



“Making of”	
<ul style="list-style-type: none"> Over 30 technicians worked on the installation so the wind turbine can be lighted on the 1st Advent. 	
<ul style="list-style-type: none"> Installation of the lighting was completed in the record time of two weeks. 	
<ul style="list-style-type: none"> Animation of the wind turbine’s lighting was completed by the artist within 2 days. 	
<ul style="list-style-type: none"> The rotating Christmas star will be lighted ca. 7 hours a day beginning at dusk. 	
<ul style="list-style-type: none"> The Siemens Superstar is a unique technical project worldwide – and is visible for 30 kilometers in good weather. 	
Biggest challenges	
<ul style="list-style-type: none"> Attaching the 9,000 LEDs under difficult autumn weather conditions so they will hold in place in rain and snow, in high humidity, and at temperatures above and below freezing. 	
<ul style="list-style-type: none"> Connecting the lights with cables through the hub of the wind turbine to operate the light installation, light the LEDs and generate various motifs. 	
<ul style="list-style-type: none"> Embedding the LEDs in specially streamlined adapters to minimize power losses of the wind turbine. Wind canal tests show that the lights barely affect the turbine’s performance. 	
Facts & Figures	
Wind turbine built:	1999
Total height:	Roughly 100 meters – higher than the Munich City Hall on Marienplatz
Rotor revolutions:	10 - 20 revolutions/minute
Rotor blade length:	More than 30 meters for each blade – roughly as long as a subway car
Number of LEDs:	In total ~1,000 Light-Dots, each Dot consists of ~nine LEDs, this means 3,000 LEDs per blade, evenly distributed over an area of 70m ² Total: ~9,000 LEDs
Cable length of installation:	Total of nearly 400 meters of cable – longer than the Eiffel Tower
Weight of installation:	Roughly 100 kilos per blade <ul style="list-style-type: none"> cable ~30 kg LEDs ~20 kg Fasteners ~50 kg
Wind turbine output:	~2,300,000 kilowatt/hours a year. This represents the average annual power electricity consumption of 660 households.
Span of the Superstar:	Nearly 70 meters (roughly the width of a soccer field).
LED consumption:	Below 4 kWh. Power for the lights comes directly from the wind turbine; the installation supplies itself, free of emissions.
Performance & dynamics of the LEDs:	
Lighting effects:	Programmed for real-time animation – visible for more than 150,000 motorists and commuters a day on Autobahn A9 approaching Munich.
Luminosity:	Up to a maximum of 20,000 candelas (dimnable), equivalent to the luminosity of 20,000 Christmas tree candles.
Light and image motifs:	The animation is coordinated in real time with the wind speed and revolutions.
Light installation:	Exclusively visible during the Christmas season until New Year’s Eve 2009.
Installation colors	White, blue and red.