

Laawun Energy Solutions Australia Pty Ltd

Spiral small wind turbine

Small wind turbine shape







AWM-750D

AWM-1000D

AWM-1500D

Design application examples



Breezy (Coastal/Water

Concept: Fish-themed design Location: Sea, river, lake, city center, etc. Concept: bird-themed

design Location: mountain, field, park, city center, etc.

Spiral Wind Turbine Overseas Installations





西班牙

The Netherlands



United Arab Emirates





Curaçao



Spiral Small Wind Turbine

Technology

As research and investment in renewable energy is being conducted globally to solve problems such as global warming caused by the use of fossil fuels, Respect is developing and producing the world's first new spiral small wind power generation system that applies Archimedes' spiral geometry in the field of small wind power.

How spiral wind turbine technology works



The spiral small wind turbine, is a new design and shape that has never been seen before, and by applying the principle of Archimedes' spiral aberration, it does not produce wind noise caused by general horizontal axis lift wind turbines, resulting in lower noise and higher efficiency than vertical axis drag wind turbines.



01 Spiral Small Wind Power System

- The world's first spiral, created by applying Archimedes' principle of spiral aberration.
- A new kind of wind turbine with blades
- Unique appearance and low noise characteristics make the
- technology highly favorable for applications near urban centers

02 Ventilated Resonant Acoustic Insulation

Panels

Helmholtz's resonance principle is applied to realize functions such as wind load reduction, gas ventilation, and heat exchange by a new ventilated soundproof panel ventilation structure that allows air to pass through the soundproof panel and noise to dissipate.



Ventilation (separates wind and sound) Air filter (prevents debris) Resonance (cancels out sound through resonance) ->

03 Low Impact Development (LID)

Technology that improves filter performance degradation in non-point source pollution control devices using conventional polymer media Implementing an active system with new non-point source filtration technology that self-cleans filters.



R&D planning

01 Energy sector

- Commercialization of spiral small wind power generation system
- Commercialization through local production in India and
- Conducting empirical research for application in urban areas



02 Noise field

- Research on ventilated resonance soundproofing technology and sound tunnel
- smoke suppression technology Research and commercialization to simplify resonance structure and improve

