

Panasonic Toughpad Case Study

Logistics

| Client | Maruha Nichiro Logistics, Inc.

| Business | Logistics

| Product | Toughpad FZ-G1

Toughpad FZ-G1 works perfectly even at 5°C or in a low-temperature environment, and can be used to create a work environment in which the use of paper is greatly reduced, in order to save printing costs. FZ-G1 is the only device that meets all the operational requirements of leading-edge low-temperature warehouses.

Maruha Nichiro Logistics, Inc. (Maruha Nichiro Logistics), having refrigerated warehouses at major ports across Japan, is engaged in “one-stop” logistics business including customs brokerage, storage, transportation, and delivery. In conjunction with the opening of the Kawasaki No.3 Logistics Center, the building of which was completed in February 2014, the company constructed a new warehouse process management system that is linked with tablet devices. Specifically, Maruha Nichiro Logistics has introduced Toughpad FZ-G1 so as to convert paper-based warehouse management slips into an electronic format, and to promote the centralization of information management, greatly improving its business efficiency.



Mr. Hiroyuki Yasumoto (chief of the Kawasaki No.3 Logistics Center of the Maruha Nichiro Logistics' Kanto Region Branch Office) said, “The introduction of Toughpad FZ-G1 has enabled us to achieve significant cost-savings in terms of printing.”



Mr. Masao Takahashi (manager, Kawasaki No.3 Logistics Center of the Maruha Nichiro Logistics' Kanto Region Branch Office) said, “Thanks to the introduction of Toughpad, we have successfully promoted the application of information technology at worksites.”



The staff is watching the slip data displayed on the tablet's screen to tally the number of items that are put into the warehouse. FZ-G1 enables users to eliminate the need for sorting slips, contributing to a reduction in workload and helping users handle work with speed and efficiency.

Kawasaki No.3 Logistics Center:

A leading-edge low-temperature warehouse that is equipped with the most advanced facilities and equipment, including a seismic-base-isolation system

Maruha Nichiro Logistics, one of Maruha Nichiro Group's companies, is engaged in low-temperature logistics business.

The company has 36 branch offices, mainly at the harbor districts of major ports in big cities across Japan, including Tokyo, Osaka, Nagoya, and Fukuoka, having refrigerated warehouses with a total storage capacity of 600,000 tons. The company has stably provided “one-stop” logistics solutions in the field of “food,” ranging from customs brokerage and storage to transportation and delivery, by flexibly using a combination of online systems and other information technologies.

Maruha Nichiro Logistics opened a logistics base, the “Kawasaki No.3 Logistics Center,” the Kanto Branch office of the company, at Higashi-Ogishima (Kawasaki-ku, Kawasaki City) in February 2014, and started operating it at full capacity in April of that year.

Serving as the logistics base of Maruha Nichiro Logistics, the center is one of the most advanced facilities regarding equipment and systems in the low-temperature logistics industry, including a seismic-base-isolation system. The center's large warehouse facility consists of F-level warehouses with a storage capacity of 27,637 tons in which the temperature is kept at minus 20°C or less and F-/C-level ones with 913 tons in which the temperature is kept at 10°C to minus 20°C, having a total storage capacity of 28,550 tons.

Maruha Nichiro Logistics has chosen a tablet device that runs Windows operating systems, so as to take advantage of its existing critical-mission systems.

In conjunction with the opening of the Kawasaki No.3 Logistics Center, Maruha Nichiro Logistics introduced a new warehouse management system, known as the "WPS" (Warehouse Progress System), which was developed by the company. Its employees were involved in the development processes of the system's functions, including management screens, slip functions, and device configuration, and were also involved in the introduction of this system.

In the course of the development of the WPS, Maruha Nichiro Logistics discussed the possibility of adopting tablet computers as a terminal device that would be used within the system. The company demanded such tablet computers to completely meet all the requirements mentioned below.

Chief Yasumoto said, "What is most necessary for all tablet devices used in our low-temperature logistics industry is to ensure that they can operate in a low-temperature environment, and to have the capability of completely withstanding severe operating conditions at places for unpacking and sorting articles at which the temperature is kept low or at 5°C."

The critical-mission systems that Maruha Nichiro Logistics traditionally adopted are designed to support operating conditions under Internet Explorer. All the tablet devices to be introduced by the company were also demanded to have the capability of running Windows operating systems.

