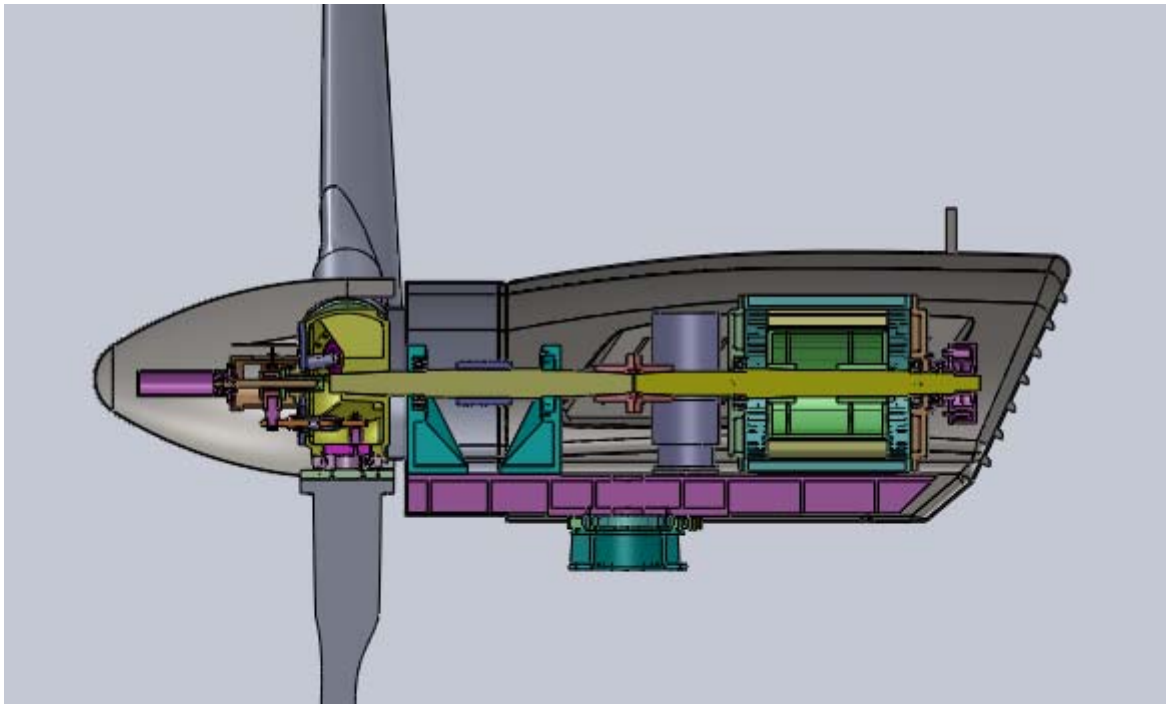
SAVOIA POWER

50kw wind turbine

Appearance

- ZFD23-50KW

Inner structure

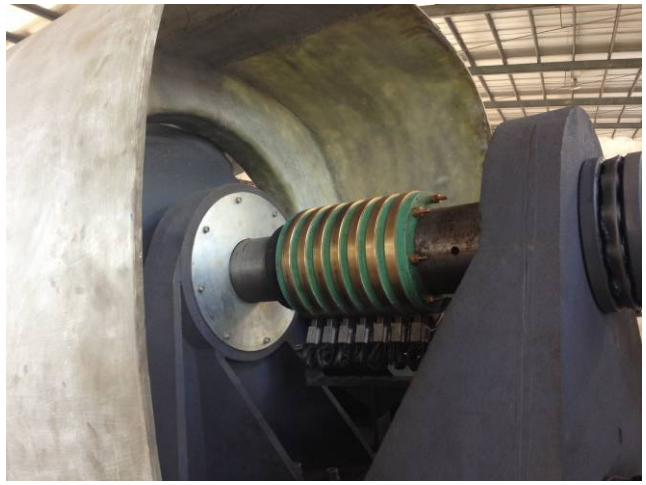


- Anemometer supply the information of wind speed wind direction to PLC
- PLC sends pitch / yawing / brake signal
- Electric drive pusher for variable pitch
- Worm wheel for yawing
- Brake motor for electric brake

Hub for 50kw Variable pitch Wind Turbine

- hub

50kw wind turbine technical parameters



- **Generator：**
- Type: Asynchronous,
- 48 poles (24 Pole pairs)
- Rating： 50KW，60 rpm， 500VDC
- Generator：Permanent magnet (Nd-Fe-B) 38SH
- Certificate：CE
- Superior grade bearings (NSK,SKF), long-term grease, run 30000 hours without maintenance
- Advantage: electric pitch control

