robert S. Weygant, chairman, CSI BIM Practice Group and lead BIM developer at ARCAT, adds, "The growth of Building Information Modeling as a technology is largely driven by the number of manufacturers that are providing components for the architects to use. BIM is becoming a necessity for many manufacturers, as architects are requiring that they provide BIM components the same way they do for quality specifications and appropriate CAD drawings. Recently,

Schindler signed to have their products modeled for use by the Architectural, Engineering, and Construction (AEC) communities. This shows a forward-thinking approach to bringing their products to market, as BIM is being used by more and more architects every day."

Peter Mehlretter, senior architect and planner at CH2M HILL, points to other benefits from BIM. "As a large database that integrates product and material lists with a plan, 3-D and elevation views, BIM acts as a change manager and results in fewer change orders. When making a change in one section of the program, for example a listing of door sizes, the data is instantly populated in all other sections as well. This eliminates having to rely on the memory of the person inputting the information in one location to have to do so in every BIM program segment. We see BIM as an important technology in building design and one that will surely continue to grow."

What we're saying

Schindler recognizes the significant contribution BIM is making to efficient architectural design and construction, and we are including this sophisticated technology as part of our services. Our efforts are focused on providing highly advanced escalator and elevator products, and seamlessly integrating them into the design and construction of buildings, large and small, everywhere around the world. Visit www.us.schindler.com to access the growing portfolio of BIM models available for Schindler products in North America. ■

next news



ONE BRYANT PARK NAMED BEST TALL BUILDING

The Council on Tall Buildings and Urban Habitat has announced that the winner of its annual Best Tall Building award for 2010 for North America is the Bank of America Tower, located at One Bryant Park in New York City.

The awards recognize projects that have made extraordinary contributions to the advancement of tall buildings and the urban environment, and that achieve sustainability at the highest and broadest levels. The projects must also exhibit processes and innovations that have added to the profession of design, and enhance the cities and the lives of their inhabitants. Schindler has installed three escalators and 52 elevators at One Bryant Park.

SCHINDLER TO EQUIP NEW AIRBUS PIER AT FRANKFURT AIRPORT

Schindler will supply 46 escalators and 30 moving walks for a new pier being built to accommodate the giant Airbus A380 at Germany's landmark Frankfurt Airport. The pier, which is scheduled to open in the summer of 2012, has berthing capacity for seven wide-bodied planes, including four long-haul Airbus A380s.

Schindler is the sole supplier of escalators and moving walks for the new four-level pier, which will be able to handle up to 6 million passengers a year. The moving walks have the capacity to transport 13,500 passengers an hour.

SCHINDLER RECEIVES E&I PARTNER OF THE YEAR AWARD

Schindler Elevator Corporation has received the "New Partner of the Year" award from E&I Cooperative Purchasing, the premier higher-education purchasing association in North America. E&I implements agreements with top-tier suppliers for its members. In its first year as E&I's elevator and escalator preventive maintenance provider, Schindler achieved 20 percent growth in new contract sales with E&I members.

"The relationship between Schindler and E&I is a win-win situation for everyone involved," said Tom Fitzgerald, E&I's chief executive officer. "E&I members receive extraordinary service at an excellent price."

SCHINDLER ID® NAMED TOP PRODUCT BY *BUILDINGS* MAGAZINE

The editors of *Buildings* magazine have named the Schindler ID® system as a top product pick. By grouping passengers according to destinations, Schindler ID decreases unnecessary trips and stops, improves system efficiency and reduces energy usage. The ADA-compliant system is featured in *Buildings'* "Top 81 Money-Saving Products" article, which was distributed at the 2010 Building Owners and Managers Association International trade show.

Buildings magazine has a large audience of more than 73,000 commercial building ownership and facility management professionals.



SCHINDLER WINS 2010 SAVE ENERGY NOW AWARD

The U.S. Department of Energy has honored Schindler's Gettysburg, Pennsylvania, manufacturing facility with a 2010 *Save Energy Now* award for its energy-reduction activities.

Schindler was recognized for actively pursuing energy-saving opportunities identified during a 2009 *Save Energy Now* energy assessment, which has led to a total of more than \$32 million in cost savings from all of the companies assessed and 4 trillion Btu in total energy savings over the past year. "Schindler continues to focus on reducing its environmental impact and better utilizing its resources," said Dave Thomas, vice president, manufacturing at Schindler.

SCHINDLER CHOSEN FOR CHILE'S TALLEST BUILDING

Schindler will supply 109 elevators for the Costanera Center, a major urban development in Santiago, Chile. Schindler is the sole supplier of elevators, escalators and moving walks for the complex, which includes a multistory shopping mall as well as four office towers. Installation of the Schindler equipment is due to start in 2011.

The tallest of the four towers will be equipped with 24 elevators, including 19 with two decks, which serve two floors at the same time and are capable of speeds up to 23 feet per second.

SCHINDLER AWARDED WAKE COUNTY JUSTICE CENTER CONTRACT

A new Wake County Justice Center is under construction in downtown Raleigh, North Carolina, to meet the rapid population growth in the region.

The Justice Center is designed to expand the county's current judicial capabilities by adding 22 courtrooms and additional office space for court clerks and administrative functions. Schindler will supply the 13-story, 577,000-square-foot building with 17 elevators and four escalators. A 12-month service contract is also included. Schindler has provided mobility solutions for several projects in the area, including the Raleigh Convention Center.

SCHINDLER MEXICO SELECTED FOR MEXICO CITY METRO

Schindler Mexico has been awarded a contract to provide and install elevators, escalators and moving walks for 13 stations along the Mexico City Metro system.

The stations sit along Mexico City's Metro Line 12 in the southern portion of the nation's capital. The new line is scheduled for completion by April 2012, and will be equipped with 73 Schindler 9300® AE escalators, eight moving walks and 36 Schindler 5400® AP elevators. When completed, Metro Line 12 will stretch nearly 15 miles and carry 450,000 passengers every day through the Mexico City underground.



Elevator upgrade. No downtime.

Schindler's Destination Interface can quickly and easily convert most brands of conventional elevator controls to trailblazing destination dispatching. This unique, low-cost transformation can be activated without further modernizing the elevator bank or removing cars from service. You can immediately enjoy the benefits of destination dispatching including: increased traffic handling capacity, improved system efficiency, significant energy savings, exclusive access control and special VIP service.

