EasyWind®
GmbH

+ The first certified*
small wind turbine in Germany.

*IEC 61400-2-SWT Class 1 since 2009

+ Produce your
own electricity
around the clock
all year long.

Now even more silent!

+ Tested and approved technology

The **EasyWind** small wind turbine was developed already in 1984 and up until now more than 400 turbines have been installed mainly in Schleswig-Holstein and Denmark. In Schleswig-Holstein, an **EasyWind** turbine yields up to 20,000 kWh annually depending on the location.

Already in 2009, the **EasyWind** received the international Class 1 Certification as the first small wind turbine in Germany. The **EasyWind** is approved for all wind classes and does not need to be switched off during storm due to its special rotor technique (the rotor blades turn in sailing position). This allows for a constant and reliable energy generation even in strongest winds.

The **EasyWind** requires only minimum maintenance and can be mounted without a crane in one day.

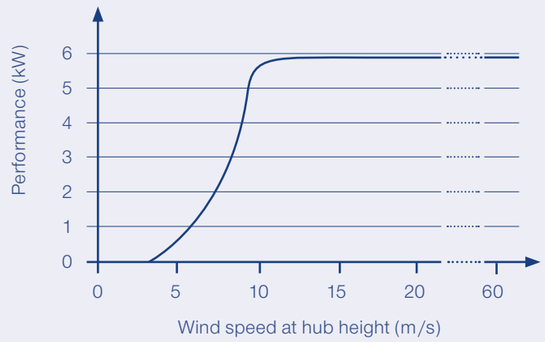
For 2017, it is planned to enhance the product portfolio. Since the end of 2016, two small wind turbines with 1.5 kW and 3.0 kW rated output are being tested.

Reliability for more than 20 years

Performance and Efficiency

The **EasyWind** small wind turbine serves primarily household and companies for self-supply of electricity and heating, but can also feed its green energy into the public grid.

Living up to modern life, the **EasyWind** electricity produced at night can also be used as “wind power” to charge electric vehicles.

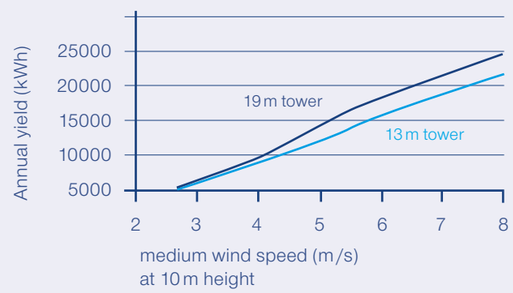


- **Rated wind speed:**
  10.6 m/s – produces 6 kW
- **Cut-in wind speed:**
  3 m/s – produces 100 W
- **Cut-out wind speed:**
  None! Stormproof, resilient rotor through patented passive pitch control. This means that the rotating blades are automatically moved out of the wind in case of strong winds..

Agricultural holding / Business enterprise

Assumptions:

- Consumption of 30,000 kWh / year
- **EasyWind** generates 14,000 kWh / year
- Electricity price: 22 cent/kWh
- Due to the high consumption, the entire supply from the **EasyWind** is used in the farm network despite of the different times of electricity production.



→ Return = 14,000 kWh/year x 0,22 € = 3.080 € annually*

→ Cost = Monthly rates approx. 250 € = 3.000 € annually
(alternative immediate purchase 22.500 € – 27.500 € depending on tower type)

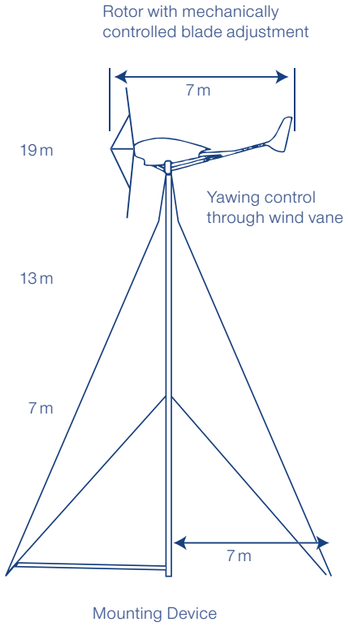
* The return replaces the existing electricity costs. After 10 years, when the EasyWind is paid-off, this refers to the annual saving. In this way, the EasyWind is paid with money which one would have paid to an external power supplier.

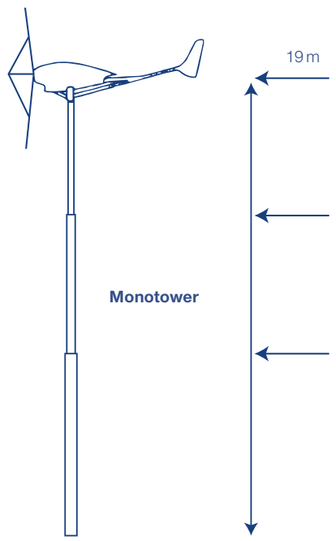
Tower Types

Braced Tower

The tower is braced with steel ropes on four sides. This results in a total surface of 10 x 10 m for the entire installation.

The braced tower is anchored in a cement foundation (cube or strip foundation).





Monotower

The Monotower does not require guy ropes which results in both saving of space and an improved visual appearance.

Another advantage is that the steel root foundation can easily be removed again.

Foundation Types

Strip foundation (for braced tower)

This traditional and cost-efficient version consist of two 7.60 m long and crossed strip foundations which are concreted on location.

