

ShipBuilding

i n d u s t r y

Europort 2017

MAXIMISING VESSEL PERFORMANCE

Bibby WaveMaster 1 Vos Start

WALK-TO-WALK SERVICE OPERATIONS VESSELS

L' Astrolabe

VERSITALE POLAR LOGISTICS VESSEL

PREVIEW INSIDE

NOT-TO-MISS
EXHIBITORS

EUROPORT 2017
ROTTERDAM

SUSTAINABLE DREDGING – CONTINUED BENEFITS

CEDA Dredging Days 2017

THE CEDA DREDGING DAYS CONFERENCE AND EXHIBITION IS HELD IN THE AHOY ROTTERDAM CONVENTION CENTRE IN THE NETHERLANDS. WITH A LONG HISTORY OF TECHNOLOGICAL INVENTIONS TO KEEP THEIR LAND HIGH AND dry, it is only logical that the Netherlands is a big player in the world of dredging, with some of the biggest dredging contractors and fleets emanating from either the Netherlands or (neighbouring) Belgium.

WORDS BY YARA ROOD

CEDA Dredging Days is held biannually, in conjunction with Europort. It has been the primary international dredging conference in the CEDA region (Europe, Middle East and Africa) for many years. At the last edition in 2015, 55% of visitors were from the Netherlands, while the other 45% represented 18 different countries. It is widely considered to be an invaluable forum allowing leading researchers and industry experts to discuss and share dredging challenges, solutions and experiences. Professor Cees van Rhee of Delft University of Technology, Member of the CEDA Board of Directors and Chair of the Technical Papers Committee of CEDA Dredging Days 2017, gives us his take on the event itself and the latest innovations in the world of dredging.

In the aftermath of the financial crisis, what can you say about the current state of affairs in the dredging industry?

Professor van Rhee: “When you look at dredging through the years, you see that from the 1980s up to as recently as 2010, most of the big projects were land reclamation projects in such places as Hong Kong, Singapore and later, of course, Dubai. The focus was on moving large quantities of sand. Shipyards built increasingly larger trailing suction hopper dredgers (TSHD’s). When the crisis hit, that market saw a large

downturn and there weren’t a lot of funds available for big projects. There were some harbour expansion projects, particularly for LNG, but they also slowed down over time. As is the case with all bigger construction industries, offshore and shipbuilding alike, the dredging industry also moves anticyclical to a crisis, meaning that there is a delay in the effect of a sudden change in the market. With the oil and gas industry slowing down, it’s hard to say where this will leave dredging. Right now, the focus for dredging contractors is on the side of sustainability: infrastructural projects, the offshore wind sector and the refitting and equipping of cutter suction dredgers.”

What innovations are currently making waves in the dredging industry?

Professor van Rhee: “The entire maritime industry is looking for innovations in fuel, either by using more efficient machinery or by turning to alternative fuels and hybrid solutions. Reducing CO2 emissions is not just beneficial to the environment; dredging is rather fuel-intensive, so cutting fuel usage means cutting costs. It’s important to calculate risks as precisely as possible. LNG is on the rise, but hybrids are an interesting possibility as well. Right now, a large number of batteries are required and their price is very high. When electricity gains more terrain in the car industry, the >>



Photo courtesy of CEDA



CEDA Dredging Days 2015. The main theme of the 2017 edition is ‘Sustainable Dredging – Continued Benefits’.

Photo courtesy of CEDA



“

CEDA is an independent organisation that connects everyone involved in the dredging industry: project owners such as ports and governments, contractors, builders and consultants.



Dredging Days is CEDA's trademark event, contributing significantly to CEDA's international recognition.

Photo courtesy of CEDA

CEDA Dredging Days 2017

CEDA Dredging Days 2017 conference and exhibition is being held 9-10 November 2017 at the Ahoy Rotterdam, the Netherlands, in conjunction with Europort. The two-day programme includes Key Note Speeches, Technical Sessions (including the Academic Sessions), Young CEDA Pitch Talks, an interactive session on contract management, networking sessions, an award ceremony and a book presentation. The main theme of this year's event is 'Sustainable Dredging – Continued Benefits'.



