

ENGINEERING
TOMORROW

Danfoss

Case story | Applied Turbine Technologies

A business model driven by **technology** and **support**

The equipment: The Applied Turbine Technologies (ATT) Zirocco road dryer runs on a diesel fueled 75 kW micro-turbine. The micro-turbine has an output of 50 cubic meters of airflow per minute at up to 650 degrees Celsius. The machine is extremely effective for drying roads, removing black ice from tunnels and bridges, and removing gum from public spaces.

The opportunity: Many cities throughout Europe have banned the use of open-flame and propane-powered road drying equipment, creating the opportunity for alternative technologies. At the same time, conventional road drying equipment often requires a crew of three people and/or a large truck to do the same amount of work as the ATT Zirocco road dryer.

The challenge: Micro-turbines are extremely sensitive and require a great deal of preventive maintenance. In fact, the engine box needs to be replaced within the first 150 hours of operation. Real-time monitoring of engine data, location, and machine operation was mandatory to prevent unanticipated downtime.

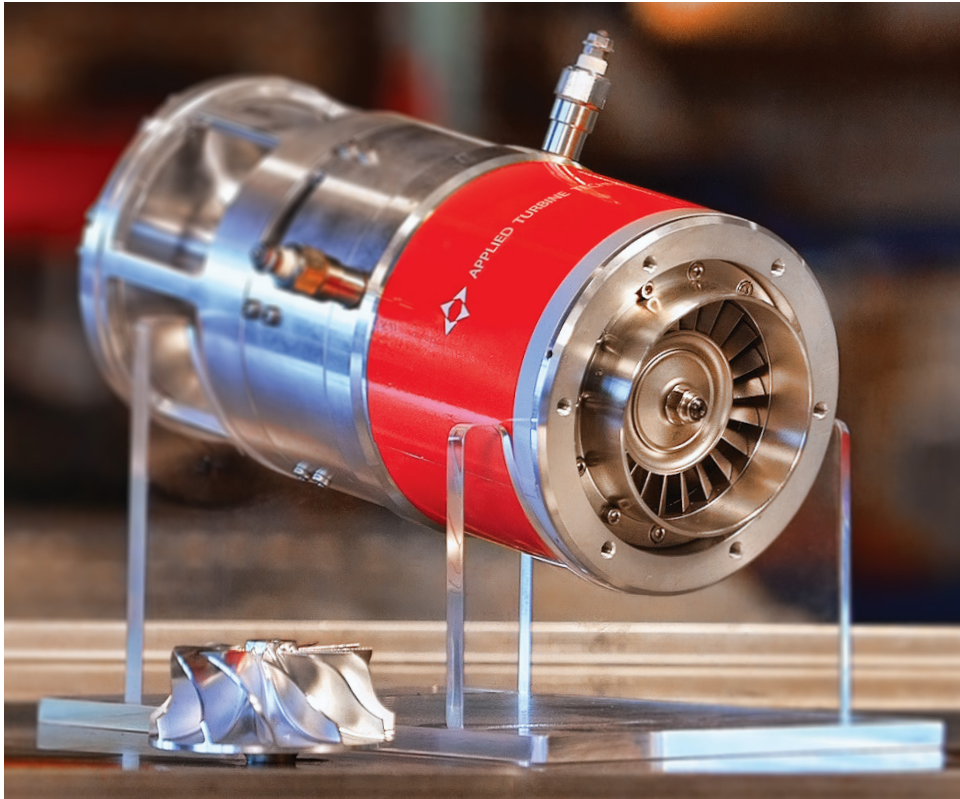
The solution: ATT sought the help of Danfoss to develop a controller and telematics system that could be customized specifically to meet the unique needs of the Zirocco road dryer, as well as end users of the road dryer. ATT integrated the Danfoss DP 250 display, PLUS+1® MC 050 and Danfoss Telematics Solutions. Using Danfoss Telematics Solutions, ATT gained immediate access to state-of-the-art telematics solutions tailored to their needs with a minimal up-front investment.

The results: Danfoss Telematics Solutions allow for ATT to remotely monitor their customers' road dryers in real time, resulting in essential preventive maintenance and shipment of parts before problems occur. Danfoss Telematics also feature machine tracking, geofencing and automatic report generation capabilities, saving time for the end user who would typically be responsible for manually documenting a completed work route.

**Plug and
perform**

versus code and compile.

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Telematics that pay for themselves

“For most of our customers, the return on investment is achieved within 50 or 60 kilometers. This is only possible with Danfoss Telematics Solutions, as it allows for the monitoring of the jet engines for the Zibrocco road dryer — which has its first scheduled maintenance at 150 kilometers. Developing our own remote solution would have cost us precious time. Only Danfoss Telematics Solutions integrated seamlessly into our application — with no wasted time.”

Lars Mellgaard, CEO | Applied Turbine Technologies

To learn more about how our solutions can drive profit for both you and your customers, contact your Danfoss distributor today, or go to powersolutions.danfoss.com