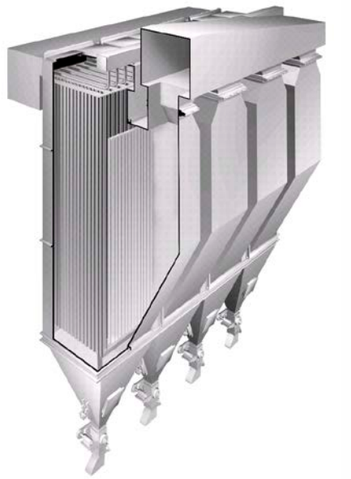
1 Excellent Environmental Equipment Awards Product awarded the Director-General's Prize from the Industrial Science and Technology Policy and Environment Bureau of Japan's Ministry of Economy, Trade and Industry

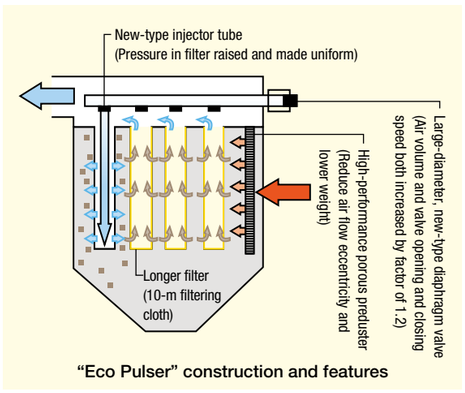
– "Eco Pulser" New Pulse-Type Bag Filter -

The "Eco Pulser," a new pulse-type bag filter developed by the Nihon Spindle Manufacturing Co. Ltd., was awarded the Director-General's Prize from the Industrial Science and Technology Policy and Environment Bureau of Japan's Ministry of Economy, Trade and Industry, at the fiscal year 2013 (40th) Excellent Environmental Equipment Awards (organized by the Japan Society of Industrial Machinery Manufacturers).

This award is presented under the system for commending devices that are recognized as having superior quality and performance as well as having made major contributions to environmental protection and to the advancement of the environmental equipment industry. The purpose of these awards is to promote research and development of technologies for environmental protection and the widespread adoption of superior environmental equipment.



"Eco Pulser" new pulse-type bag filter



"Eco Pulser" construction and features

The bag filter is the most widely used of the barrier-type dust collectors for removing the highly concentrated particulate matter in exhaust gases. Of these dust collectors, those with pulse-type bag filters inject pulses of air through injector tubes to remove particulate matter that has adhered to the filtering cloth.

In the iron and steel manufacturing markets, the sharp increases in electric power costs in recent years are among the factors that have created particular demand for energy-saving and lower running costs. The "Eco Pulser" new pulse-type bag filter with enhanced pulse cleaning functionality has achieved greater efficiency in removal of particulate matter captured by the filter and reduced power consumption by blowers. The adoption of a porous preduster has also reduced both weight and pressure loss in order to limit eccentricity in the air flow. By adopting new-type diaphragm valves and injector tubes, we have made the filtering cloths longer so that fewer cloths are needed. Reducing the number of filtering cloths contributes to space-saving construction and to reduction of the price of the dust collector itself as well as of foundation and installation work expenses and other initial costs. Reducing the number of filtering cloths that need to be exchanged can help reduce maintenance costs, making this a product that can enhance customer value.

Steps are being taken to expand the target markets for the "Eco Pulser" to include municipal waste incinerators and boilers. Going forward, we will continue aiming to make ourselves a corporation that contributes to the global environment and to society.

Award ceremony

2 Kurashiki City Green Curtain Contest

- Okayama Works Wins Award for Excellence -

The green curtain planted on the south wall of the main building at the Okayama Works was selected (by citizen votes) for an Award for Excellence in the Kurashiki City Green Curtain Contest of fiscal year 2014, and we received a commendation.

Kurashiki City, where the Okayama Works is located, has been expanding the creation of green curtains throughout the city as part of its measures against global warming. This involves planting bitter gourds, morning glories and other climbing plants around windows and on walls as curtains against the direct summer sunlight. This helps limit the rise of interior temperatures so that air conditioning can be reduced.

When the people at the Okayama Works learned about this Kurashiki City initiative, they started planting a green curtain on the south wall of the main building in fiscal year 2010. At first they planted bitter gourd vines, but from fiscal year 2014 they decided to plant mainly Ryukyu morning glories. These morning glory vines grew all the way up to the second floor windows, and their large leaves shaded the entire windows with a curtain effect.

Covering the entire window surface on the main building south wall from the first to second floors, the green curtain effectively blocked both light and heat. This reduced summertime air conditioning use and contributed to the reduction of CO_2 emissions. Moreover, the Ryukyu morning glory produces large numbers of blossoms on a daily basis. This has the very positive effect of softening the workplace atmosphere and improving the appearance of the Okayama Works campus.

The work for which the Award for Excellence was received was the extensive growth of vines on the south wall of the main building. As we understand it, the fact that the green curtain also covered over the windows on the second floor was given high marks by the public.

The green curtain will be implemented again on the south wall of the main building in fiscal year 2015, and it is growing satisfactorily.

We intend to go on working on this in the future as a local community activity.

Seen from inside an office

Members of the implementing team

3 "Training in the System for Writing Local Government Global Warming Countermeasure Plans (Actual Practice Session)" organized by the Ministry of the Environment Held:

- At the Tanashi Works on Monday, March 16, 2015 -

This training was held to implement the plan writing system that is part of the future global warming countermeasures being considered by the Ministry of the Environment. The training was held using the Metropolis of Tokyo system as a model. This plan writing system has been adopted by the Metropolis of Tokyo ahead of the rest of the country, and the Ministry of the Environment is following the system with interest.

The Tanashi Works is recognized as a business establishment that has made notable progress in reducing CO_2, even among the large-scale business establishments that are supporting the mandatory system for total CO_2 reduction under the Tokyo Metropolitan Ordinance on Environmental Preservation. At present, the Ministry of the Environment has approached the plant to enquire about implementing this training.

This training session brought together the officials in charge from sections promoting global warming countermeasures in every prefecture and government-designated city. Taking a practical format, the training covered the kinds of preparation that need to be made by government offices, and how follow-up on measures are to be handled with corporations when the system is actually put into operation. On the day of the session, activities conducted at the plant were explained. The focus was on brainstorming activities, everyday target management through visualization, measures making use of electric power monitoring systems promoted to date and so on. On a tour of the plant, participants were shown frequency converter rooms and other equipment and facilities that had been streamlined by improvements, allowing them to observe actual measures that were taken.

The Tanashi Works will continue aiming to achieve further improvements.

Explaining the status of measures at the plant