

Application Note

WindSonic, WindObserver, MaxiMet & MetPak in the marine market

Reference: AN0023

Introduction

Gill's anemometers are extensively chosen for projects in the marine market due to their reputation for high quality, easy installation and above all, for their solid-state construction, which offers huge advantages over other mechanical instruments as they require no regular maintenance. All Gill anemometers provide an automatic quality message, giving confidence that data received is valid and can be trusted.

WindSonic, WindObserver and MetPak are the most commonly used, however, the 3-axis WindMaster-Pro and Research anemometers are also used.

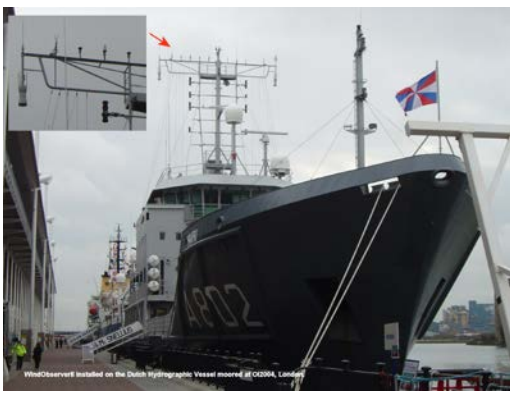
Dynamic Positioning Systems

Wind speed direction can significantly affect the position of a ship or oil platform. Regulations require that the vessels record weather data, including wind speed on a regular basis, with data displayed continuously on the bridge.

On-board wind sensors provide data directly to the ship dynamic position system, which automatically controls ship thrusters to counteract the effect of the wind to keep the ship on station when manoeuvring alongside oil platforms.

High quality wind speed and direction data is essential to ensure accurate control of a vessel, especially during high wind storm conditions. Gill products are proven in DPS applications and supported by formal offshore evaluation by our customers.

WindObservers are used extensively by Kongsberg for their Dynamic Positioning Systems provided to vessels worldwide.



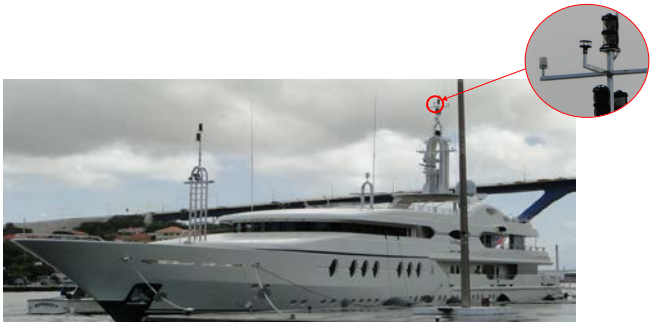


General Vessel Wind Measurement

Wind measurement is a key requirement for any sea going vessel, whether the requirement is for a fishing vessel, super yacht or sail boat as wind is used as part of the data to provide safe travel, reduce fuel costs and allow sail boats to make progress.

WindSonic and WindObserver are used on a range of vessels as seen below. MaxiMet has also been chosen for larger vessels and Navy patrol vessels.





Ports & Harbours

Operational staff in ports and coastal areas are put under extreme pressure to make the right decisions. Offshore, the captain of a vessel wants to bring cargo safely into the harbour and onshore, the harbour master will also want vessels to come safely to berth. They both need accurate local weather and sea state information provided by weather monitoring systems to ensure peace of mind via increased safety and economic savings. Wind, temperature, relative humidity and pressure form a basic part of this requirement.

WindSonic, WindObserver and MetPak are currently in use at several ports worldwide including Cardiff UK, Fraserburgh UK, Hurst Castle UK, Norfolk, UK, Netherlands and Asia.







Data Buoys

Over the years meteorological data has been required from more locations, often in areas which become more and more remote. This has meant an explosion in the requirement for data buoys for coastal to deep ocean monitoring. MetOcean data buoys include basic meteorological parameters like wind but these are often in remote, harsh environments and WindSonic has more than been proven to be the sensors of choice.

WindSonic is chosen by almost all MetOcean data buoy providers including Axys and is also the chosen sensor by the UK Meteorological Office.



MaxiMet has also become a popular choice for large or coastal data buoys as it offers a compass and GPS built-in.

https://solent.port-log.net/

