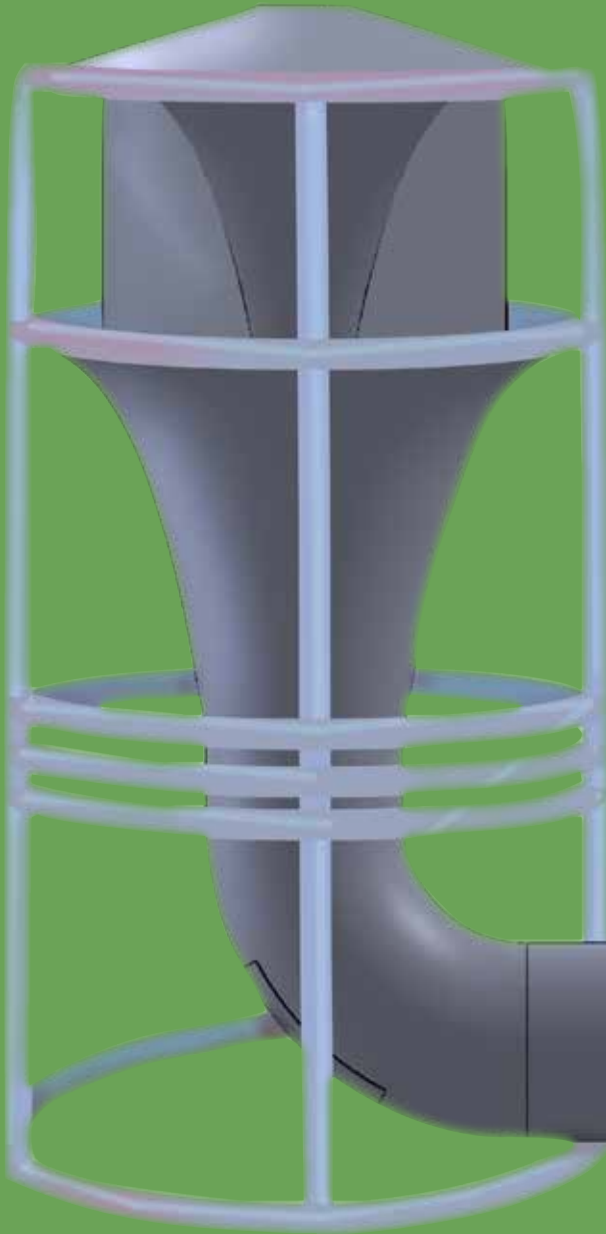


SheerWind's INVELOX Leo is sized for wind power plants, data centers, industrial parks, mining operations, small cities, and industrial plants. Increasing the output of traditional turbines, INVELOX captures, concentrates and accelerates wind to increase capacity factor.

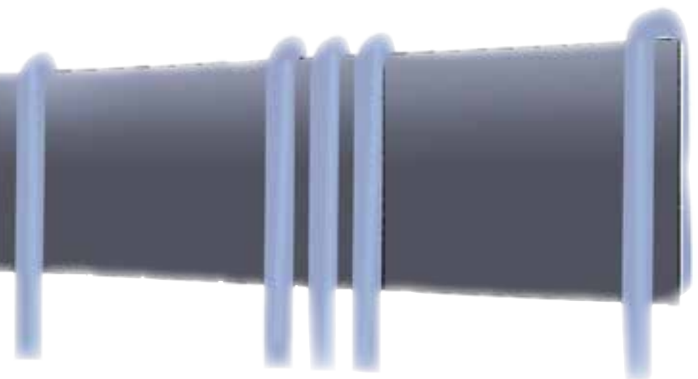


Capture, accelerate, concentrate. These three words express the essence of SheerWind's approach to wind power. The name INVELOX comes from this dedication to INcreasing the VELOCITY of wind. What the technology produces—energy that is affordable, abundant, safe, and clean—is nothing short of revolutionary.

INVELOX funnels wind energy to ground-based generators. Wind is captured with a funnel and directed through a tapering passageway that naturally accelerates its flow. This stream of kinetic energy then drives a generator that is installed safely and economically at ground level.

Bringing the airflow from the top of the tower to ground level allows for greater power generation with much smaller turbine blades. It also allows for networking, allowing multiple towers to direct energy to the same generator. The unit is about 50% shorter than traditional wind towers and uses a ground-based turbine with blades that are 84% smaller.

Our units are designed to respond to increasing power demands by allowing multiple turbines to be installed in a single INVELOX unit.



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**SHEERWIND**  
Changing the Course  
of Power Generation



**TECHNOLOGY:**

- SheerWind’s innovative wind delivery system, INVELOX
- Utilizes state of the art and commercially available turbines, generators, and control box
- No noise, optical flickering, no radar cross section, minimum or no negative impact to wildlife, no negative influence on human health
- Omnidirectional intake with no yaw system required
- Auto wind speed control
- ABB power inverter
- Remote performance monitoring (optional)

**APPLICATIONS:**

- Wind power plants
- Mining operations
- Data centers
- Small cities
- Industrial parks
- Industrial plants

**PERFORMANCE:**

- Power Capacity of Tower: 25,000 kW at 27 mph (12 m/s) Upgradeable to 70,000 kW
- Peak Power Capacity: 32,000 kW Upgradeable to Peak Power of 70,000 kW
- AEP (Annual Energy Production): 219,000 MWh @ 27 mph (12 m/s) Upgradeable to 610,500,000 kWh
- Speed Ratio: 6.5
- Cut-in Wind Speed: 2 mph (1 m/s)
- Cut-out Wind Speed: None
- Furling Wind Speed: None
- Maximum Design Wind Speed: 157 mph (70 m/s)
- Nominal Rotor Speed: 0 – 1,800 rpm

**ELECTRICAL & MECHANICAL:**

- Type: 3-blade upwind, horizontal axis
- Rotor Diameter: 52.5 ft (16 m)
- Gearbox: None
- Over Speed Protection: Speed control, limit to 15m/s
- Temperature Range: -40 to 140 F (-40 to 60 C)
- Tower:
  - Fixed on Foundation
  - Height (Center of Intake to Ground): 623 ft (190 m)
  - Total Height (Top of Intake to Ground): 719 ft (219 m)
  - Intake Diameter: 928 ft (283 m)
  - Ground length: 489 ft (149 m)
  - Intake Type: Omnidirectional
- Generator: 25,000kW, Permanent Magnet
- Inverter: Outdoor rated
- No of Turbine-Generator Sets: 1
- Remote Monitoring (Optional): via internet and smart phone

