

Customer: Nakayama Iron Works
Country: Japan
Solution: On-demand Remote Connectivity



Benefits

- Allows quick answer to remotely solve issues with machines
- Improve employee work efficiency
- Successful and easy connectivity for every machine

Ewon Cosy works in a tough environment - Rock crushing

For over 100 years, Nakayama Iron Works has staked their reputation on accumulated customer credibility. The Saga Prefecture (Japan) based company was founded in 1908 and manufactures crushers, screens and feeders, sand-making machines, belt conveyors and rock crushing/recycling plants. And, in their words, “we found that the Ewon Remote Access solution fits our needs perfectly.”

Ewon produces a full line of products designed to assist in remotely accessing automation equipment in the field. This “perfect fit” came about because Nakayama Iron Works is increasingly employing advanced automation in their rock crushing machines. According to Deputy Manager of the Plant Division, Mr. Tadashi Sezaki, “The number of our PLC-based machines is increasing, so we receive more and more support requests. Moreover, our customers’ requirements, as well as the way our systems are controlled are becoming more complex.”

The company needed a solution which allowed it to communicate directly with rock crushers, which are generally found in some very remote locations in the field. A broad range of technologies such as Keyence and Panasonic PLCs, Human Machine Interfaces (HMI) and IP cameras are employed. Because Ewon’s solution is manufacturer agnostic, no change in procedures is required to connect to these devices (or other brands of automation equipment).

Ewon Remote Access saves trips to the customer site

Many companies have discovered the numerous benefits of employing remote access equipment in their systems. In a world where the cost of last minute airplane tickets and hotel stays is growing at astronomical rates, the economic justification is easy. However, many miss the impact of avoidable travels on sustainability. A relatively short 500 mile/800 Km commercial airplane trip creates about 1/8 metric tons of CO2 per passenger. Furthermore, even though the stress and strain of constant traveling on employee’s morale is hard to measure, reports from engineers who face this burden are bleak.

Nakayama Iron Works has discovered that applying the Ewon COSY has dramatically reduced the need for travel and, at the same time, pushed customer service to a new level. In the words of Mr. Sezaki:

“Before using the Ewon COSY, we usually had to go back on-site a few days after the installation of a new machine, carrying a laptop PC to do some adjustments in the PLC program or to implement some last-minute requirement of the customer. Thanks to Ewon, we don’t need to travel anymore for such operations. We can stay in our office, saving time and money (spent on travel). Moreover, we can provide a much faster response to our customers.”

The reduction of travels during start up is not the only saving. Remote troubleshooting has a big impact on the application. Today Nakayama Iron Works simplifies the troubleshooting of machines in the field by making a quick connection to the equipment via the Ewon COSY. Again quoting Mr. Sezaki:

“When a problem occurred in the past, we usually had to rush on-site (to the customer location) to do a diagnostic of the situation, then return to our office to do some preparations and finally we had to go back on-site to repair our machine.

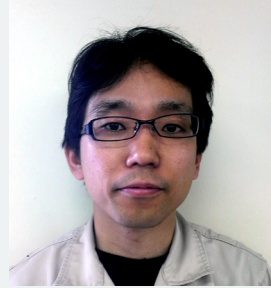
Since we started using the COSY, we can now immediately begin by connecting to our machines through Talk2M (Ewon’s cloud based service) to do a diagnostic remotely and check the cause of the problem.

In most cases, we can even solve the issue remotely, by adjusting the PLC program or giving some simple instructions to our customer over the phone. We can therefore avoid a lot of unnecessary travels. A problem can be remotely solved in about 2 hours on average, and we can save a lot of time as well as important expenses on travel and accommodations.”

The Remote Connection is fast and easy

The Ewon COSY is fast and easy to set up and use. In addition, Ewon offers a number of connectivity options: Ethernet, 3G, 4G/LTE and WiFi connectivities are available. There is a “setup wizard” for establishing the connection to Ewon’s global Talk2M cloud-based service, that is available for free. Most customers find they can make their first connection in a matter of minutes.

