

# WindLab™

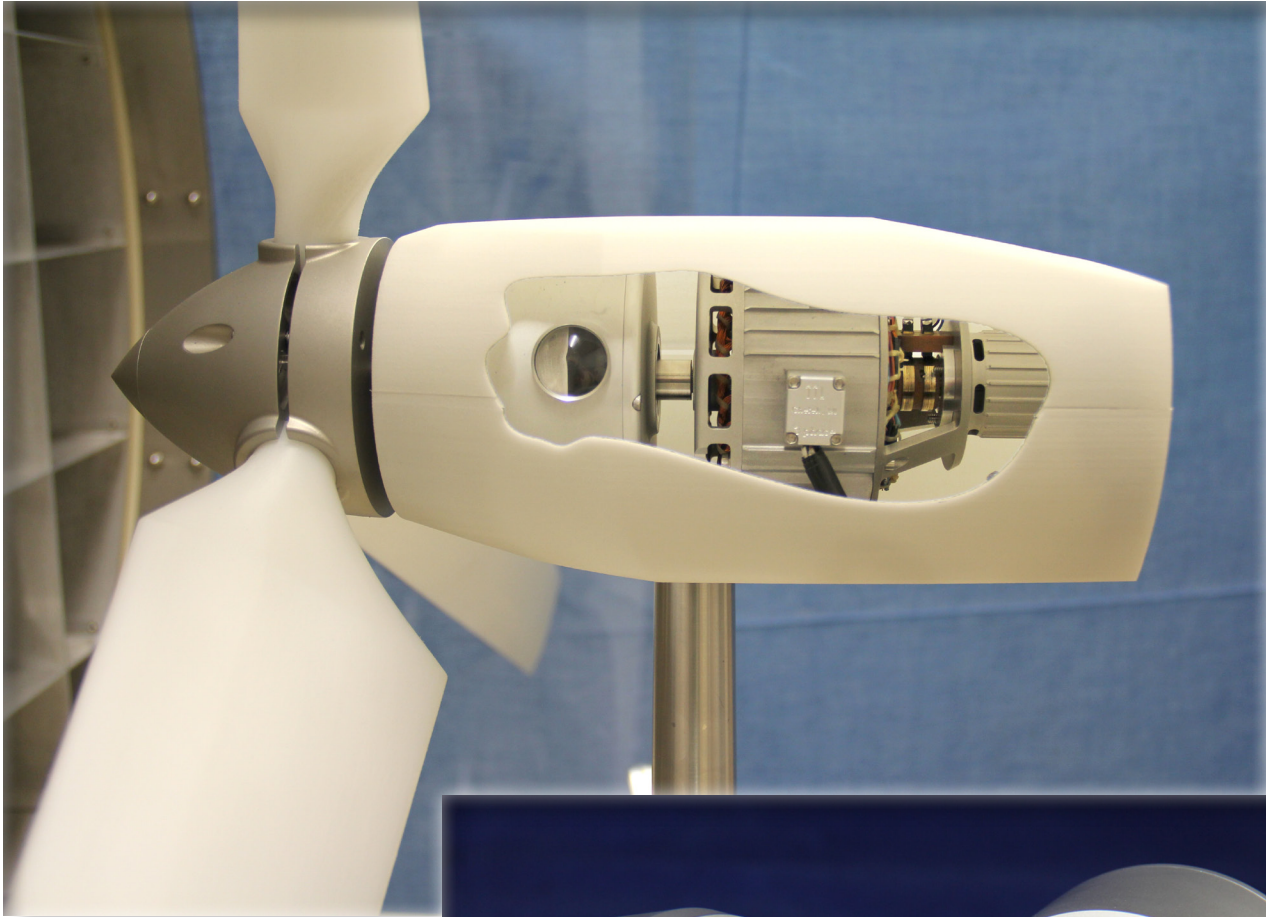
## Electrical Generation System



### Educational & Research Features:

- Housed in an Air Flow Wind Tunnel
- Programmable Variable Speed Wind Source
- Custom On-board Instrumentation Created with LabVIEW™
- Complete & Ready to Operate

# Aerospace Grade Components . . .



## Mechanical Features:

- All Alloy Planetary Gear Box
- Precision Wire EDM Gears
- Cut-Away Gondola Cover
- Stainless Steel Tower
- ABS Plastic Blades



