



SMOOTH OPERATIONS

Considering that airports constantly see traffic, it is imperative that all fixtures lead to enhancement and sustainability keeping the location in mind

BY TEAM CW

India may continue to be called a developing country, but the country has a few fine airports and more are on their way to boost the air connectivity between cities and ease congestion in existing airports. Recently, the Minister of State for Civil Aviation highlighted the government's plans to establish about 100 airports in the next 15 years at an estimated cost of Rs 4 lakh crore. Among them, 70 airports will be at new locations while the rest will be second airports or expansion of existing airfields to handle commercial flights.

Any development that requires such large-scale land bank will naturally boost the city's real estate development. The presence of an airport will enhance the city's image as a business destination thus increasing demand for commercial real estate as well. Moreover, greater commercial activity in a locality will mean higher employment opportunities, which directly augments scope for rental housing.

Large-scale projects always have long gestation periods. When one considers the idea of designing an airport, it is a herculean task. This is because symbolically the de-



▲ Automation plays a huge role in ensuring smooth functioning and security.



“THE PIR SENSOR SWITCHES ON/OFF WHEN PERSONS PASS THROUGH THE DETECTION AREA OF THE SENSOR.”

JAYANTH JAIN

signs need to embody the city's and country's identity by acting as the first and last handshake. Importantly, the key factors of the sensitive nature and security concerns of airports also have to be painstakingly taken in consideration in the designs.

Besides aesthetics, it is the functionality of the building that is important and involves proper segregation of visitors, passengers and the baggage system. As passengers are required to stay longer periods in hold areas, queuing immigration and check in areas, it is necessary to provide good visual effect within the building. Minimising heat gain and maximising day light through passive strategies of good planning should be emphasised while designing airport terminal buildings.

Security at airports are of utmost importance. This involves ensuring complete safety and smooth flying of passengers, avoiding illegal activities like smuggling to protecting from unfortunate incidents like terrorist attacks and hijacking. Effective lighting plays a huge role in securing



“THE INNOVATIVE QUALITY OF AFX LAMINATES KEEPS THE SURFACE IMPRESSION FREE OF MAINTENANCE.”

ALEX JOSEPH

outdoor spaces and avoiding inconvenience and regrettable events. **Jayanth Jain, CEO, GM Modular**, says, “Keeping safety in consideration in crowded places like airports, we have LED lights and PIR (Passive Infrared) sensor switches that takes care of flyers' safety by keeping unfortunate happenings in check and decreases passenger hassles by serving convenience. GM's high quality LED lighting solutions with down lights, chandelier lights and panel lights provide effective lighting, and serve the purpose of safety and security. The G-Lux LED lighting solutions help lessen maintenance and saves more than 85% of energy adding to environment safety. The PIR (Passive Infrared) Sensor switches on/off the lamp automatically in dark when persons or animals pass through the detection area of the IR motion sensor, thus saving electricity and reducing maintenance costs.”

However, there could be design constraints during re-development of airports on existing premises and the limitation of site areas available on city side developments.

Lighting forms an important part of such projects as besides the day factor, it is the night illumination which is of utmost importance too. **Sumit Joshi, vice chairman and MD, Signify India Innovations (formerly known as Philips Lighting India)**, says, “Lighting solutions in airports have continuously evolved to meet modern-day airport requirements. We're seeing an increased implementation of efficient LED-based lighting in place of incandescent lighting. There's also a shift from vault-centric architec-



▲ Escalators, elevators, and moving walkways, whether for moving people or freight, must be robust and durable.

ture to more light-centric architecture, where a fixture controls lighting's intensity level after intensity information is conveyed to it. Due to LED lighting's lower power consumption, we are also exploring new wireless or contactless power concepts that minimise installation and maintenance challenges. Furthermore, we're increasingly seeing lighting with built-in intelligence which enables it to retrieve data and predict performance, enabling more preventive maintenance.”

Signify India Innovations upgraded the new SAS Lounge at Oslo's Gardermoen airport with a novel concept of a light shower, transforming it into a spot to relax. It also delivered a variety of innovative solutions featuring new intelligent lighting, giving SAS's customers the best possible experience.



“THE GEN2 ELEVATOR. INCREASES EFFICIENCY AND SAFETY WITH A COATED STEEL BELT, AS WELL AS THE REGEN DRIVE.”

SEBI JOSEPH

▼ Choosing the right materials for facade is a gamechanger for an airport.





WE HAVE THE
INSYNC RANGE OF
PRODUCTS FOR
HUMAN CENTRIC

LIGHTING SOLUTIONS.”

