



Fact Sheet

SG 14-222 DD, May 2020

Turbine

- The winds of change have never been stronger: Siemens Gamesa introduces the new SG 14-222 DD offshore Direct Drive turbine.
- The turbine has a capacity of 14 MW; with Power Boost technology, it delivers up to 15 MW.
- The 222-meter diameter rotor uses 108-meter long IntegralBlades[®]. Each blade is almost as long as three Space Shuttles (37.18 meters each) placed end-to-end.
- The 39,000 m² swept area is approximately the size of 5.5 standard football pitches (105 x 68 metres with an area of 7,140 square meters each).
- The light nacelle weight of 500 tons is a testament to the Siemens Gamesa proven technology.
- IEC class: I, S.
- Hub height: site specific.
- Power regulation: pitch-regulated, variable speed.
- 50/60 Hz markets.
- The prototype is planned for 2021 and commercial deployment is already set for 2024.

Electricity production

- The new SG 14-222 DD increases the Annual Energy Production by more than 25% compared to the predecessor, the SG 11.0-200 DD.
- One single SG 14-222 DD offshore turbine provides enough electricity to power approximately 18,000 average European households every year.
- Approximately 30 SG 14-222 DD offshore wind turbines could cover the annual electricity consumption of Bilbao, Spain.

Environment

- One SG 14-222 DD will during its lifespan of 25 years avoid approximately 1.4 million tons CO₂ emissions compared to coal.
- This is the amount of CO₂ that nearly 4.5 million beech trees absorb from their surroundings in the same timeframe.
- Siemens Gamesa became carbon neutral in late 2019 and we are on track towards our long-term ambition of net-zero CO₂ emissions by 2050. The new SG 14-222 DD helps us take giant steps towards protecting and preserving our planet.
- Our installed fleet of over 100 GW both offshore and onshore abates more than 260 million tons of CO₂ emissions annually.

Siemens Gamesa

- The combined installed Siemens Gamesa fleet of offshore and onshore turbines has reached over 100 GW.
- Offshore is in our DNA: Siemens Gamesa is at the front of the market for offshore wind turbines with over 3,500 wind turbines and a capacity of more than 15 GW installed.
- In 1991, Siemens Gamesa built the world's first offshore Wind Power Plant, Vindeby, in Denmark. After more than 25 years of successful operation, Vindeby was decommissioned by owner Ørsted in 2017. Siemens Gamesa has thereby been through the first full lifecycle of an offshore project.
- More than 1,000 Siemens Gamesa Direct Drive offshore wind turbines have been installed in all major offshore wind markets globally. They include the UK, Germany, Denmark, The Netherlands, Belgium, and Taiwan, among others.
- Furthermore, confirmed orders for an additional 1,000 offshore Direct Drive turbines have been received, with installations planned for the markets mentioned above and new offshore markets including the USA and France.