Disassembled Planetary Gear Box

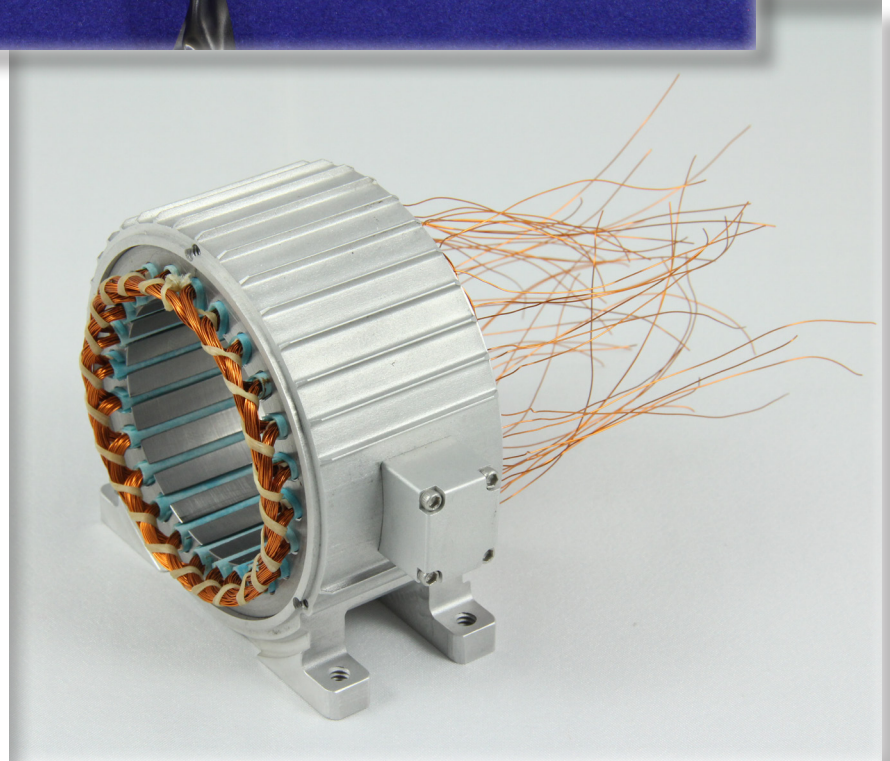


# Purpose-Built Electrical GenSet . . .



## Electrical Features:

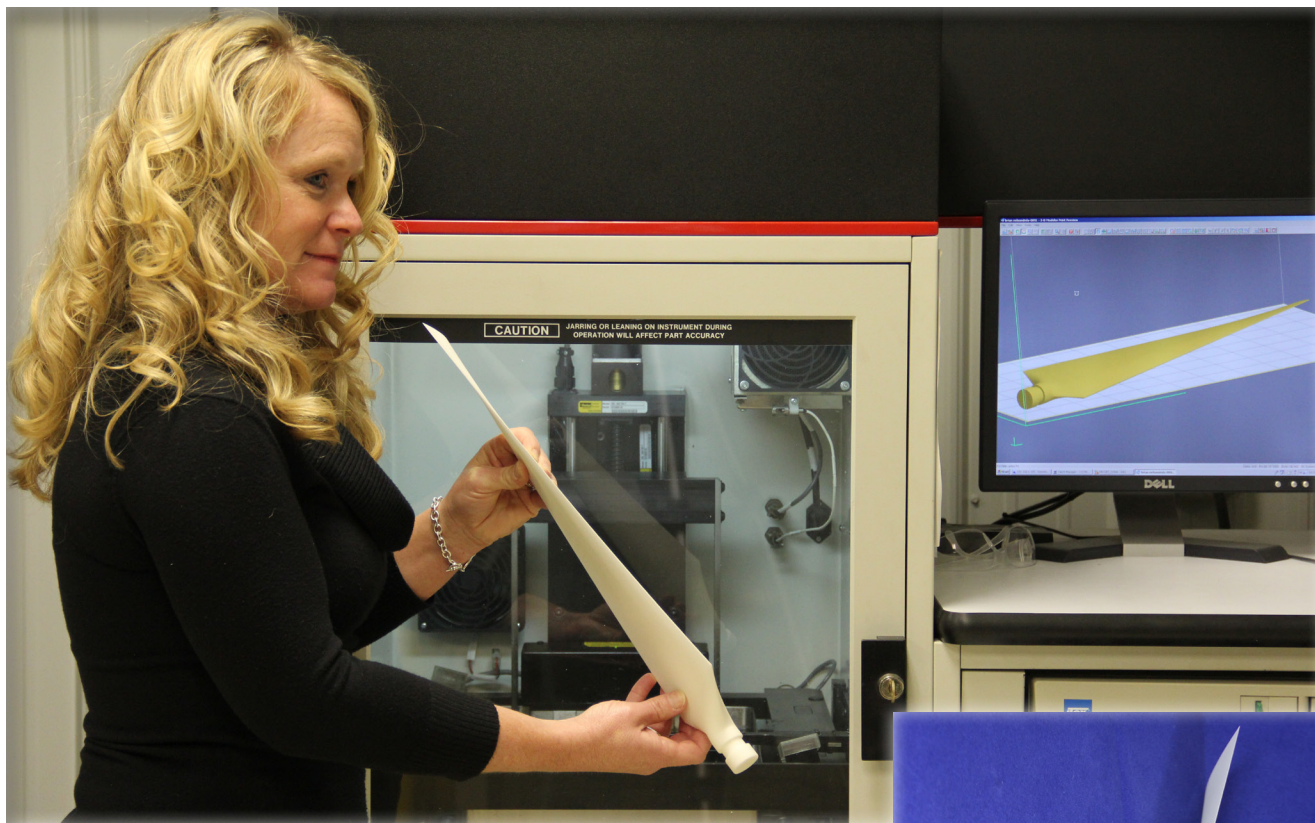
- Three Phase Generator
- DC Excited Eight Pole Rotor
- Eight Pole Three Phase Stator
- Individual Phase Load Control
- Safe Low-Power Output