ANUJ DHIR

NOVEL PRODUCTS

It is a fact that airports have evolved in the past decade. Be it attractive bookstores, statement décor pieces or glamorous clothing showrooms, today, airports have all kinds of luxuries. The fact that airports are one of the busiest places and witness the highest level of traffic, it is best to go for products that guarantee durability with an extra edge of magnificence. **Alex Joseph, senior vice president, marketing, Greenlam Industries**, says, “AFX and compact laminates are especially used in coffee shops, restaurants, food court and shopping counters as they are abrasion resistant, highly durable and impact resistant. The innovative quality of AFX (Anti-Fingerprint) laminates to keep the surface impression free and ease of maintenance makes it highly suitable for such high traffic areas.”

Greenlam recently introduced interior cladding solutions for the purpose of panelling which is an exemplary choice for new age panelling. Suitable for airports, this product is durable and anti-bacterial with a resilient structure.

Speaking of lighting solutions for modern airports, **Anuj Dhir, VP and business head, Wipro Lighting**, says, “We offer smart and connected range of products through



▲ The aesthetics of the interiors have been intelligently dealt with.



▲ Compact laminates are compatible for both horizontal and vertical surfaces and are easy to assemble with no edging and adhesive needed.

our Internet of Lighting (IOL) platform that can offer lighting controlled over smart applications and useful in airports. Wipro has also got the inSync range of products for human centric lighting solutions which can create in selected areas a replica of natural light outside, and also a soothing experience for passengers cutting across time zones.”

Wipro has strategic tie ups with global majors. It has tied up with Cisco for Power over Ethernet (PoE) solution, pureLiFi Scotland for integrated lighting solution for wireless communication through light, all of this under IOL platform. It also entered into a partnership with Netherlands-based Mapiq to work jointly in smart workplaces in India.

Most airport projects are through a tendering process. In construction bidding, price is of vital consideration. On many projects, especially in government related construction projects, the selection process of the contractor depends on the project delivery method. **Satya Vyas, CEO & co-founder, Tornado**, says, “Airports are fairly complex projects to execute from quality standards and compliance perspective. The timelines are challenging. We tackle these solutions by leveraging our in-house design and production capability. Also, our project management tools and in-house technology helps us deliver projects faster and without any quality issues.”



THERE'S A SHIFT
FROM VAULT-CENTRIC
ARCHITECTURE TO
MORE LIGHT-CENTRIC

ARCHITECTURE.”

SUMIT JOSHI

Tornado being a vertically integrated general contractor uses technology to deliver interior and construction projects on time. The vertical integration and technology enablement helps them plan the execution better, faster and economically than conventional players.

Infrastructure projects, including airports, focus on public safety, system reliability and environmental sustainability. **Sebi Joseph, president, Otis India**, says, “Otis offers just that in its escalators, moving walkways and elevators. Airports have also turned to Otis’ flagship product, the Gen2 elevator. This range is designed to increase the elevator’s efficiency, safety and reliability with key components that include a coated steel belt, as well as the ReGen drive, permanent magnet machine and PULSE monitoring system. Gen2 elevators with ReGen drives are as much as 75% more energy efficient than traditional elevators with conventional drives. This helps achieve substantial energy savings and can help support green building certification.”

The Gen2 range also has machine-room less (MRL) elevators. These elevators replace large elevator rooms by locating a compact hoisting machine on the top of the elevator shaft. Compared to systems with machine rooms, the



OUR PROJECT
MANAGEMENT TOOLS
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SATYA VYAS

compact gearless machine consumes less electricity and saves on other building costs because it does not take up an entire room for parts and equipment.

The entire idea in development of airports is not only on the airport’s iconic form, but also in the space modulated to conform to the needs of the passengers to make them most comfortable. **CW**

CONSUMER CONNECT

OPENING THE DOOR TO A GREENER WORLD



It is said that if trees gave us Wi-Fi signals, then perhaps we would be saving them, but unfortunately they don’t. Deforestation has become a major global problem and it is increasing every day, putting human lives in jeopardy. From drastic climate change to global warming, deforestation is costing a lot more than we can imagine, it is endangering us and our future generation.

In India, deforestation has been increasing at an alarming rate. Between 2015-18, 20,000 hectares of forest land, almost the size of Kolkata, has been used for developmental activities such as mining, thermal power plants, dams, road, railways, irrigation projects. A large number of trees are cut to make furniture, doors and windows. While the entire world favours beautiful and safe metal doors, 82% of doors in India are still made of wood. It’s time to welcome a change.

Tata Pravesh, from the house of Tata Steel offers a wide range of doors and windows that are environment-friendly and 100% recyclable. Each and every Tata Pravesh steel door comes with the elegance of wood and on top of that, these doors are GreenPro certified. Its variety of products are serving requirements of individual houses and big housing societies, commercial spaces, hospital, educational institutes.

With everything we make and everything we do, let’s strive to open the door to a cleaner, greener future, thus envisaging a better world for our future generation.