Steel root foundation

For the Monotower with its steel root foundation, only a 5 x 5 m large excavation pit is required in which the steel root will be inserted. Afterwards, the pit will be filled with excavated soil and condensed with the help of a concrete vibrator.

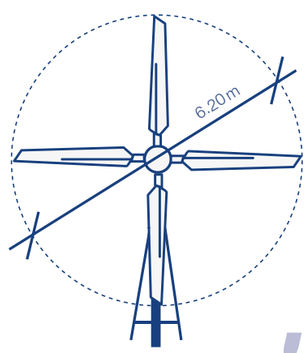
Cube foundation (for braced towers)

With this design, the precast concrete elements (1.6 x 1.6 x 1.0 m) for the rope anchoring and a small cube for the tower wiring are buried in the soil.

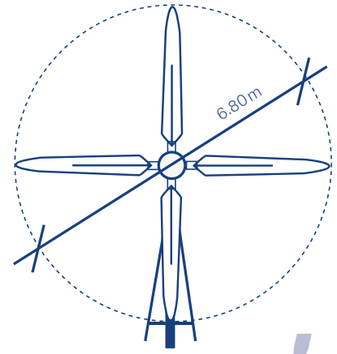
Rotor Variations – it depends on the surface

The **EasyWind small wind turbine** comes in two different rotor sizes: 6.20 m and 6.80 m diameter. In contrast to standard rotating blades with a wing length of 3.10 m, the especially for weak wind areas designed 3.40 m long rotating blades can generate an additional yield of 25 % to 40 %.

Wind harvest area



Enormous **30.19 m²** !



Gigantic **36.32 m²** !

EasyWind as part of complete **self-supply**

Already now our **EasyWind** turbines play a role in self-sufficient energy supply. In addition, the self-produced wind energy allows for a clean, 100 % CO_2 emission-free ride in an electric vehicle.

Our efficient **EasyWind** turbine is the start for a decentral and independent energy supply. The smart coupling of components such as wind, battery storage and e-mobility ensures supply reliability around the clock.

Especially during night and cold weather conditions, our small wind turbine produces heat flow, supply flow and charging current. Our system is flexible and easily scalable and can, hence, easily be adjusted to the client's needs.

For the international market, we developed a cost-efficient container solution which ensures low-maintenance energy supply through sun and wind also in structurally weak areas.

Financing options

a) Immediate purchase (50 % down payment and 50 % upon completion)
b) Instalments (one-time special payment of 3,000 - 5,000€, afterwards monthly instalments of approx. 250€)
c) Low-interest bank financing (from experience the proof of value of the EasyWind is sufficient and no other documents are required)

With the VR-Bank Niebüll (Germany), we have already agreed on special conditions: The purchasing order can be transmitted online and already after max. one week, the **EasyWind** client receives the financing commitment.

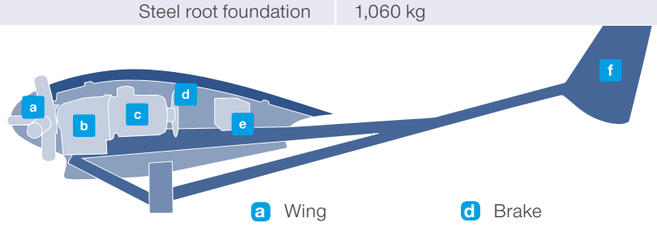
EasyWind Composite

Models, Moulds and Prototypes

In our production department for fibrous composite material we produce not only our own **EasyWind** housings and rotating blades, but also customer-specific polyester mouldings for body parts of cars and trucks, tanks for fire-fighting vehicles, water slides and many more. Our materials are mainly GRP (glass fibre reinforced plastic) and CRP (carbon reinforced plastic). In addition, we can repair and replace your damaged or defected GPR-parts.

Data sheet

Rotor	
Diameter	6.20 m / 6.80 m
Number of rotor blades	4
Position	Windward
Rated Speed	90 / 128 1 / min
Design of blades	Steel / glass fiber
Design of hub	Rigid, solid steel
Drive Assembly	
Gear Unit Design	Spur gear, i = 12.1
Generator Type	Asynchronous, pole-changeable, two-stage
Generator Capacity Output	1.5 / 6.0 kW
Generator Operating Speed	1,080 / 1,550 1 / min
Generator Rated Voltage	400 V, 3-phase, 50 HZ
Power Characteristics	
Capacity Output	6 kW
Cut-in wind speed	3 m / s
Rated wind speed	10.6 m / s
Cut-out wind speed	None (stormproof, passive pitch)
Control Systems	
Aerodynamical performance control	Passive blade pitch angle
Electrical performance control	Pole changing, electronically controlled
Yawing control	Wind vane
Safety Systems	
Aerodynamical	Blade pitch positioning
Mechanical	Disk brake, spring-loaded, electro-mechanically released / ventilated
Tower	
Design	Hot galvanised steel tube, braced on 4 sides or Monotower
Hub height	7 m (23 ft), 13 m (42 ft), 19 m (62 ft)
Weights	
Total weight tower head	363 kg
Wired tower, two-piece, hub height 13 m	Approx. 220 kg
Wired tower, three-piece, hub height 19 m	Approx. 330 kg
Monotower	Approx. 1,700 kg
Steel root foundation	1,060 kg



a Wing
b Gear
c Generator
d Brake
e Vibration sensor
f Wind vane

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I am interested in : ☐ An individual consultation ☐ A location assessment

Name, Surname

Phone

Street, Street number

E-Mail

Postal Code, City

Date, Signature