

Application Profile





Application

Offshore Wind Turbines

BSFH 300 Series Brakes

Highlights

- BSFH 330
 Monospring brakes
- Clamping force of 6,744 lbs. (30,000 N)
- Operating range between -40°C* and +55°C (-40°F and 131°F)
- Sintermetal brake pads for high heat dissipation and long life
- Special finish coating for corrosive environments

A major wind turbine OEM needed a reliable rotor braking solution for offshore turbines with rotor diameters of 76 meters (250 ft.). Located in Middelgrunden off the coast of the Danish capital Copenhagen, the turbines are installed in a slight curve with 180 meters (197 yds.) between each and an overall length of 3.4 kilometers (2.1 miles). The total wind farm area is about 1 hectare (2.5 acres). The 2 MW turbines feature stall-regulated blades that are fixed on the hub and designed with integral flaps for individual pitch control.

The rotor brakes are positioned on the high-speed brake disc and are used to reduce RPM and stop blade rotation in the event of an emergency in connection with an active stall regulation.

To meet the application requirements, Svendborg supplied BSFH 330 Monospring brakes with Sintermetal brake pads for high heat dissipation and long life. A Svendborg Monospring brake is comprised of three parts: a caliper half fitted with a spring and a passive caliper mounted on a base plate suitable for side mounting. The brake caliper assembly is free-floating on guide shafts, allowing for a certain degree of axial disc movement.

Each BSFH 330 caliper brake provides a clamping force of 6,744 lbs. (30,000 N). With an operating range between -40°C* and +55°C (-40°F and 131°F) and a special finish coating, the units are built to perform in corrosive offshore applications.

All Svendborg hydraulic brake calipers feature few moving parts, resulting in easy maintenance and reduced costs. A small air gap allows for short response time and fast braking. Svendborg leads the market in supplying rotor braking systems to the global wind industry.

*Contact Svendborg Brakes for low temperature requirements.

Svendborg Brakes GLOBAL REPRESENTATIONS

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