

Introduction to the environmental efforts of Nitto Europe

The Nitto Denko Group makes concerted efforts together to tackle environmental issues. Let us introduce the efforts of Nitto Europe, which are highly evaluated as one of the most advanced environment-friendly companies in Europe as a result of reduction in the density of organic solvent emissions and achieving a 93% recycling rate for industrial wastes.

 Belgium

● Nitto Europe N.V.

Corporate Profile

Company name: NITTO EUROPE N.V.

Established: 1974

Location: Genk, Belgium

Capital: 6,195,000 Euro

Number of employees: 521

<Major products>

Electrical insulating tapes/surface protection tapes/double coated adhesive tapes/sealing materials

Controlling organic solvent emissions into the air within 20% of the regulatory standard

Nitto Europe was founded in Hasselt, Belgium in 1974, as Nitto Denko's marketing and sales headquarters in Europe. Concurrently, a factory started its operation in Genk as a European production base. It currently produces high-quality electrical insulating tapes, surface protection tapes, double-coated adhesive tapes, and sealing materials, etc.

Since its foundation, the Genk Factory has always endeavored to implement environmental measures with cutting-edge technologies. The restraint of organic solvent emissions is one example. In 1987, the factory introduced the first deodorizing furnace equipped with a heat recovery system in Europe, prior to the implementation of effluent control. In 2003, it was replaced with a new deodorizing furnace enhanced by cutting-edge technologies.

The density of the organic solvent emitted from the original furnace marked 70 mg/Nm³, while the new equipment reduced it to less than 10 mg/Nm³. The current regulatory standard for the density is 50 mg/Nm³, and that means we successfully control the density within 20% of the standard. In addition, the generated thermal energy is fully and effectively utilized in multiple processes. The introduction of cutting-edge technologies realized two effects for environmental conservation: the prevention of air pollution and reduction of energy consumption.

Nitto Europe is committed to introduce positively and continuously new technologies that reduce the environmental impact.

(left) **John Miny**
Environment & Safety Dept.

(center) **Tilkin Louis**
Environment & Safety Dept.

(right) **Stals Theo**
Environment & Safety Dept.



Receiving the commendation for its 93% recycling rate by the Belgian government

Nitto Europe applies its environmental policy to every aspect of business activities. We have been identifying the items that have huge effects on reducing the environmental impact (can be resulting in huge profit) in all activities that is ranging from materials procurement to production and distribution and taking the best possible measures for them. Also, we put the efforts to recycle industrial wastes. We reviewed the whole production process and decided to introduce an equipment to distill toluene used for washing (with a capacity of 60,000 liters/month). We have also promoted recycling of paper, cardboard, lumber, metal, surface protection tape, and polyethylene. As a result of these efforts, the Genk Factory achieved a 93% recycling rate. In 1999, we were

awarded the Excellence in Consideration for Environment by the Belgian government. This is the proof that the government regarded our efforts and steady activities as an innovative approach toward the reduction of environmental impact and consumption of natural resources and energy. We were able to establish our position as one of the most advanced environment-friendly companies not only in Belgium but also in the whole Europe.



In 2003, Nitto Europe acquired the certification of ISO 14001 that is an international standard environmental management system. Preparing for the application, the company had set up a special management and action team in the Environment and Safety Division of the Genk Factory. Consisting of specialists in the fields of environment, quality and safety, the team conducted thorough inspections of all equipment in the factory. Acquiring the ISO certification does not mean the end of these activities. Nitto Europe, a leader in the corporate environmental conservation activities in Europe, will continue the consistent activities to investigate in detail and improve all processes involved in production.

The new deodorizing furnace is a regenerative furnace, which does not require energy supply from outside during its operation. The collected thermal energy is used not only to operate the equipment itself but also to supply steam and coolant to the production process and heat to the building.



Examples of the efforts to reduce environmental impact

Reduction of raw materials	Reducing film waste by the introduction of new tape cutting technology (Economic effect of 28,000 euro/year)
Reduction of energy consumption	Reducing electricity consumption by the adoption of inverter fluorescent lamps (Economic effect of 3,000 euro/year)
Pollutant removal	Replacing an automatic halogen fire extinguisher with an environment-friendly automatic fire extinguisher (2 million euro invested)
Reduction of organic solvent emission	Sealing the space where the solvent is used

Nitto Europe's standards for environmental actions

Nitto Europe implements its environmental policy according to the following guidelines:

- Observe all applicable environmental laws, regulations, and guidelines.
- Reduce industrial wastes and promote efficiency in resource and energy consumption through the continuous improvement in the production process.
- Give the first priority to the reduction of environmental impact in the production and technology development processes.
- Provide information and offer educational opportunities to have all permanent and contracted employees understand, execute, and maintain the environmental policy.
- Set environmental objectives and targets, which are internally appropriate in terms of technology and economy and promote the continuous improvement through organizational efforts.
- Perform the open direct communication with customers, suppliers, regulatory authorities, and local residents.

