



Case Study

Powering Resilience Across Japan's Supply Chain



Customer

Leading Wholesaler



Power Generator

1 unit x KD1650-E (mobile)
2 units x KD1350-UE (mobile)
2 units x KD2000-E
1 unit x KD1600-UE
1 unit x KD1500-E
2 units x KD1250-UE

In response to Japan's frequent natural disasters and growing focus on supply chain resilience, a major international wholesaler engaged Tominaga & Co Ltd, a Rehlko distributor since 1998 to implement emergency power back-up systems across its warehouse network. The client's top priority was the continuity of access to essential goods for all subscription members in the aftermath of disasters. As such, they decided to invest in reliable backup solutions rather than rely solely on insurance recovery.



Overview

To meet this need, nine Rehlko generator sets were installed at strategic locations across North and South Japan. This deployment included six stationery units from the KD series (ranging from KD1250–UE to KD2000–E) and three mobile units that could be rapidly dispatched across warehouses in each region during emergencies. The three mobile generators (1 set of KD1650–E and 2 sets of KD1350–UE) containerized for trailer deployment, enabling fast response to power outage scenarios across multiple warehouses.

Challenges Faced

1. Encountering Regulatory Hurdles in Fuel Transport at the Product Design Approval Stage

Japanese fire regulations flagged the mobile generators' 2,700-liter internal fuel tanks as high-risk. Legislation required the tanks to be emptied before transportation, which posed serious logistical challenges. In a disaster scenario, refueling from off-site fuel depots would be both time-consuming and uncertain, especially if access roads were compromised.

Solution: To tackle the fuel transport restriction, Rehlko designed and supplied newly manufactured fuel tanks certified under the International Maritime Dangerous Goods (IMDG) Code. Achieving this certification required destructive testing and design updates, but it ensured compliance with Japanese laws while allowing fuel to remain in the tanks during transit. This significantly improved the readiness of the mobile units to support emergencies.

Additionally, Rehlko designed the mobile generators with integrated internal silencers, maintaining acoustic performance without compromising transport legality, in compliance with Japanese road regulations that ban rooftop protrusions on containers in transit.





Tominaga & Co., Ltd has been a Rehlko distributor since 1998. With their headquarters in Tokyo and branch offices in Osaka and Nagoya, they provide backup for Rehlko generators all over Japan with service and training facilities in Funabashi, Tatsuno and Fukuoka.

Approved as a contractor for steel structures in 2011, they have since expanded the business into power plants. Current competencies include engineering services, site start up, engine packaging, generator service and maintenace contracts.



2. Equipment Integration with Local Transport Infrastructure

Upon arrival at the Japanese seaport, the mobile generator containers could not be mounted on standard trailers due to incompatible gooseneck designs. Japanese trailers feature a front mounted gooseneck, while Rehlko's containerized generators lacked a corresponding tunnel. This incompatibility halted deployment.

Solution: Rehlko and Tominaga worked swiftly to resolve the gooseneck issue. With structural engineering support from Rehlko's SEA global team, Tominaga modified the container bases onsite to include gooseneck tunnels. The customized units were approved and fully operational, ensuring seamless integration with Japan's transport fleet.

The Outcome: A Mission Beyond Recovery

Through its partnership with Tominaga and Rehlko, the wholesaler has significantly enhanced the resilience of its nationwide warehouse operations, prioritizing continuity over compensation. Their decision to invest in reliable backup power reflects an ongoing commitment to safeguard the well-being of all stakeholders by ensuring uninterrupted access to essential goods during times of crisis.

For Rehlko, this project exemplifies its core mission: delivering power solutions that create real world impact. By combining engineering expertise, regulatory agility, and a deep understanding of local challenges, Rehlko continues to support critical infrastructure and strengthen energy resilience—one installation at a time.

<u>Visit our website</u> to learn more about our energy solutions.