Used & Refurbished Wind Turbine for sale

Unlocking the full value of the clean energy transition for our partners

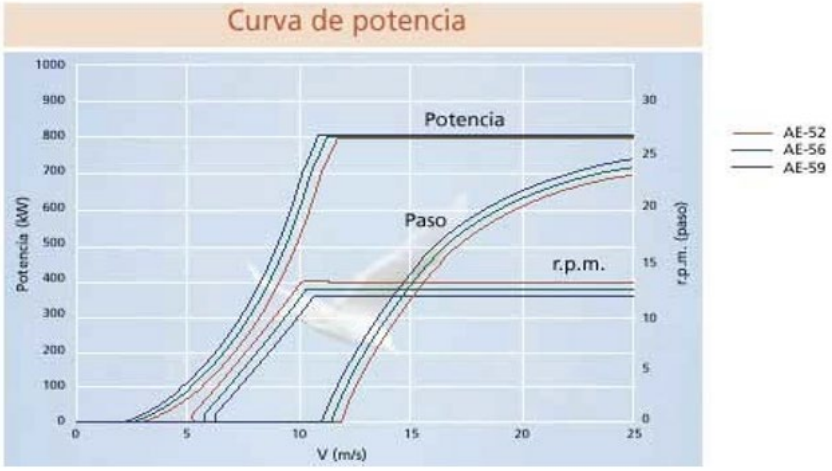
repowerlab CIRCULAR ECONOMY

WIND TURBINE	POWER	TOWER	ROTOR
MADE S800 AE56	800 kW	60HH Tubular Steel Tower	56 m

WIND TURBINE	POWER	TOWER	ROTOR
MADE S800 AE59	800 kW	60HH Tubular Steel Tower	59 m



MADE 800 Series
Variable pitch and variable speed wind turbines 800 kW



Technological Innovations	Additional advantages
High Performance	
Synchronous generator	High performance at low loads
Full variable speed	Adaptation to the wind speed over the entire wind speed range
Fuzzy logic control	Production optimisation
Variable pitch	Adaptation of the blade profile
Large swept area	High specific output
Range of rotors	Optimisation in all wind speed ranges
High reliability	
IGCT Electronics	More robust than IGBT
Single device for all current	No failures due to lack of synchronism
Brushless generator	True IP 54 and no maintenance
Independent pitch control on each blade	Total operational safety
State-of-the-art components	Long-term reliability

