

# **CASE STUDY**

# CANADIAN WIND TURBINES

## **Sealing Rebar Rods Protection**





Rebar rods being installed on site.

## **Project Data**

Location	Ontario
Completion	2006
Project Type	Wind Turbine Rebar Rod Protection
Products Used	Denso Priming Solution
Contractor or Applied By	Maintenance Personnel

## **Project Details**

The push for alternative energy sources has been at the forefront of most people's minds lately, especially with fuel prices reaching new heights almost daily. Wind power is one of the alternatives that is making a difference in Canada as Canadian Hydro Producing companies harness this vast body of clean energy.

The first phase of this renewable energy project involves building  $45 \times 1.5$  Mega Watt General Electric wind turbines that are placed strategically over approximately 2500 acres of land in Central Canada (Ontario). The installed capacity has the ability to generate 67.5 megawatts of renewable energy and lessen the reliance on more traditional types of fuel burning energy production. Denso in Canada has been involved in providing anti-corrosion protection to the large number of anchoring re-bar rods that support these massive structures and form part of the foundation for the base.

Denso Priming Solution is applied to the anchor bolts at the manufacturing plant to avoid corrosion during shipping and installation in the field. Once onsite, the bolted rods are set into a concrete pad and then attached to the bottom cylindrical base. After each section has been bolted together, the turbine head itself, complete with 3 x 50 ft blades are mounted on top of the tower structure. Each turbine is then connected by heavy electrical cable. As the turbines spin slowly in their cycle, the energy produced is directed into the power grid for the area. This project has provided another unique opportunity for Denso Anti-Corrosion Products and proven once again that no matter which way the wind blows, Denso is there to protect the integrity of the structure for years to come!