3 Advantages of Low Cogging Torque

Precision. Quiet operation. Full-system benefits that are engineered into the motor.

Cogging torque creates unwanted resistance in motors, especially at low speeds. It can lead to noise, vibration, and control challenges. That's why axial flux motors with low cogging torque are ideal for applications that demand **smooth**, **quiet**, **and precise performance**.

1

Reduced Vibration & Noise

An optimized electromagnetic design minimizes torque ripple and magnetic detents, resulting in lower vibration and a quieter acoustic profile. The result: smoother motion and reduced mechanical stress.





Precision Motor Control

Low cogging torque improves low-speed performance, enabling finer control of motion. Even at very low RPMs. Ideal for applications requiring accuracy, responsiveness, or positioning.

3

System-Level Improvements

Cogging torque isn't just a motor issue. It impacts the entire drive system. Techniques like current injection can further reduce ripple, improve control, and increase overall efficiency.