The company concluded to introduce the rugged "Toughpad FZ-G1" 10.1-inch tablet, which satisfied all the above requirements. Manager Takahashi said, "All the tablet computers that we use in the center are required to ensure that they can operate even in low-temperature environments or withstand up to a temperature of minus 10°C. In addition, they need to have a rugged, water- and dust-resistant design. In these respects, FZ-G1 is safe to use if it gets wet. If we should accidentally drop FZ-G1 or allow it to sustain impact with something at a site where many workers and forklifts are coming and going in a hurry, it is rugged enough to withstand such impact."

FZ-G1 comes standard with Panasonic's comprehensive maintenance service programs in which generous user support is readily available if an accident or problem should occur with the tablet. This was also a factor

to which the company attached greater importance in the selection of FZ-G1. Mr. Takahashi said, "FZ-G1 is used for business purposes as one of our company's critical-mission systems. Therefore, it was only natural that, in the selection of FZ-G1, we placed considerable emphasis on the fact that if there is a problem or trouble with the tablet, support service is available to swiftly cope with it, and that the device can be seamlessly introduced into our current operations, without interrupting the business flow."

The company currently uses FZ-G1 at places for unpacking and sorting articles at which the temperature is kept at 5°C. According to the company, there has been no trouble with FZ-G1, including any breakdown of the tablet, since its introduction.

The company has promoted the creation of a work environment in which the use of paper documents can be greatly reduced, to achieve cost savings.

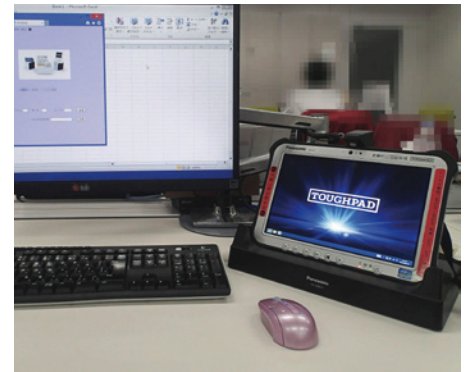
The practice of taking articles out of storage at the center's warehouses starts with the capturing of the barcode data of tags attached to articles with handheld scanners. The barcode data is transmitted via Bluetooth from the scanners to Toughpad FZ-G1 and is checked with the data shared through the company's network system, and then the result data is displayed on FZ-G1.

The company's field workers check the data displayed on the tablet screen and tally the articles to input the information into the tablet device on the spot. The information data is sent back to the system via a wireless LAN and is printed in the form of an invoice on a laser printer.

Mr. Takahashi, who is in charge of the warehouse site, told us about the benefits of using FZ-G1 in the center's warehouses.

"When we used printed slips before introducing FZ-G1, we were concerned about certain risks, such as their exposure to water and the damage and loss of them. The introduction of FZ-G1, however, has enabled us to resolve such concerns," he remarked.

He also said, "The use of the tablet device has greatly contributed to a reduction in our printing costs. We had used dot matrix printers and dedicated paper slips before we introduced FZ-G1. For the tablet device, which supports electronic media and cut sheets, there is no need to use these printers and paper slips. This has helped us to achieve cost savings."



FZ-G1 can be inserted into a cradle and used as a desktop PC in the office.

Information can be shared and recognized on a real-time basis. There is the benefit of introducing a tablet device for the management of slips, instead of the management of a paper form of a slip.

The introduction of mobile devices has also allowed the company to actually experience the improvement of its operation efficiency.

Mr. Yasumoto said, "Toughpad FZ-G1 can be used to share information on a real-time basis at every site, which enables everyone to grasp how operations are progressing wherever they may be. This is a great benefit. If there is a site where operations get behind schedule, for example, the device enables us to readily make a decision about whether to dispatch support personnel to the site so as to flexibly cope with such a problem."

It was a pleasant surprise for the company to find that the camera built into Toughpad FZ-G1 has been very useful at the center's warehouses. Before the introduction of the tablet device, it took a lot of time to send photos to clients. The company's field workers needed to go back to the office to pick up a digital camera, return to the site to take photos, and then bring the camera back to the office to send the photo data to clients by email. The Toughpad tablet enables them to swiftly send such photos to clients on the spot. FZ-G1 is well received among field workers because the tablet makes it possible for them to save a lot of time and effort when moving around the spacious warehouses.

The company has the goal of increasing the average level of the skills of all of its workers through the introduction of IT equipment.

At the center's warehouses, most field workers work standing up. Some of them have complained about the fact that FZ-G1 is a bit heavier than paper slips.

