Next-generation terminals designed to achieve logistical innovations

Achieving non-stop logistics through 24-hour, 365-day operation

In line with the re-expansion of the Tokyo International Airport (Haneda Airport), Mitsui began operating the Tokyo International Air Cargo Terminal (TIACT) in the international cargo area at Haneda since October 2010. The TIACT site covers an area of 170,000 m² and has a total floor area of 80,000 m². Taking advantage of its convenient location near the Tokyo Metropolitan Area, the largest consumer market in Japan, TIACT aims to provide nonstop 24-hour-a-day logistics services for international air cargo. As a hub that most efficiently connects both Japan to the world and the metropolitan area to local regions in Japan, TIACT brings innovations to international air cargo logistics through its sophisticated operations in efficiency and quality.

Also with its environment-friendly facilities and the latest information system, TIACT embodies the concept of an air cargo terminal of the future. It is Japan’s first financially independent company, based on the Private Finance Initiative (PFI*), that builds and operates international air cargo terminals.

*PFI is a way of utilizing funds, management capabilities, and technical capabilities from the private sector to build, maintain, and operate public facilities.

Environmental Initiatives

Initiatives toward achieving eco-friendly terminals

In addition to reducing CO₂ emissions and fuel consumption through efficient logistics, the TIACT facilities themselves are designed to be eco-friendly. Most of the roofs of International Cargo Buildings No. 1 and No. 2, which are the main facilities of the terminal, are covered with shiny photovoltaic power generation modules. These modules measuring approximately 28,000 m² have a generation capacity of around 2,000 kW and supply approximately 10%*1 (or 2 million kWh a year) of the total power needs of the entire terminal. The renewable energy credit generated in this way is sold to a third party through the Green Power Certification System*2. Rainwater and recycled water are also actively utilized at TIACT. Both sewage and greywater are processed by an advanced water treatment system within the terminal and utilized for miscellaneous uses (e.g., flushing toilets), contributing to reduction of waste water. The rainwater that falls on the massive roof and the site of the terminal is also saved in tanks and utilized. These measures supply approximately 70% of the water for miscellaneous uses within the terminal, and provide numerous benefits, including a reduction in the load on the municipal sewage system.

Furthermore, the truck-staging area of the terminal is equipped with power supply stands to enable idling stop. These stands supply power to parked trucks so that their frozen or refrigerated cargo be protected even when idling is stopped, at the same time helping reduce CO₂ emissions and fuel consumption.

*1 At peak operation, approximately 47% of the power needs can be supplied.

*2 Green Power Certification System: The “environmental value” of green power generated using renewable energy sources, such as wind, solar, and biomass, is certified and turned into renewable energy credit, which can be traded in the open market.

Initiatives for Consumer Issues

Delivering cargo safely and securely by taking advantage of its convenient locations and the advanced facilities

TIACT’s aim is to further ensure stable transportation of cargo by fully utilizing the advantages of the metropolitan airport. It never sleeps, operating 24 hours a day, 365 days a year. It has easy access to the metropolitan area and major locations near around. It connects international flights with domestic flights smoothly within the same area. Use of automatic certification system based on RFID (radio frequency identification) at the entry/exit gates prevents congestion with trucks that are within the terminal site. To allow for efficient cargo handling operations, the 26,000 m² cargo shed has no pillars at all. Cargo positions are tracked using mobile registers and barcodes.
placed on the ceiling. After the positional information of cargo is determined, it is smoothly relayed to the driver, closely linking truck guidance to the cargo handling system. The Perishable Center, which covers a large area of 3,000 m², is a temperature-controlled warehouse, maintained at between 16°C and 20°C to keep imported fruits, flowers, etc. Refrigerators (kept at 5°C) and freezers (kept at -5°C and -20°C) are also provided inside, providing complete temperature control to help secure a cool chain for safe and secure storage of perishable cargo. For example, tuna caught in Spain are airlifted fresh from Paris to TIACT. We have achieved super-fast handling that allows tuna arriving at TIACT in the morning to be served in sushi restaurants in Tsukiji by noon. Located adjacent to the Perishable Center is the fumigation chamber, designed to kill harmful insects that may be hiding in flowers, etc. imported from overseas, to protect the safety and health of consumers and achieve a fast and stable supply of important cargo.

The relief supplies shipped to TIACT in Haneda from many Asian countries including China and Malaysia, as well as the U.S., following the Great East Japan Earthquake were quickly transported to disaster areas such as Ofunato city and Rikuzentakata city in Iwate prefecture and Soma city in Fukushima prefecture, by taking full advantage of TIACT’s around-the-clock operations. As an important metropolitan infrastructure capable of assisting in national emergencies, TIACT will continue to provide safe and secure logistical functions that contribute to society on an international basis.

**Initiatives for Community Relations and Development**

**Entering the medical field and establishing a logistics services for investigational drugs for clinical trial**

In March 2011, TIACT began operating a dedicated storage area (“Medical Gateway”) with a total area of 600 m² for handling cargo related to drug/clinical development. Utilizing the first facility of its kind at an airport in Japan, we plan to enter a new business area in order to set up a logistics network for medical and pharmaceutical products, eventually establishing Haneda Airport as the Asian hub of import/export of cargo related to drug/clinical development.

As an eco-friendly terminal responsible for international air cargo logistics in the metropolitan area, TIACT is also carrying out locally rooted activities, such as opening a facility that boasts an area more than 3.6 times that of the Tokyo Dome (46,755 m²) for a tour for the residents of the neighboring communities.

**Human Rights Initiatives**

**Keeping the CSR Action Charter in mind**

International air cargo terminal operation is of a highly public nature since it is responsible for part of air cargo distribution, which is a lifeline for economic and social activities. Through the important role it plays in this operation at Haneda Airport, TIACT will continue to fulfill its social responsibility. At TIACT, we have established the CSR Action Charter and conduct our operations always keeping in mind their public nature and the interest of the public, and maintaining a keen awareness of our relationship to society.

Additionally, we have specified the activity goals that comply with Mitsui’s Supply Chain CSR Policy in TIACT’s corporate philosophy (Mission, Vision and Values (MVV)). We are taking all necessary steps to ensure that we protect human rights and do not take part in any human rights violation. As part of these measures, we also hire people with disabilities in line with the legally mandated employment rate.