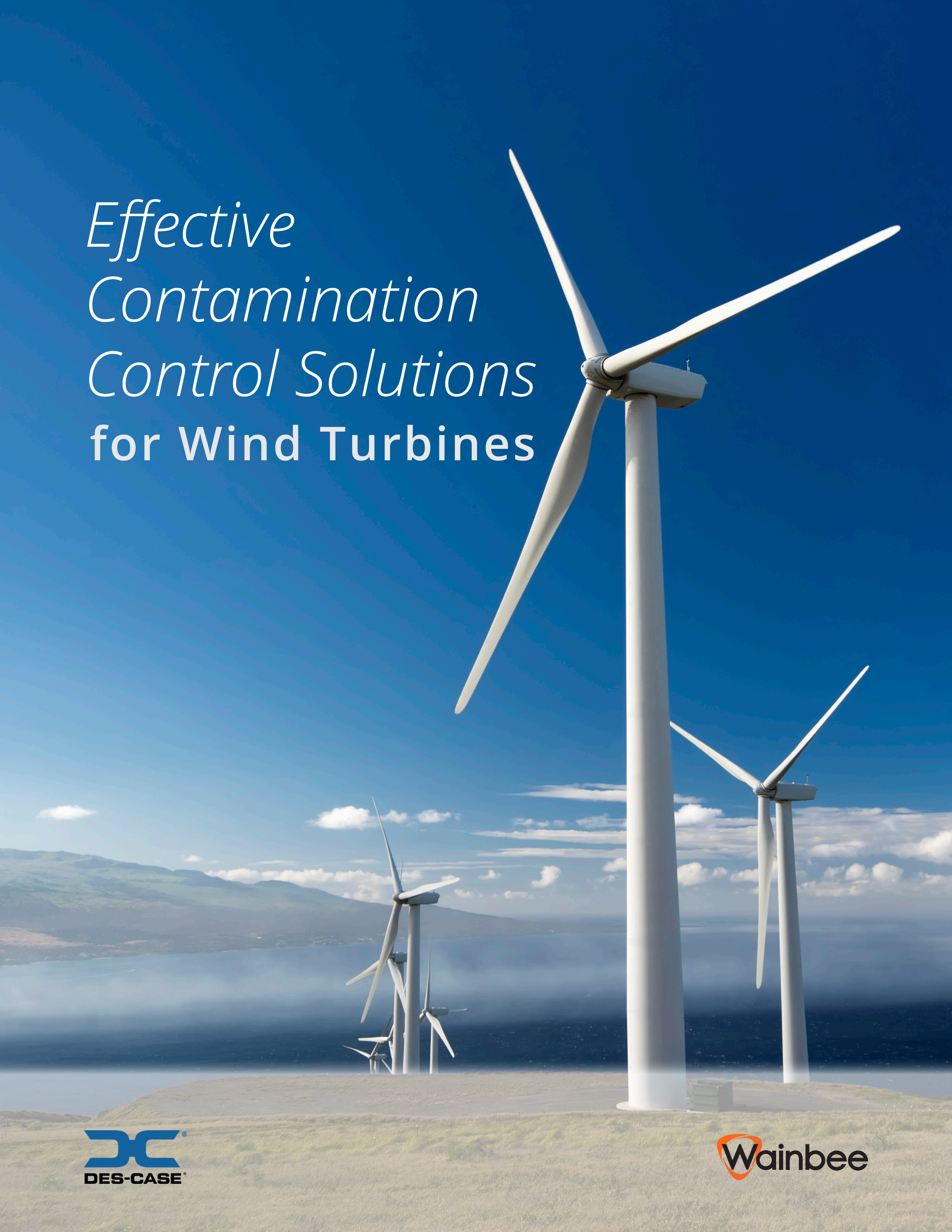
Effective Contamination Control Solutions **for Wind Turbines**



