

## 20 FOOT PACKAGE BY OUTDOOR WATER SOLUTIONS



### Why Buy an Outdoor Water Solutions Aeration Windmill?



To keep ponds clean and healthy, water requires oxygen. Without it, water turns unhealthy, resulting in fish kills and bacteria growth. You can prevent this by adding oxygen to the water with an Outdoor Water Solutions Aeration Windmill. An added benefit of aeration is it helps prevent freezing water through water circulation beneath the surface of the pond.

#### Benefits of Aeration:

- **Reduces algae, bacteria and odor**
- **Adds oxygen**
- **Circulates stagnant water**
- **Improves water for fish, livestock, recreational sites, golf courses and wildlife**
- **Minimizes pond freezing**
- **Hinders West Nile Virus**

**Operation** – Aerates without electricity in as little as 3-5 mph winds. One system is designed to aerate ponds that are up to 2-3 acres in size. For larger ponds, additional systems can be utilized. When working with wider/shallower ponds, one system is effective, but we recommend the use of multiple airstones to disperse the oxygen more efficiently. The OWS Selector valves allow you to regulate the oxygen to each airstone. The windmill can be placed up to 1000' from the pond for effective aeration.

**"BalCam" Technology** - Patent pending technology that increases the amount of air produced with a single diaphragm utilizing the new balanced camshaft system. This innovative new design uses a straight camshaft to balance the workload on three internally mounted sealed bearing's giving you much longer bearing life.

**Manufacturing** – Manufactured in the USA with top quality 18 gauge galvanized steel to our newly engineered design specs. Each piece is cut to order and the system assembled in the Outdoor Water Solutions facility.

**Assembly** – Windmill designed for easy assembly with oval holes for quick alignment and rounded corners for improved safety when working with steel.

**Angle Cut Blades** - Engineered to capture and operate even with a limited amount of wind speed. Longer than many competitors on the market to catch more wind. Total head width is 73", which is the largest head on the market!

**One Piece Hub Assembly** - Reduces the amount of parts to improve assembly time and improve on long term maintenance of the windmill. The one piece hub uses two locking collars and a through bolt at the end of the compressor shaft. You can install the head on the shaft in 5 minutes and it will stay put. Other companies use squeeze clamps that take over an hour to install and can loosen over time.

**Larger Compressor 1/2" Piston Stroke and 10" Diaphragm** - Engineered for most efficient air production and maximum compressor life. Can run up to 3 different diffusers aerating ponds and lakes from ¼ acre up to 3 acres in size.

**Self-governing Heat and Tail fin design** - This uniquely designed tail fin captures the maximum air and is designed to turn out of excessive winds to prevent damage to windmill.

**3 Sided Tower Design** – The three sided tower allows for ease in lowering and raising the windmill for maintenance and repair and allows for the need of only three ground mounting locations. Available in 12', 16' and 20' heights.

**Secure Locking Mechanism** - Allows the windmill head to attach securely to the shaft.

**5 Year Warranty** – Covering all major mechanical defects inside the compressor for a full five years from the date of purchase. Other windmill parts are covered for a period of 3 years from the date of purchase against defects in workmanship or materials.

**Customer Service and Technical Assistance** – The Outdoor Water Solutions technical team is available to assist with any questions regarding setting up the right system, assembly, maintenance and repair. Customer Service is toll free in both US and Canada (866) 471-1614

## Windmill Specifications

<b>Capacity</b>	<b>Up to 4.5 CFM (cubic feet of air per min.)</b>
<b>Rating</b>	<b>30 PSI</b>
<b>Turbine Type</b>	<b>Upwind</b>
<b>Rotor Diameter</b>	<b>73"</b>
<b>Swept Area</b>	<b>19.63 sq. ft.</b>
<b>Blade Design</b>	<b>Proprietary</b>
<b>Transmission</b>	<b>Direct drive</b>
<b>Stroke</b>	<b>0.5" Balanced Camshaft Design</b>
<b>Over speed Protection</b>	<b>Automatic</b>
<b>Foundation</b>	<b>3 ground rods; 1" diameter pipe, 4' long</b>