



D3 Uprate

Unleash the full potential of your existing D3 fleet

Are you looking for solutions that improve the profitability of your existing assets?

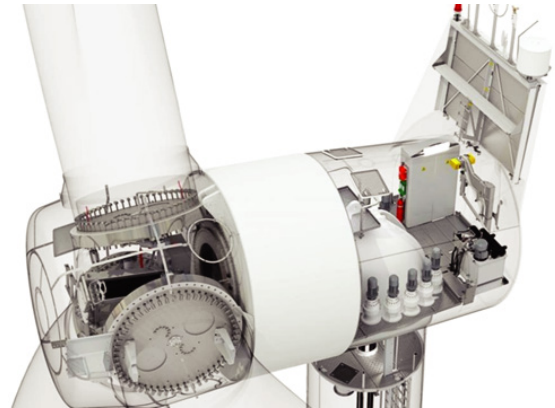
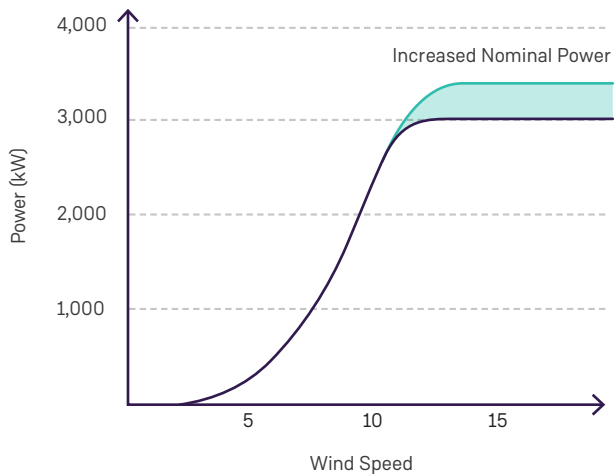
The evolution of the D3 platform has enabled Siemens Gamesa to develop its D3 Uprate product, which permanently increases the nominal power of existing first-generation D3 wind turbines, thereby raising the productivity and profitability of a wind farm.

D3 Uprate delivers a substantial increase in annual energy production (AEP) for the SWT-3.X-101, SWT-3.X-108, and SWT-3.0-113 wind turbines. It increases their rated power to:

- 3.2 MW for 113-meter rotor diameter turbines
- 3.2 MW or 3.4 MW for 101-/108-meter rotor diameter turbines

The uprates are achieved by improving the turbine control logics through a software update, allowing the full potential of the wind turbine to be utilized while still offering full safety guarantees. Depending on the turbine model, the software increases either the torque or both torque and revolutions per minute of the drive train.

Fig. 1: D3 Uprate power curve



Depending on factors such as turbine type and the site-specific wind regime, the actual AEP gain could reach up to 5%. Below are the estimated AEPs for a site with 7.5 m/s average wind speed (assuming there is no export restriction).

SWT – 3.X-101

Potential AEP gain:
From 3.0-101 to 3.2-101: **+2.1%**
From 3.0-101 to 3.4-101: **+4.3%**

SWT – 3.X-108

Potential AEP gain:
From 3.0-108 to 3.2-108: **+2.8%**
From 3.0-108 to 3.4-108: **+5.0%**

SWT – 3.X-113

Potential AEP gain:
From 3.0-113 to 3.2-113: **+3.0%**

Key benefits of D3 Uprate

- Increased profitability
- Zero-risk investment
- No additional hardware needed to implement D3 Uprate
- Take advantage of a certified solution that safely increases the maximum power output of D3 platform wind turbines



- Fast remote software installation and parameter settings
- D3 platform with D22-2 generator type or later versions

Siemens Gamesa Renewable Energy, S.A.U.
Parque Tecnológico de Bizkaia, Edificio 222
48170, Zamudio, Vizcaya
Spain
+34 944 03 73 52 (International)
902 734 949 (Spain)

siemensgamesa.com

Copyright 2023
Siemens Gamesa Renewable Energy (SGRE).

All rights reserved.
No part of this document may be reproduced
without the prior written permission of SGRE.

The information contained in this document is for general information purposes only and may not apply in all cases. Information is subject to change without prior notice. No binding commitments are made by SGRE unless expressly agreed upon in a separate contract.