

Update of the GIDAS TEA: compliance with the new ISO 7933:2023 standard



The **port of Vado Ligure** has recently implemented an **advanced wind monitoring project** using LSI LASTEM anemometers and Wind Watcher software. This innovative system was designed to ensure the **safety** and **operational efficiency** of the port, monitoring anemometric conditions in real time and providing critical data for the management of port activities..

Wind Watcher: technology and functionality

LSI LASTEM's Wind Watcher software is a cutting-edge system for real-time **anemometric acquisition** and **processing**. Its ability to instantly analyse wind data allows it to evaluate alarm conditions and determine port operational states. The software processes data received every second from a network of anemometers, ensuring an **immediate response** to potentially dangerous situations.

Operational decision support

The Wind Watcher program supports operational decisions by determining **safety, alert** or **alarm** conditions in real time. This is particularly important in contexts such as port terminals, railway lines and offshore platforms, where

the management of operations must be closely related to wind conditions to ensure safety and efficiency.

Technical characteristics of Wind Watcher

The main technical features of the Wind Watcher system include:

- **Rapid acquisition and management of real-time data:** one data per second from one or a network of anemometers;
- **Visualisation on PC or web platform:** immediate access to data for the relevant personnel;
- **Alarm generation:** it is possible to control actuators such as sirens or telematic switches;
- **Data storage:** analysis and subsequent checks through access to the database of the collected data;
- **Redundancy:** installation on two servers to guarantee service continuity.

Implementation at Vado Gateway

At **Vado Gateway**, the first semi-automated deep-sea container terminal in Italy and among the most technologically advanced in the Mediterranean, a sophisticated **system consisting of hardware, anemometers, acquisition control units and client-server software** has been implemented. Two anemometers were installed on two container cranes, with six monitoring points in total, including four light towers. The data collected is managed and stored every second, offering real-time visualisation and allowing constant **monitoring** of the **anemological conditions** of the **entire port area**.

Benefits for safety and operational efficiency

The main **objective** of the Wind Watcher monitoring project is to ensure **worker safety** and **minimise operational downtime**. By constantly monitoring wind conditions, the system allows you to make thoughtful, objective and timely decisions, reducing the risks of accidents and optimising the management of port operations.

Future installations and collaborations

After the success of Vado Ligure, the Wind Watcher system is planned for **other installations in Liguria**, including the port of La Spezia. Liguria is often subject to **unpredictable wind conditions** and **strong gusts**, making an advanced monitoring system essential. Collaboration with technicians and port operators has been and will always be fundamental for the effective implementation of the system.

Conclusion

The anemological monitoring and warning project with Wind Watcher at Vado Gateway represents a significant step forward in the **management** of **anemometric conditions** in the **port area**. Thanks to reliable technology and an effective decision support system, LSI LASTEM contributes to improving the safety and operational efficiency of ports, minimising risks and maximising productivity.