ZFD23-50kw Blade

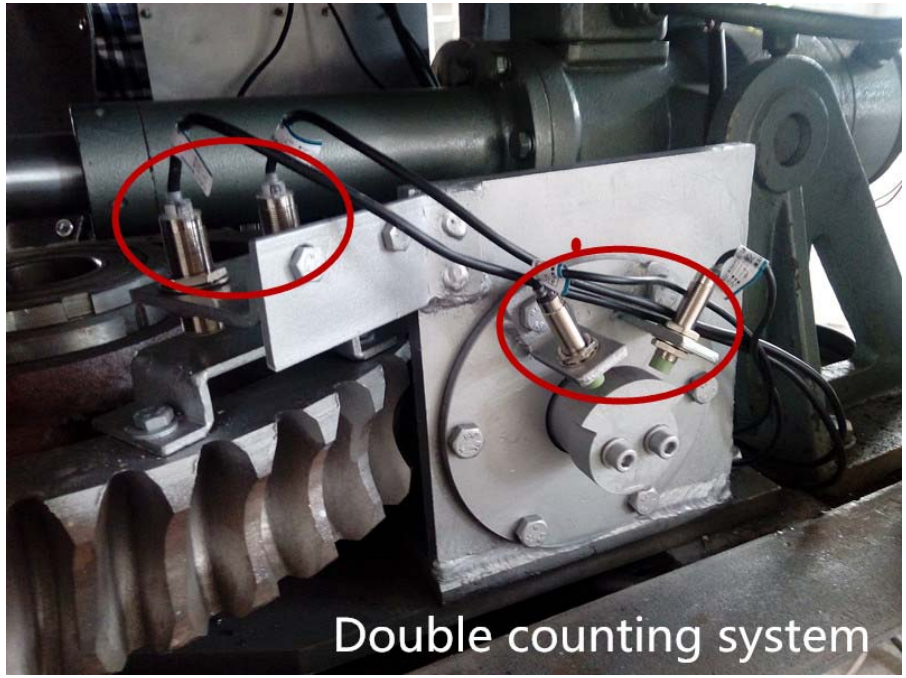
- 3 bladed, upwind
- Diameter: 23.0m
- Swept Area: 415㎡

- Technology : via foaming
- Material : Fiberglass reinforced polyester
- Resin : American Ashland
- Special paint for wind turbine blade
- Protective film
- Vacumme infusion technology, without bubble, high strength , light weight
- Blade position sensor for pitch control

Operational Data &Protection Mode：

- Start-up wind speed: 3m/s
- Rated wind speed : 8m/s
- Cut-out wind speed: 35m/s
- Survival wind speed: 50m/s

- Yaw
- Dumpload
- Manual/Automatic
- Feathering propeller
- Electromagnetic Brake



Output Power

ZFD23-50KW Wind Turbine			
Wind Speed	RPM (r/min)	Output voltage (v)	Output power (w)
3m/s	22.5	187.5	2748
4m/s	30	250	6515
5m/s	37.5	312.5	12724
6m/s	45	375	21987
7m/s	52.5	437.5	34914
8m/s	60	500	52117
9m/s	67.5	562.5	74206

Active electric pitch control Controller

- SIEMENS PLC
- ADSL remote control RS485 Interface
- Fault Alarm
- Touch screen interface
- New function : The controller can drive the inverter by an analog frequency signal , it can match Power One TRIO inverter.

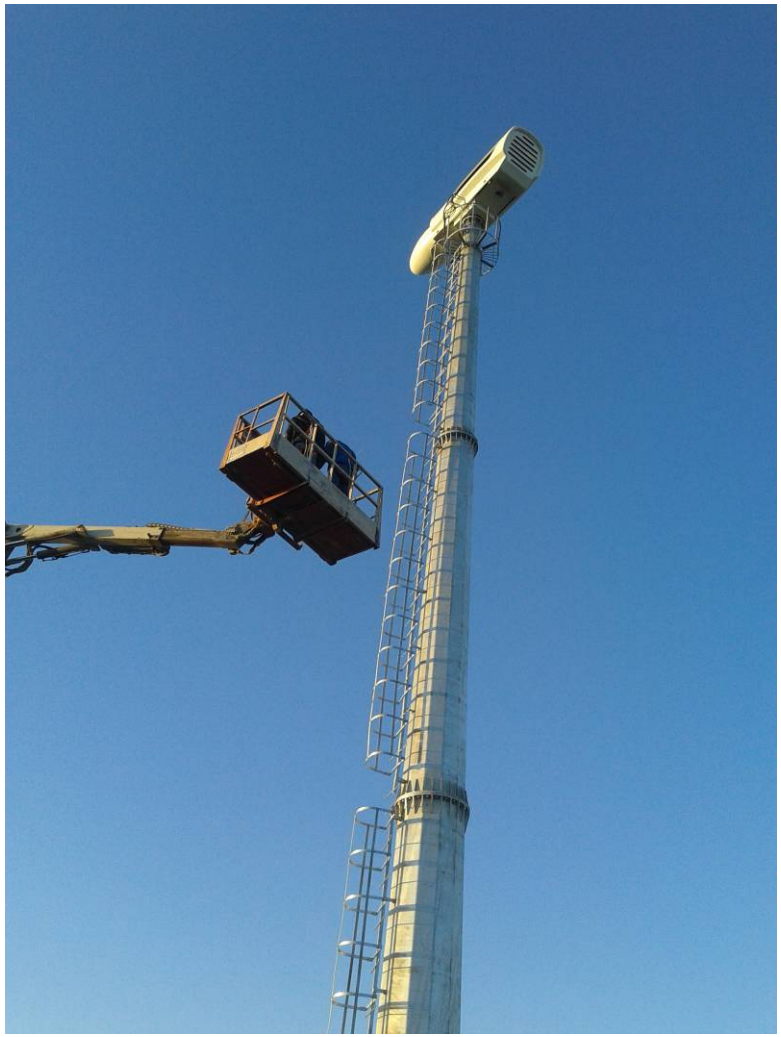
Free Stand Tower

- Material : Q235/Q345
- Surface treatment : hot dipped galvanizing
- Professional drawings and Stress analysis

Package

Projects in Silicy Island

Projects in Silicy Island



Projects in Silicy Island

Projects in Silicy Island

Projects in Livorno, Italy