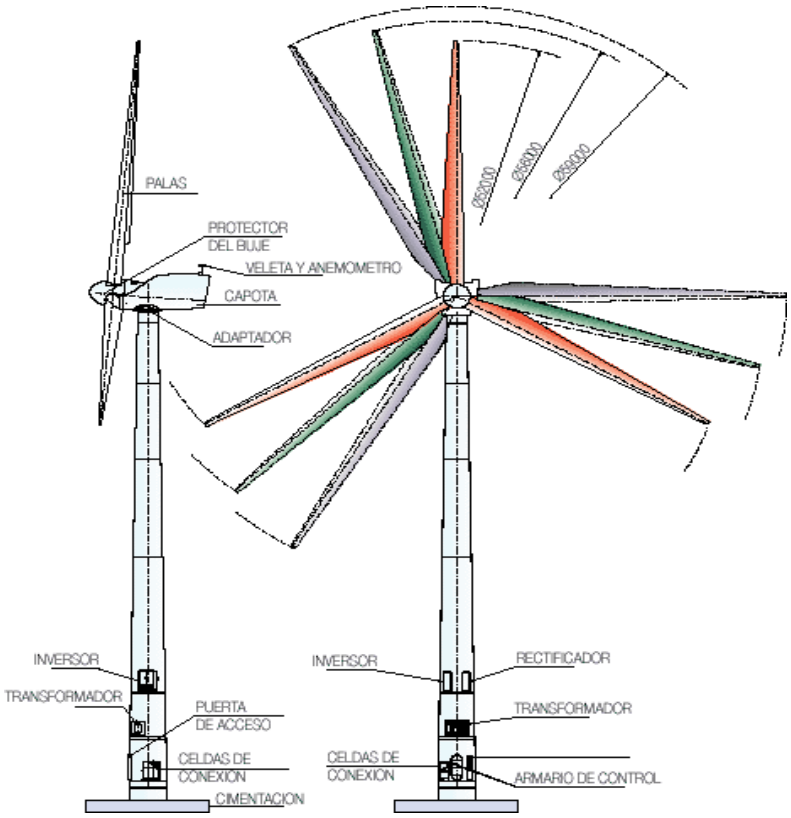


Table of Technical Characteristics			
		MADE S800 AE56	**MADE S800 AE59**
Rotor	Rated power	800 kW	800 kW
	Rotor diameter	56 m	59 m
	Power control	By pitch change and 100% variable speed	By pitch change and 100% variable speed
	Guidance system	Active upwind	Active upwind
	Rotor swept area	2463 m^2	2733,97 m^2
	Number of blades	3	3
	Blade type	LM 27,1 P	LM 28,6 P
	Rotor speed range	11,9 a 23,8 rpm	11,3 a 22,6 rpm
	Hub height above ground	50/60 m	50/60 m
	Pitch angle	5º	5º
Gearbox	Type	Planetarium	Planetarium
	Multiplication ratio	0,001423843	0,001462616
Generator	Generator type	Three-phase, four-pole, synchronous	Three-phase, four-pole, synchronous
	Supply voltage	1.000 V ± 5%	1.000 V ± 5%
	Insulation	Clase H,uso F	Clase H,uso F
	Protection	IP 54	IP 54
Frequency converter	Topology	diode rectifier,step-up chopper,IGCT 'S' inverter	diode rectifier,step-up chopper,IGCT 'S' inverter
	Supply voltage	1000 V	1000 V
	Mains frequency	50 Hz ± 2%	50 Hz ± 2%
	Cosine management of ϕ	Maximum efficiency at all loads	Maximum efficiency at all loads
Braking system	Main brake	Pitch change of the blades	Pitch change of the blades
	Safety brake	Disc brake, hydraulic caliper on the quick-acting axle	Disc brake, hydraulic caliper on the quick-acting axle
Guidance system	Type	Electric geared motors, with geared and planetary stages	Electric geared motors, with geared and planetary stages
	Type of brake calipers	Hydraulic brake calipers	Hydraulic brake calipers
Tower	Type	Welded steel cone-shaped frame	Welded steel cone-shaped frame
Operating conditions	Wind class	II according to IEC 61400-I	III according to IEC 61400-I
	Starting speed	3,3 m/s	3 m/s
	Stopping speed	25 m/s	25 m/s
	Operating ambient temperature	-10ºC ÷ 40ºC	-10ºC ÷ 40ºC
Estimated weights	Rotor	15.200 kg	15.700 kg
	Nacelle	29.000 kg	29.500 kg

RepowerLab is a company that specializes in circular wind energy, focusing on the principles of reuse, repurpose, and recycle. As a full-service supplier in the field of pre-owned wind turbines, RepowerLab is involved in various aspects of the wind turbine lifecycle.

Here's a breakdown of the services provided by RepowerLab:

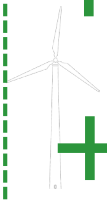
- **Buying:** RepowerLab purchases pre-owned wind turbines that are no longer in use or are being decommissioned. This allows them to acquire turbines for refurbishment and resale.
- **Decommissioning:** RepowerLab is involved in the decommissioning process of wind turbines. This includes dismantling and removing turbines from their original location.
- **Selling:** RepowerLab sells pre-owned wind turbines that have been refurbished and brought back to operational condition. These turbines can be purchased by individuals, businesses, or organizations looking to invest in renewable energy.
- **Installation:** RepowerLab offers installation services for the wind turbines they sell. They can assist in setting up the turbines at the desired location, ensuring proper installation and functionality.

By focusing on the circular economy principles of reuse, repurpose, and recycle, RepowerLab aims to contribute to the sustainability and efficient use of wind energy resources. Their services provide an opportunity for the continued use of wind turbines and the reduction of waste in the renewable energy sector.

Your advantages

Cost-effective solution: Used or reconditioned wind turbines offer a significantly reduced initial investment compared to traditional new turbine sales, while maintaining a solid LCOE.

Reduced transport costs: Used or refurbished wind turbines of legacy models provide further cost reductions, as transport and installation are cheaper due to optimized transport concepts (e.g. containerized transport solutions).



Simple and cost-effective maintenance: Maintenance is performed using standard tools and equipment in the installation and service industries, resulting in easy and cost-effective maintenance.