

# Preventing Air Pollution (Reducing organic solvent emission)

## Emission of organic solvents into the air

**The emission of organic solvents into the air is constantly being reduced to achieve the target.**

To reduce the amount of organic solvents emitted into the air, including toluene, ethyl acetate, xylene, and methyl ethyl ketone, the Nitto Denko Group has taken the measures to narrow the outlet by installing solvent recovery equipment and deodorizing furnaces since 1970's. As a result, the amount of the emissions has decreased year by year. In fiscal 2004, Nitto Denko on a non-consolidated basis marked 1,240 metric tons, which is a steady step toward the target for fiscal 2005 of 1,200 metric tons or less. Solvent consumption per unit of production showed 51% improvement compared to fiscal 1990.

The total consumption of organic solvents, however, was approximately 44,000 metric tons (including 12,194 metric tons recycled), an increase of 4,000 metric tons from the previous year. The group promotes the development of non-organic solvent products to reduce the consumption.

CO<sub>2</sub> is also emitted from the incineration of organic

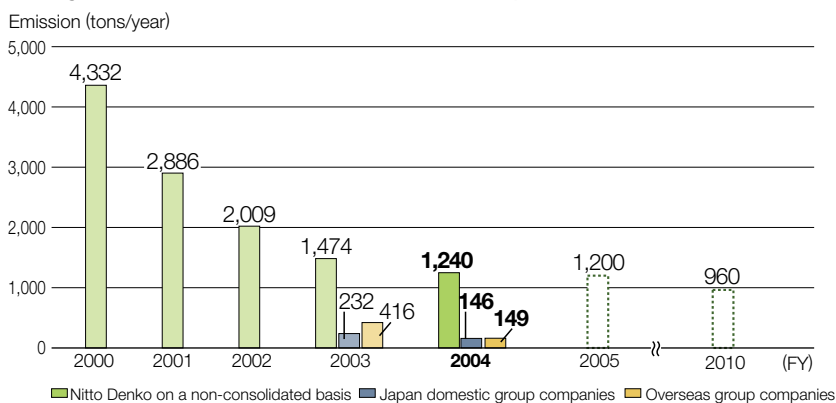


Deodorizing furnace in the Onomichi Plant

solvents in the deodorizing furnaces. Considering the type of treatment gas and energy consumption and comprehensively estimating the reduction of environmental impact, we employ the most appropriate method. →P23

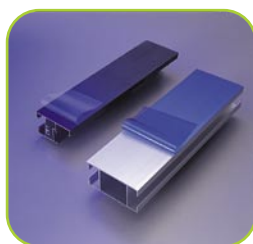
The overseas group companies also introduced deodorizing furnaces and solvent recovery equipment to prevent air pollution resulting from organic solvents.

## Organic Solvents Emission into the Atmosphere



## Solvent Treatment Equipment Introduced in Fiscal 2004 by:

- Toyohashi Plant of Nitto Denko Corporation
- Shiga Plant of Nitto Denko Corporation
- Nitto Denko (Shanghai Songjiang Co., Ltd.
- Nitto Denko (Taiwan) Corporation



## TOPICS

### Part of the surface protection film products became non-solvent products.

To minimize impact on human health and the environment, Nitto Denko has endeavored to eliminate organic solvent from the manufacturing processes since early 1970's. We researched the technologies of emulsion and UV polymerization that do not use organic solvents and developed non-solvent products as well as switching the existing products to non-solvent adhesives successively.

Nitto Denko put the surface protection film using water dispersion adhesives, which does not use organic solvents, on the market in April 2003. Since then, the company has promoted the switchover to non-solvent adhesives, and now all products subject to the switchover have been replaced by non-solvent ones.