Stator During Winding at Turbine Technologies Factory



# Custom Blade Profiles . . .

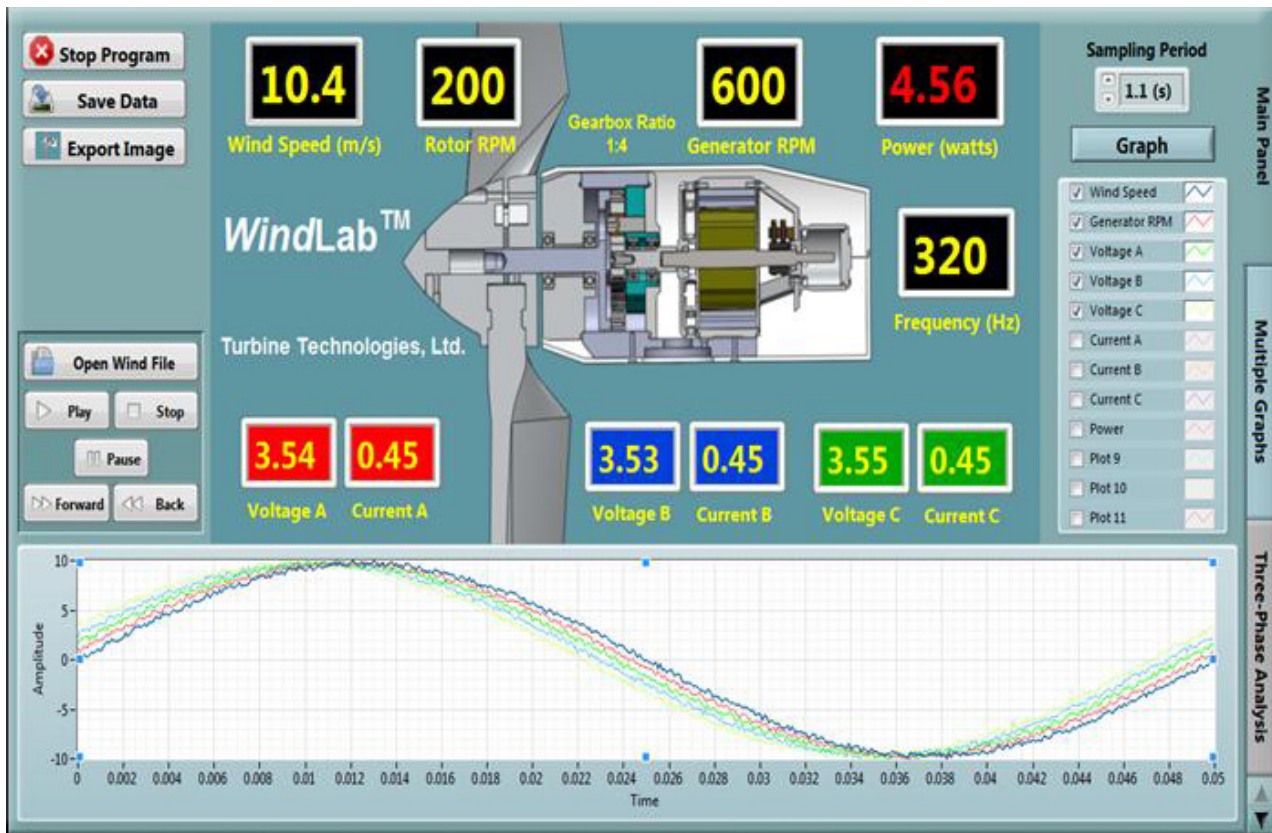


## Aero Features:

- Performance Comparison Testing
- Electronic Solid-Model Blade Files Included
- Manually Adjustable Blade Pitch
- Easy Access Hub for Blade Change-out
- In-House Rapid Prototype Blade Creation Service



# Programmable Wind Control . . .



## Data & Control Features:

- VI Created Using LabVIEW™
- Open DAQ Source Code
- Included Laptop & USB Port
- Extra Channels for Expansion
- Software Loaded & Calibrated

