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Greater returns. Greater reason to celebrate.
Introducing the SWT-2.5-120
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# High capacity factor for higher returns

**Witness the evolution of our robust Onshore Geared platform: Designed with the high capacity factor needs of the market in mind, Siemens' powerful SWT-2.5-120 is tailored to optimize the output of medium to low wind sites.**

The SWT-2.5-120 builds on the foundation of Siemens' proven Onshore Geared product platform, one of the most robust and successful turbine lines of all time with over 8,300 units installed globally. The turbine continues its strong heritage while scaling and streamlining innovative features to deliver an exceptional capacity factor and lower cost of energy for medium to low wind conditions.

The 2.5 MW rating and the 120 m rotor diameter result in a rotor to generator ratio that extracts more from the available wind, opening up previously unconsidered low-wind development possibilities. Due to the turbine's robust design, that high capacity factor can be used in medium wind sites for a dramatic improvement in the cost of energy.

### Evolved technology with a proven track record

As the end-product of three decades of practical experience in the onshore wind industry, the SWT-2.5-120 stands as the pinnacle of onshore turbine technology. Design reliability is ensured through detailed component and system testing as well as complete turbine testing and certification. By incorporating extensive operational data and advanced design tools into the development process, the SWT-2.5-120 is able to deliver increased availability for medium to low wind sites all over the world.

The SWT-2.5-120 wind turbine employs a high-performance 120-meter rotor, with 59-meter, aeroelastically tailored blades. The turbine utilizes Siemens' IntegralBlade® technology to make intelligent use of the flexing capabilities of the blade structure. The technology allows for the SWT-2.5-120's larger rotor diameter and 23 percent greater swept area at reduced structural loads.

The nacelle is ergonomically optimized for maintenance through increased accessibility of components and enclosed by a square steel canopy.


1. Square canopy made of steel
2. Efficient electric drive yaw motors
3. Gearbox with one helical and two planetary stages for increased capacity
4. Large hatches and additional space for easy access to and service of the generator and gearbox
5. Efficient cooling system for maximum reliability

Features designed for enhanced capacity and simplified maintenance

### The SWT-2.5-120 at a glance

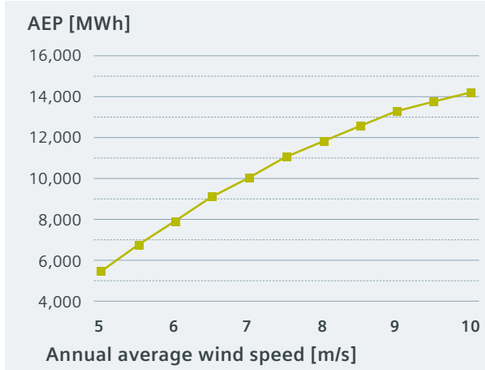
To increase energy production and deliver a high capacity factor and reduced cost of energy for medium to low wind sites, we have refined certain key features of our proven Onshore Geared product platform:

- 59-meter long aeroelastically tailored blades for reduced structural loading
- 120-meter rotor diameter with 23 percent increased swept area for a high capacity factor and enhanced energy production
- Gearbox and yaw system designed for greater capacity
- Enhanced canopy design for easier access to main components

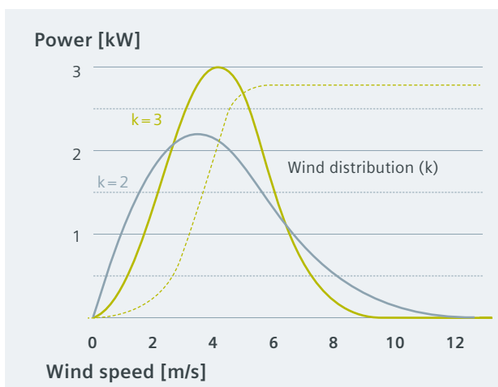
### Tailoring service to your specific needs

To sustain your investment, our service team will fashion an intelligent service solution designed to deliver reliability and maximum output. The ultimate goal: optimizing your return on investment throughout the lifetime of your project.

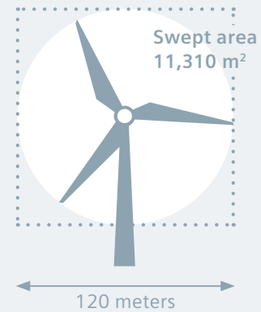
Servicing your wind power plants requires dedication and a long-term partnership with a commitment to care. By tailoring our flexible range of solutions to your specific needs, we can deliver 360° asset care for the lifetime of each turbine. When action is needed, we call on our unique diagnostic capabilities and experience to respond smarter and quicker. We're equally committed to safety. Continual training and a Zero Harm policy make health and safety paramount at all times.



