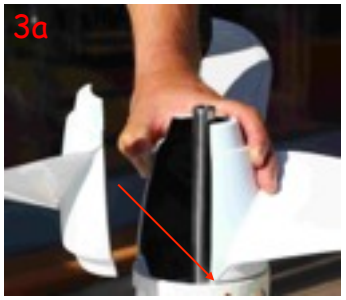
Leewise 1000

* 1 meter rotor diameter
* 350 W at 13 m/s wind-speed
* 12/24 V battery-charging, MPT-controller
* 3-time security against overload
* extreme low noise
* rotor with highest possible aerodynamic efficiency
* generator with efficiency higher than 90%
* carbon fibre rotor-blades handmade in Germany
* extremely thin trailing edge for lowest possible noise
* rotor-blades balanced statically and dynamically
* glass-fibre body, handmade
* computer-aided aerodynamic design, tested and approved in wind-tunnel. Theoretical and wind-tunnel-data have been validated in practical appliance since summer 2010.
* assembly of the 3 rotor-blades in 2 minutes
* shaft construction protected by a patent-law.



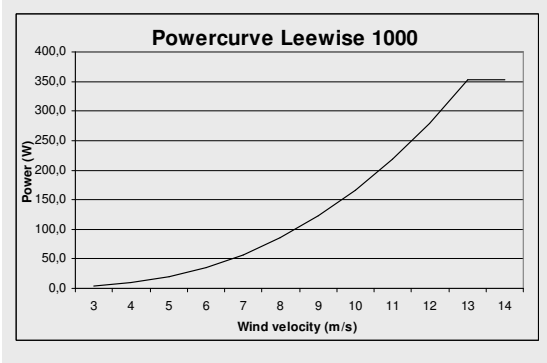
Don´t let them tell you about miracles . . .

It is fact that the power that can be taken from the wind, is mainly dependent on the wind-speed and the total swept area of the rotor - and hence is physically limited.
(see also calculation on page 5)

In advertisement and politics the laws of physics are often ignored . . .

. . . hence we see again and again attempts to outsmart the laws of physics and aerodynamics - promising more power than there is in the wind . . .

. . . unfortunately none of these promises could be proven to be true so far ...



Power-curve of the Leewise 1000 verified in the wind-tunnel aswell as in long-time test in reality

You do not want to buy a windmill . . .

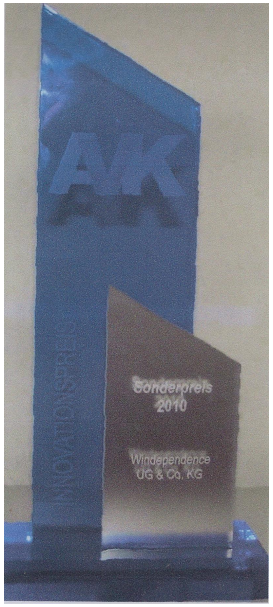
. . . you want to buy energy!

Energy is: power multiplied by lifetime.

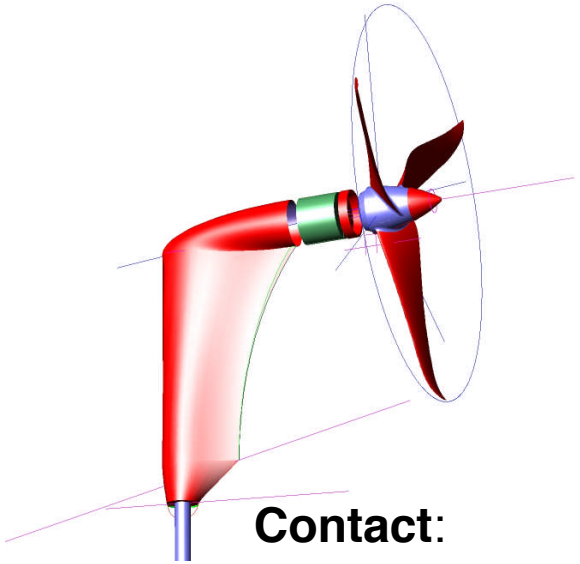
A hight quality windmill with twice the power and twice the lifetime supplies 4 times the amount of energy!
Even though a 3 time investment costs the energy (kWh) will be cheaper.

Leewise 1000: € 1999,-
incl. battery-charge-controller and shipping

Special Innovation Reward 2010
AVK
Association of Compound Materials



You may also buy the the „Leewise 1000“ just because it is so beautiful.



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How much energy is there in the wind?

The kinetic energy in the wind depends on the density of the air, the wind-speed and the projected or swept area of the rotor (normally round or for Darrieus-rotors: hight * diameter).

the power is:

$$P_0 = roh/2 * A * v^3$$

with:
roh = air-densety 1,225 kg/m^3 (at sea-level)
A = rotor-disk-surface = Pi * R^2
with Pi = 3,14; R = rotor-radius [m]
v = wind-speed [m/s]

Leewise 1000:
R = 0,5m at 13 m/s Wind

P_0 = 1056 Watt

59% of that can be taken out of the wind.

$P_{max,\ theoretically}$ = 623 Watt

Now this power is reduced by aerodynamic, mechanic and electric losses down to 50% at the best large wind-mills with 50m ⌀ and 37% oder or less in small wind-turbines.

$P_{Leewise\ 1000,\ 13m/s}$ = 359 Watt

... much more is not possible!

An individual „energy-forecast“ can be made with your wind-data for your spot - or we measure at your spot.

Leewise 1000 by

Windependence,

one step to your

Independence