DES-CASE®

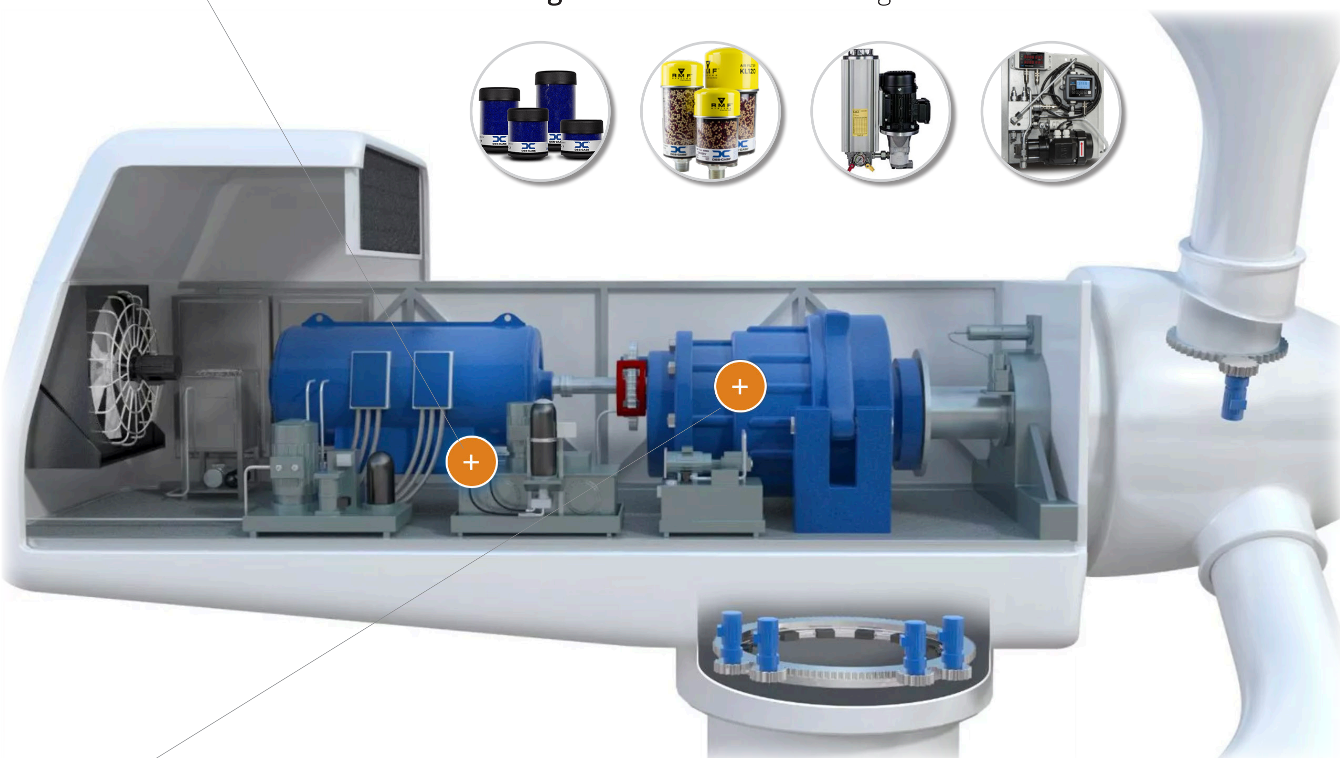
Wainbee

Des-Case Leading Technologies, Powered by Wainbee Expertise

Hydraulic Unit

The turbines use a hydraulic system that provides a braking mechanism for a unit, but can also be used for hydraulic pitch control on the blades. The oil in this application not only transmits power, but it also provides lubrication, heat transfer, and transports contaminants to be filtered out.

- **Seal and Protect**: Extended Series or Titan desiccant breather
- **Filter and Purify**: Off-Line Unit
- **Monitor and Diagnose**: Condition Monitoring Center



Gearbox

Gearboxes in wind turbines differ from those in high-speed machinery. In industrial gearboxes, the progress of failure can occur in weeks, days, or even hours. In wind turbines, the impact of contaminants on slower turning gear drives is slow and insidious. Nevertheless, the mean time between failure (MTBF) for gears and shaft-support bearings can be increased by as much as two to three times by maintaining optimum levels of fluid cleanliness and dryness.

- **Seal and Protect**: Standard Series, VentGuard™ Series, Extended® Series, TDB Series, ACL Series, KL Series desiccant breathers
- **Filter and Purify**: Off-Line Units, Varnish Removal System
- **Interchangeable Filter Elements**: 1330R-KE50, 2200R-KE50, 2600R-KE50, C1063-KE50, C1083-KE50
- **Diagnose and Monitor**: Connected desiccant breathers, Connected Off-Line Units, Oil Quality Sensor, Contamination Monitoring Sensor
- **Store and Transfer**: LT-LMS, Oil Transfer Containers, Filter Carts, Drum Filter Carts, Drum Toppers