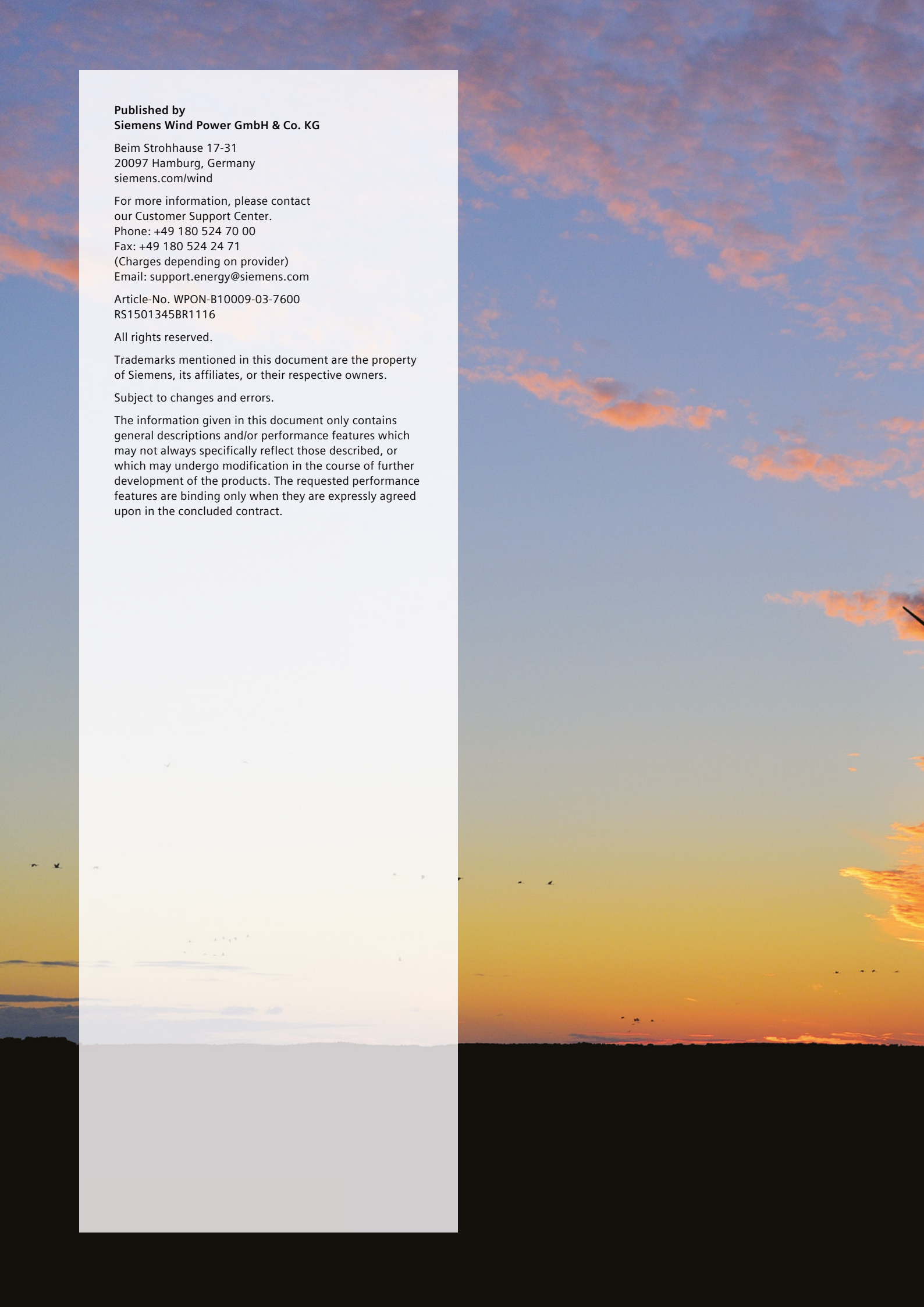

Higher AEP for medium to low wind sites




Weibull shape parameter k and power curve




| SWT-2.5-120 | |
|---|---|
| IEC Class | IIS |
| Nominal power | 2,500 kW |
| Rotor diameter | 120 m |
| Blade length | 59 m |
| Swept area | 11,310 m² |
| Hub height | 85.1 m |
| Power regulation | Pitch regulated, variable speed |
| Annual output at 8.5 m/s | 12.6 GWh |



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