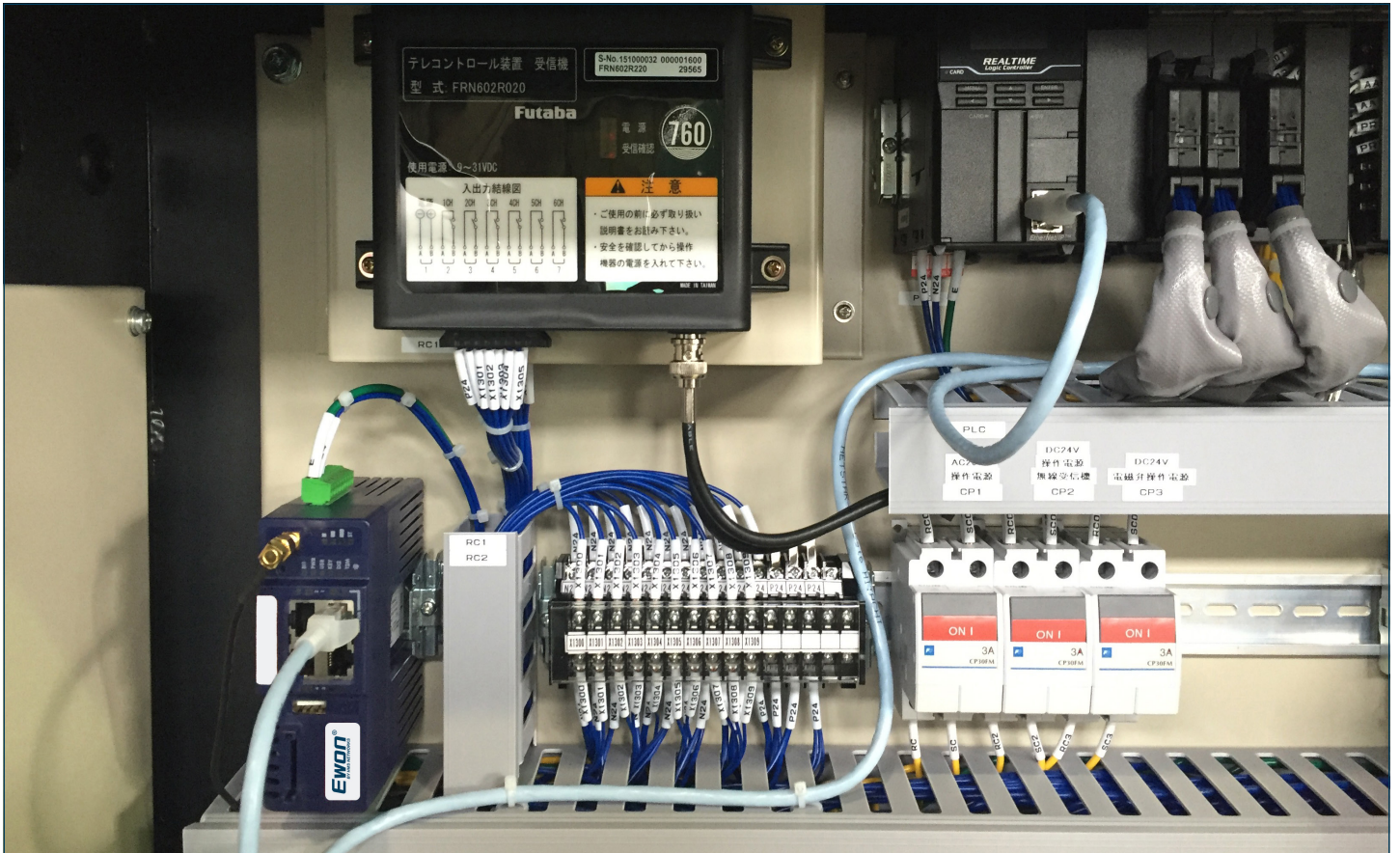
Nakayama Iron Works took all of these factors into consideration when they selected the Ewon COSY. Again referring to Mr. Sezaki, three points are abundantly clear in their selection criteria:



Selection criteria for choosing Ewon:

- “ 1. Being able to use the cellular network to establish a VPN connection without the need to change the settings of the router onsite (since the cellular connection can be configured in our office) was important to us.*
- 2. The running cost is very cheap, since Talk2M can be used for free, and even the price of the Talk2M Pro version (should the need arise) is very reasonable.*
- 3. The Ewon COSY is small and uses a 24VDC power source, so it can easily fit inside the control panel of our machines.”*

Mr. Tadashi Sezaki, Deputy Manager of the Plant Division,
Nakayama Iron Works



Inside a control panel of a rock crushing machine. For Nakayama Iron Works, it is easy to connect the Ewon Cosy to their Keyence or Panasonic PLC, HMI and IP camera as it comes with all the protocols included.

A final word from Nakayama Iron Works

We generally like to ask Ewon users what advice they might have for those considering a move to remote access for their equipment. Here are two very worthy comments:

- “By simply installing a COSY in your machine, which can easily be done in a few minutes, you will be able to directly access your PLC from anywhere, without traveling. This will allow you to greatly improve your work efficiency.”
- “...we explain from the start to the end-users of our machines that we will be able to provide them with a great remote maintenance service, simply by adding a COSY to their machine.”

Nakayama Iron Works knows what they are talking about

They applied their first Ewon device in September 2016 and since then have made the Ewon Cosy a standard solution on all of their equipment.

Isn't it also time for you to consider applying one of Ewon's remote access systems to your solution?



Learn more on www.ewon.biz

The Ewon Cosy is an industrial VPN gateway designed to offer easy remote access, across the Internet, to machines and installations on customer sites or in the field. OEMs and System Integrators can troubleshoot machines remotely without going on site, drastically reducing support costs.

