INNOVATIVE MONITORING OF THE WORLDÂ€™S ENVIRONMENT

Aanderaa

Aanderaa Instruments develops, manufactures and markets oceanographic and meteorological instruments and special systems for collecting environmental data. The products are rugged, reliable and particularly well suited for long-term applications in remote areas without electricity supply. Data can be stored internally in a highly protected memory or transferred in real-time via cable, VHF/UHF radio, satellite, modem or GSM.

From their base in Bergen, Norway, Aanderaa Instrumentâ€™s market presence has steadily been expanded over the years and, since 1966 (when the company was established), the company has manufactured and supplied about 20,000 oceanographic instruments worldwide. Currently 90% of all equipment is exported to users in more than 40 countries worldwide, 10% of the sales are domestic. And to carry this legacy into a sound future we are creating several products.

The New Aanderaa
The Doppler revolution is embraced by Aanderaa with special interest. Our new current meters are utilising innovative Digital Signal Processors (DSP) and ultra low noise electronics, as well as specially optimised Doppler sensors.
Introduced in 1996 and reengineered in year 2000, the RCM 9s and the RCM 11s have become the workhorses of both deep sea and coastal seas globally.
In an article in Sea Technology in June 2004 leading scientists from Woods Hole Oceanographic Institute gave excellent rating to the RCM 11 after some two-and-a-half years of sea
trials. The consistency and quality of the data are impressive. Over the trial period only production units were used and no changes to the instruments were made.

Innovation in Sea Current Profiling
Aanderaa has introduced a new Recording Doppler Current Profiler; the RDCP 600 (see Figure 1). This instrument has a host of new features rendering the coastal analysis work more effective. Combining new, advanced features, the scientist is able to look at the water column in several different ways at the same time. Adding parameters like oxygen, conductivity, depth and turbidity makes this a complete measurement platform. Powerful presentation and analysis tools are added to expedite the workload.

New Oxygen Sensor and Improved Conductivity Sensor
Utilising the same advanced DSP technology Aanderaa has introduced new and improved sensors. The new oxygen optode is setting a new standard in long-term dissolved oxygen measurements. The improved Conductivity Sensor can now be installed on the recording instruments, as well as, as a self contained sensor on third party systems.

How Do We Do It?
The reliable instrument is the companyâ€™s key trademark. The Aanderaa brand is a quality name in the industry. We want to keep it that way! So how do we do it? Several best practices have been developed over the years. Focusing on important issues like high development standards, excellent production facilities and calibration and testing of each and every unit. In addition an Application Resource Group which is able to utilise the instruments and explore their limits is added. To communicate this to the user in their scientific terms is of utmost importance. Honest and simple business practices are cornerstones in our relation with the marine scientist.
Setting it all into perspective the following paragraph regarding an installation in Spain says it all.

The Coastal Network of the Basque Country
Figure 2 shows an Aanderaa Weather station in one of seven harbours on the Basque coast.
The network consists of oceanographic and meteorological measurements combined into innovative Port and Harbours Stations. The harbours instrumented includes Bilbao, Armintza, Bermeo, Ondarroa, Getaria, Pasaia and Hondarribia.
These stations measure air parameters like wind, temperature, pressure, visibility, and sea parameters like currents, temperatures and sea level and waves.
The measurements are presented on the Basque Country's WEB-site and are also available on your mobile telephone. This information is available to the public and is put to use in different areas; Fishery and sea transport uses the information for safety at sea. The leisure fleet want to know the situation in the harbours to visit. This real-time information is also used as input to climatic models and used both for baseline and forecasting purposes.

View of the Future
Over the last years Aanderaa has strengthened its position as a worldwide supplier of instrumentation to environmental science, the oceanographic community and to ports and harbours. In particular instrumentation and sensors rendering coastal analysis work as well as instrumentation in ports and harbours have had high attention. This effort has lead to Aanderaa increasing its market share over the last

years.
The company's strategy is to grow and become an even stronger supplier to chosen markets. Therefore, and as a consequence of this strategy, Aanderaa is presently merging with a smaller instrumentation company that is also based in Bergen, Norway. The merger between two companies (Aanderaa and Data Instrument) will primarily give synergy to technology development and to marketing and sales.
Three new Business Units will aim at becoming major players in these markets:

1. Oceanography will also in the future be one of our most important markets. Being a market leader in deep-ocean work Aanderaa will also increase its importance (and focus) as a supplier of instrumentation for coastal work as well as instrumentation in ports and harbours.
2. Electronic measurement systems and equipment for meteorology, environmental science and traffic safety. Further development of meteorological sensors as well as data logger technology will found a basis for this. Together, Aanderaa and Data Instrument form a strong player in this market.
3. Advanced crane load monitoring systems for the offshore industry. From the start the merged company is already a market leader in this field.

For more information please visit our website: www.aanderaa.com. The content is there to help you choose the instrument that best suits your particular needs.
