Pleasant Prairie Woods

Permacel, one of Nitto Denko's overseas local subsidiaries in the U.S.A., purchased land for a new manufacturing plant in Pleasant Prairie, Wisconsin. Although village officials had been actively supportive of the plant, neighbors to the property were concerned about protecting a stand of old growth Burr Oak trees which were considered historically and environmentally valuable.

Despite the neighbors lobbying for the protection of the oak trees, developers went ahead with their plans and cleared and graded the land. With Permacel's support, approximately 100 small trees growing on the planned construction site were transplanted to other areas. One line of trees, along a drainage pond near the building, was kept. Wild birds can be seen among these trees.

To help mitigate the loss of some of the trees, Nitto Denko purchased 29 acres of wooded land adjoining the property and donated the land to the village on the condition that it would remain undeveloped and be kept in its natural state.

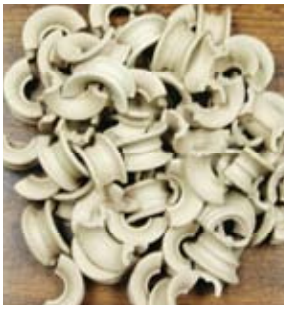
A few years have passed and despite care being taken, many of the transplanted trees were unable to adapt to their changed environment. Unfortunately, in spite of landscape gardener's efforts, 90 percent of the transplanted trees died. Local scientists who have studied the old trees have concluded that they were in very poor health and that their centers had rotted out.

The donation of the 29 acres of wooded land was viewed favorably by the village and Permacel has been able to maintain good relations with their neighbors. The employees feel proud that they have contributed to the environmental conservation of Wisconsin.

The remaining line of trees

Introduction of a Highly Efficient Regenerative Thermo Oxidizer Energy Saving System

Nitto Europe is based in Belgium, an EU member nation. Environmental regulations in Belgium are tight. Given this we have treated the exhausted air drained during the production process with a regenerative thermal oxidizer. It is equipment that transforms exhausted air into clean energy. The exhausted air is burned in a reactor with heat transfer material.



Saddle-type Thermal Storage Device

Monolith-type Thermal Storage Device

Nitto Europe replaced the heat transfer ceramic saddles for more efficient heat transfer monolith blocks at the end of 2006. By doing this we have been able to reduce the pressure drop over the heat transfer material thereby increasing the heat efficiency up to 97% and reducing the energy consumption by 330MWh yearly. In addition to this the total natural gas consumption used through the process has decreased by 840,000 Nm3 yearly which will lead to a reduction of 1,772 tons of CO_2 emission. Providing this reactor runs smoothly, Nitto Europe will be actively contributing to Belgium being one step closer to realizing its greenhouse gas emission target as defined by the Kyoto Protocol Agreement.

The investment amount required for this environmental measure was approximately 900,000 euros. We estimate that it will be collectible within a few years.