

# Noise Reduction DinoTails and Serrations



Figure 1: Blade without DinoTails or serrations



Figure 2: Blade with DinoTails or serrations

## Challenge

Customers with Gamesa wind farms located near residential areas or environmentally sensitive zones must comply with strict noise regulations, and exceeding these limits can result in operational restrictions, curtailment or penalties.

## Solution

Siemens Gamesa offers DinoTails for G90-2.0 MW and G97-2.0 MW turbines and serrations for Servion turbines equipped with RE and LM blades, specifically designed to reduce noise in sensitive locations. By incorporating trailing-edge DinoTails or serrations at the rotor blade tip region, these modifications optimize airflow at the trailing-edge separation point of laminar flow, effectively lowering sound power levels. Available in various sizes, the solution effectively minimizes noise emissions, making them ideal for noise-sensitive areas and reducing environmental noise pollution.

## Benefits

- Noise Regulation Compliance, particularly in noise-sensitive or environmentally protected areas. Noise level reduction up to 1.5 dB<sub>A</sub>.
- Minimized Environmental Disruption, ensuring turbines operate with minimal disturbance to the surrounding environment.
- Operational Flexibility: Enables turbines to perform at full capacity without exceeding noise limits, avoiding potential operational restrictions or curtailment.



Maintenance  
ease



Cost  
control



Operating  
reliability



Trusted  
partner



Safety

## Applicability

G90-2.0 MW, G97-2.0 MW, 3.2M114, 3.4M114, 3.4M104, 3.4M122, MM92, MM82, MM100.

## Related products

EnergyUp Partial Range, Hardware.

## Requirements

No PLC update.  
No SCADA update.

### Fleet experience

Installed in +90  
Gamesa turbines  
and +80 Servion  
turbines.

### Installation time

- 30 hours x 2 technicians for Gamesa turbines.
- 19 hours x 3 technicians for Servion turbines.

### Functional system

Blades.

Information is subject to change without prior notice.