The new SG 8.0-167 DD

Greater rotor for greater benefit

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The SG 8.0-167 DD: Reach higher value.

Maximizing your benefit means maximizing your turbines’ output. The new model of the Siemens Gamesa Renewable Energy Offshore Direct Drive platform, the SG 8.0-167 DD, allows for even higher energy yields at all wind speeds. By integrating proven concepts together with an increased rotor size, the latest Offshore DD turbine equals lower risk and greater AEP.

Meeting our customers’ needs and maximizing their benefit is always our main concern. By leveraging Siemens Gamesa’s unique offshore experience, we are able to create innovative product solutions. In this case – to set a new standard for offshore by improving the energy output of our largest offshore wind turbine. We used our expertise to integrate technology and approach this proven, reliable product from a fresh angle. By looking closely at every detail of our Offshore Direct Drive turbine we were able to make upgrades that we knew would yield the greatest results. Introducing the new SG 8.0-167 DD.

Higher output and lower risk
The 8 MW rating is made possible through the use of new and more powerful magnet technology with an even higher grade than in the SWT-7.0-154.

By introducing a larger rotor using the new aerodynamic 81.5-meter-long B82 blades, the SG 8.0-167 DD gains up to 20% higher annual energy production than the 7 MW direct drive turbine.

The same key advantages
The rest is the same proven technology you’ve come to count on – our reliable direct drive technology, IntegralBlade® technology, and hub and tower concepts, as well as maintenance and safety systems. All designed to lower the risk of your total investment. With the only exception being the blades are now longer, utilizing components that are already in play also means that the supply chain is ready to go and that associated processes are already established.

With the new SG 8.0-167 DD we have once again improved profitability and reduced risk for our customers.

Proven results
For over 30 years, customers have recognized Siemens Gamesa as a major driver of innovation in the wind industry. Technology has changed with the times, but our commitment to providing customers with reliable wind turbine solutions has always remained the same. By building on our direct drive technology, which uses fewer moving parts than geared machines, the robust SG 8.0-167 DD enables superior performance for added benefit.

Utilizing existing elements of our production model creates key advantages. We standardize processes by leveraging our fully developed supply chain while re-using both current and future production facilities. This lets us manufacture high volumes with low risk – over 1,000 units will be produced at the beginning of 2020.

And staying within its predecessors’ design envelope means the 8 MW creates a number of advantages for customers’ projects. First, product risk is reduced. Second, certification processes are shorter. Finally, the balance-of-plant supply chain impact from turbine configuration is minimal. All of these factors contribute to a fast time-to-market result. To sum up, not only do we reduce risk on a turbine level, but by extending our proven Offshore Direct Drive platform we are able to provide valuable synergies to project development. Add the greater swept area and increased rating and we arrive at our SG 8.0-167 DD: lower risk and greater AEP.

### SG 8.0-167 DD

<table>
<thead>
<tr>
<th>IEC class</th>
<th>S (1B)</th>
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</thead>
<tbody>
<tr>
<td>Nominal power</td>
<td>8,000 kW</td>
</tr>
<tr>
<td>Rotor diameter</td>
<td>167 m</td>
</tr>
<tr>
<td>Blade length</td>
<td>81.5 m</td>
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<tr>
<td>Swept area</td>
<td>21,900 m²</td>
</tr>
<tr>
<td>Hub height</td>
<td>Site specific</td>
</tr>
<tr>
<td>Power regulation</td>
<td>Pitch-regulated, variable speed</td>
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</tbody>
</table>

167 meters

Swept area: 21,900 m²