



Customer focused. Built on values.

## Case Study

**Location:** Oak Creek, WI

**Industry:** Education

**Scope:** Electrical, Underground Utilities

**Contract Amount:** \$120,000



Installing the turbine head on the tower

**Owner:** Milwaukee Area Technical College

**General Contractor:** Grunau Company

**Owner's Rep:** Joe Jacobsen

**Delivery Method:** Design Assist

**Contract Type:** Fixed Price

**Website:** [www.grunau.com](http://www.grunau.com)

## MATC-South Wind Turbine

Milwaukee Area Technical College (MATC) now has a complete portfolio of renewable energy sources at their South Campus. With the installation of a wind turbine by Grunau, the other sources are geothermal, solar thermal, and photovoltaic. The turbine is located in front of MATC's Center for Energy Conservation and Advanced Manufacturing (ECAM) where students can take sustainable and energy-focused programs among other curriculum.

Before commencing work, coordination was required with MATC, Milwaukee County, and the City of Oak Creek to obtain zoning, building, and electrical permits. Even the FAA and Department of Transportation were involved since they needed to approve the tower which had a 50-foot height restriction due to the nearby General Mitchell International Airport. The final installation included a 39-foot tower and a total height of 47 feet at the peak of the turbine blades.

Grunau's Underground Utilities crew initially laid the utilities and concrete foundation to provide proper support and anchor points. A 3-man electrical crew then assembled, had the assembly painted in Grunau's Metals shop, completed the electrical wiring, and tipped up the tower and turbine. This Windspot 3.5 KW wind turbine is a valuable power producer for MATC's on-campus micro grid.



Raising the wind turbine