

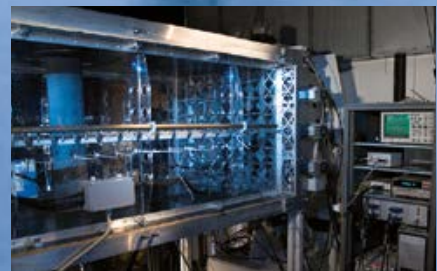
THE NUMBER

50 m/s

... is the speed that scientists can generate in the Oldenburg University wind tunnel.

These wind currents simulate those in nature – and make it possible to measure the aerodynamic and aeroacoustic properties of objects. This allows scientists to determine, for example, the precise strength of the uplift force on the rotor blades in wind farms. Because wind farms are exposed to as many as 100 million gusts of wind over the course of their 20 years in operation, demands on material

and technology are extreme. In the wind tunnel the scientists of the ForWind – Center for Wind Energy Research can study how to regulate turbulence on the rotor blades in order to prevent material fatigue. A “windlab” is now being built on the University’s Wechloy Campus. At the heart of this new building, with 2,300 square metres of floorspace for more than 130 scientists, is a turbulence wind tun-



nel. Here it is possible to reproduce turbulent wind fields – exactly as they occur in nature.