

# Turbine Nacelle Troubleshooting eLearning | Wind Turbine Training

**Hydraulic Power - WX20015-BA02JEN-E1**

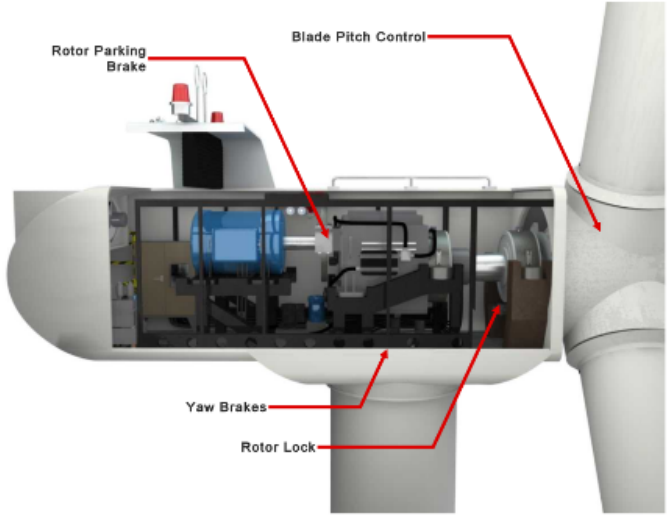
Objective 1: Describe the Function of a Wind Turbine Hydraulic System

**Function of a Wind Turbine Hydraulic System**

Wind turbines commonly use hydraulics for braking and certain other functions because hydraulics is well suited for applications that have high forces and require clamping for extended periods.

Depending on the design, wind turbines use hydraulic power for as many as four subsystems:

- Yaw Brakes
- Rotor Parking Brake
- Rotor Lock
- Blade Pitch Control



AMATROL

Page 2 of 17

## eLearning Course: M20015

Turbine Nacelle Troubleshooting eLearning teaches adaptive skills for wind turbine operation, adjustment, and troubleshooting in a wide variety of situations. It highlights the need for component, sub-system, and system level skills. Covers turbine safety, control functions and power, turbine hydraulics, yaw and parking brakes, rotor lock, the yaw drive, and twist box. Shows meteorological system impact, yaw system operation, safety loop operation, networking, and troubleshooting at all levels.

## Teach States of Operation

### Operating States of a Utility-Scale Wind Turbine

With this course, users will learn about the multiple different operating states of a wind generator control system. These include the three main automatic operating states, which are standby, wind sense, and run. Transitional states are also explored, including ramp up speed state, pitch to feather state, unwrap state, emergency feather shutdown state, and more.

## In-Depth Multimedia Curriculum

### Turbine Nacelle Troubleshooting eLearning Features Engaging Multimedia

Amatrol's extensive, thorough multimedia covers green energy basics such as turbine nacelle troubleshooting. Interactive screens paired with instructive graphics teach turbine nacelle troubleshooting topics from hydraulic power to yaw systems. With the optional hardware, learners can then apply this theoretical knowledge to immediate hands-on skills. For example, learners study yaw drives and then manually test the operation of a wind turbine yaw drive system for applied practice. This combination of theory and practice ingrains concepts in a learner's mind and makes more advanced topics easier to comprehend. (References [950-TNC1](#))

## Additional Info

**Requires:**

- Computer ([see Computer Requirements](#))

**Options:**

- Turbine Nacelle Troubleshooting Learning System ([950-TNC1](#))

---

**Address**

**Amatrol  
2400 Centennial Blvd  
Jeffersonville, IN 47130**

**Contacts**

**email: [contact@amatrol.com](mailto:contact@amatrol.com)  
phone: (800) 264 8285**