

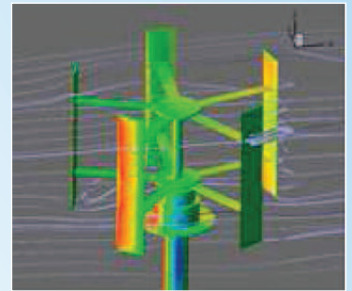
Whisper Silent 500kW Wind Giro Mill

This new technology vertical axis, high energy 500kW wind giro mill, mounted upon its tall, free-standing tower is almost silent in operation and is visible and safe to migratory birds.

Specifically designed with wind farms in mind, The A-axis wind giro mill outperforms nearly any wind turbine in its class due to its powerful generator and large, multi-blade rotary mill.

The hydraulic technology used within this turbine gathers maximum power from the wind, whilst maintaining a steady 500kW of power at the rated speed*.

It is highly efficient - with the giro mill able to rotate at low wind speeds - and, accepting wind from any direction. (Unlike the traditional, much noisier horizontal turbines that must face into the wind and can be slow to react to constant changes in wind directions).



*at a rated wind speed of 13 m/s.

Performance

Rated power	500kW
Rated wind speed	13 m/s
Self start up speed	2 m/s
Operating range	3 - 30 m/s
Maximum wind speed	60 m/s
Nominal RPM	14

Noise levels at 3m distance

Less than 7 m/s	27 dB
Between 7 -10 m/s	32 dB
Between 10 -13 m/s	37 dB

Physical parameters

Mill size	35m diameter
Blade length	28m
Platform height	20m
Overall height	43m
Total weight	60t [metric]
[includes tower, generator and mill]	

Lightning Protection

Standard	On blade tips
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Over Speed Protection

Electronic

Generator

Type	Permanent magnet direct drive DC generator
Nominal output/ Rated VAC	500kW/600

Controller

Output	280-800vdc
Input (DC)	280-800vdc
Rated Voltage	690vac/50Hz

Gearbox

Type	Planetary/helical stages
Gear Ratio	1:15

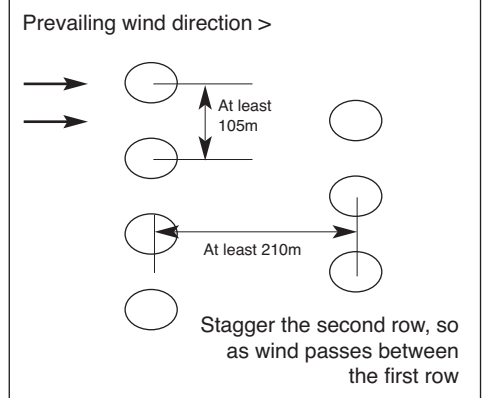
Standby Braking

Auto disc

Monitoring

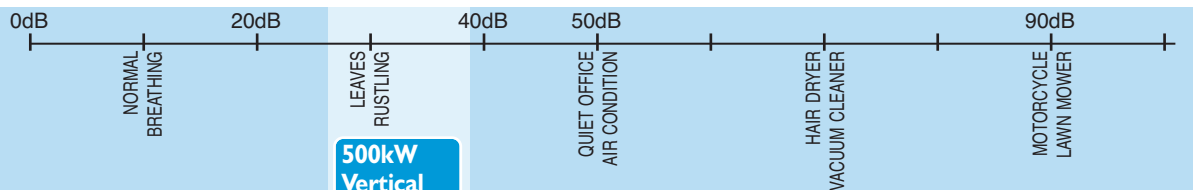
Computer based control (CPU bus mastering) of all vertical axis turbine functions with standard remote pass-code monitoring. Output regulation and optimisation is via the Vari-Pitch. Thermal and vibration sensors throughout.

Suggested Wind Farm Layout



The information contained within this leaflet is correct at the time of going to press, but may be subject to change.

A sound comparison



500kW
Vertical
Axis
Wind
Turbine



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