Norsepower is at the forefront of emerging clean tech for the shipping industry. Their Rotor Sail is the first proven auxiliary wind propulsion system that enables cargo, cruising and other shipping vessels to reduce fuel consumption by augmenting their power systems.

With their modern sailing technology, Norsepower is poised to achieve their mission of reducing the environmental impact of shipping: The Rotor Sail system replaces up to 20% of the fuel used to power a ship while lowering CO₂ emissions.

Dependable wind sensing

Accurate, reliable and dependable wind sensors are essential for optimizing Rotor Sail performance. Norsepower sought a wind sensor that could stand up to the harsh, demanding oceanic environment including winter weather conditions.

After experimenting with several options, Norsepower chose the rugged and highly accurate Vaisala WINDCAP® Ultrasonic Wind Sensor WMT700.

Accuracy in all weather conditions

A robust and reliable ultrasonic anemometer for wind measurement, the WMT700 uses ultrasound to determine horizontal wind speed and direction.

Norsepower selected the WMT700 not only for its high accuracy and durability, but also for its heating properties which protect the components and prevent ice and snow buildup in cold climates.

The WMT700 is a very rugged instrument. It is made of stainless steel with a durable design — perfect for rough conditions including salted sea air. This proven technology has been used...
widely in ships from Greenland to
Antarctica. Extremely accurate
and maintenance free, the
WMT700 is also ideal for global
shipping operations.

**Optimizing rotor operation**

After a successful trial period,
Norsepower decided the
WMT700 is the best choice
for operation, research and
development projects for their
Rotor Sails. The WMT700 delivers
precise measurements, enabling
the Norsepower automation
system to recognize and leverage
all wind conditions, use the
maximum available propulsion
power and calculate the
corresponding fuel savings.

The WMT700 gives Norsepower
peace of mind, knowing that
their Rotor Sails are performing
optimally at all times, and
bolstering their confidence that
they are achieving their goals
for cleaner shipping around
the world.

“Optimal use
of wind energy
requires wind
sensors with the
highest accuracy
and reliability…
We have chosen
Vaisala WINDCAP
WMT700 wind
sensors and
have been very
satisfied with both
performance of
the sensors and
cooperation
with Vaisala.”

- Jarkko Väinämö,
Chief Operations Officer