Mr. Takahashi relayed to us the field workers' assessment of the introduction of the tablet device.

Mr. Takahashi said, "If we use FZ-G1, we do not have to carry several paper slips with ourselves and flip through them one by one, in order to find the slips of the target articles to be checked. Such benefits outweigh the heaviness of the tablet body. This type of tablet device is very useful, especially in locations where a wide variety of articles need to be handled, like the Kawasaki No.3 Logistics Center."

"We did experience some dilemmas when shifting from the management of slips in the form of paper documents to the management of slips through the use of the tablet device," Mr. Yasumoto admitted.

He said, "For our experienced workers, it is actually faster to manage slip information by using the paper form of a slip than by using a digital form of a slip, via the tablet. On the other

hand, it is impossible for inexperienced staff to do so. To increase the average level of the skills of all of the company's workers and to eliminate the difference in skill levels between them, using FZ-G1 and other IT tools is one of the most effective methods." Maruha Nichiro Logistics' consensus is that if it were not for the introduction FZ-G1, it would be impossible to create the current paperless work environment.

The company has taken the initiative in actively



The barcodes of tags attached to articles are scanned with a reader, and the barcode data is transmitted via Bluetooth to FZ-G1. After the data is checked with the corresponding slip data on the company's system, the data is displayed on the tablet screen.

introducing advanced systems ahead of competitors, establishing itself as a leading player in the industry. FZ-G1 will be greatly expected to continue to serve as a powerful tool that helps Maruha Nichiro Logistics to further improve its business operations and efficiency.

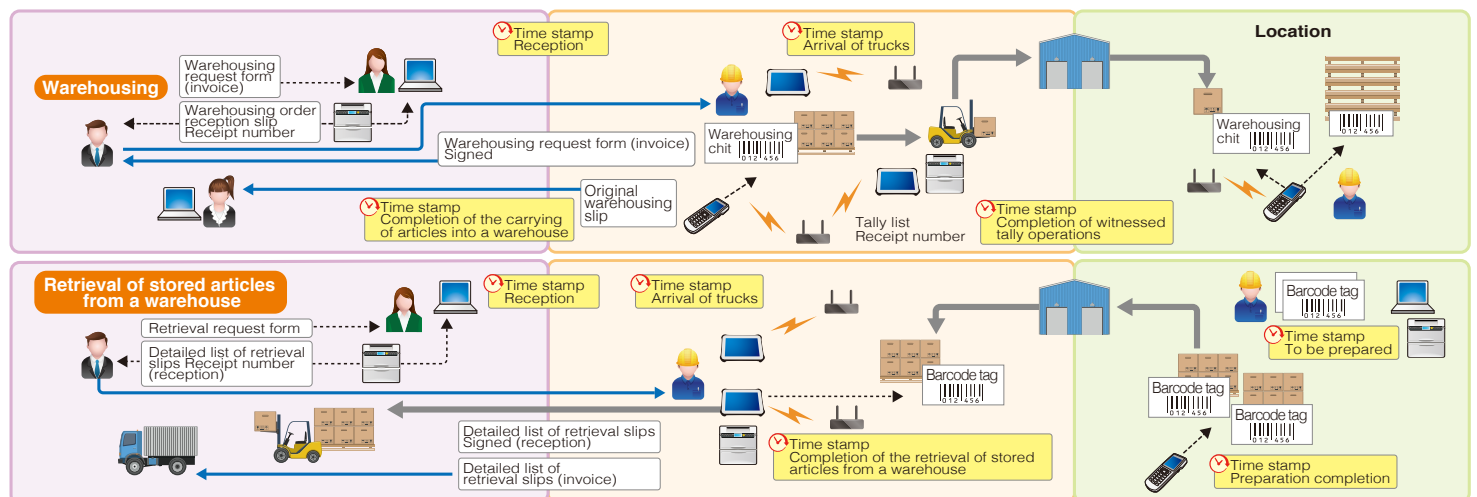
Toughpad FZ-G1 (made by Panasonic) and a barcode reader (made by AIMEX Corporation), both of which are put into practical use at the center's warehouses.

You can operate the tablet device simply by tapping the screen. This enables you to eliminate the need of flipping through paper slips and writing information on them, resulting in the promotion of more rapid and accurate business operations.



Product: Toughpad FZ-G1
Purpose: WPS (Warehouse Progress System)

Usage example of the WPS (Warehouse Progress System)



* Information in the article is current as of the date the interview was conducted (October 2014).

For inquiries, please contact:

TOUGHBOOK