Students at CEDA Dredging Days 2015. CEDA sponsors the participation of 70 selected students, enabling them to attend the conference free of charge.

Photo courtesy of CEDA



Photo courtesy of CEDA

Professor van Rhee: “You need to make sure that the next generation knows that your business is interesting enough.”

maritime sector will undoubtedly follow. Another innovation is to be found in the dredging techniques on harder surface materials. In order to comply with stricter environmental laws, powerful cutter dredgers are being built to excavate harder rock without the need for blasting. Dredging hard surface materials obviously requires a high fuel usage, but is still fundamentally more environmentally friendly than drilling and blasting.”

Can you explain the role CEDA plays in the dredging industry? What is the main goal of the organisation?

Professor van Rhee: “CEDA is an independent organisation that connects everyone involved in the dredging industry: project owners such as ports and governments, contractors, builders and consultants. By supplying objective information, they attempt to promote a methodology for sustainable development. Let’s say your new project is the expansion of a harbour. CEDA can help you to develop your plan to optimally fit with the surroundings, to include a nature reserve or recreational area, for example. The product you create needs to be sustainable, as does

the equipment you use. You also need to exercise damage control during operations. Removing bottom sediments doesn’t necessarily have harmful consequences, but when you bring in large quantities of sand or silt, this can cause problems for the surroundings. The negative effect that sediment in the water column can have on specific organisms, and how that in turn can cause harm to other parts of the aquatic ecosystem, is a subject that CEDA is very concerned with. CEDA can help bring together and distribute the latest findings through papers, books, conferences and other events.”

**CEDA Dredging Days
What is the importance of the Dredging Days for CEDA?**

Professor van Rhee: “Dredging Days is CEDA’s trademark event, contributing significantly to CEDA’s international recognition. It is the biggest dredging conference in and around Europe, where every type of organisation involved in dredging can network, share their latest insights or innovations and motivate young professionals to take up a career in dredging.” >>



Photo courtesy of CEDA

Students at CEDA Dredging Days 2015.

The main theme of the CEDA Dredging Days is 'Sustainable Dredging – Continued Benefits'. Would you care to elaborate?

Professor van Rhee: "Sustainable dredging, with regard to both dredging activities and the resulting projects, is what it's all about right now. There are new solutions that predict and measure sediment release as a result of dredging, for example. Dredging needs to meet strict regulations. The measured amount of suspended solids can never be above certain levels. In dredging operations, the time of day can make a big difference, as the possible damage depends on the tide.

There are some great examples of sustainable dredging projects where dredged sediment is used beneficially; where they are building in collaboration with nature. In the Netherlands, the Marker Wadden mudflats were recently completed. The Markermeer (Lake of Marken) has a lot of suspended solids (mud, silt) in the water column. By collecting these fine materials and turning them into islands, the water gains clarity and, simultaneously, new nature reserves are created. In Indonesia a similar project is being executed, where they want to repair the coastal erosion to

help mangroves recover and also use fine particles for construction.

The latest developments in dredging technology that facilitate sustainable dredging are in the aforementioned energy saving solutions and use of alternative energy as well as in more efficient pumps, drag heads and in process control."

Throughout the CEDA Dredging Days, a lot of attention is given to young professionals. Why do they deserve that focus?

Professor van Rhee: "In every branch of business, it's important to attract the people that are best equipped and most suited for the job. Dredging involves an interesting mix of specialisations: robotics, automation, mechanical and civil engineering, maritime technology and environmental sciences. You need to make sure that the next generation knows that your business is interesting enough. The dredging industry has always managed to accomplish this, and we continue to do so by drawing attention to the various career possibilities in dredging. Young CEDA hosts the fast-paced Pitch Talks: short, sharp presentations through which young professionals and university students get a chance to discuss their current

WODA, WEDA, CEDA and EADA

The World Organisation of Dredging Associations (WODA) is an independent, non-profit, professional organisation. It is composed of three separate, autonomous sister dredging associations:

- WEDA - Western Dredging Association: regions cover North, South and Central America;
- CEDA - Central Dredging Association, serving Europe, Africa and the Middle-East;
- EADA - Eastern Dredging Association, serving the Asian, Australian and Pacific region.

research projects with more experienced professionals and get valued feedback. Then there is the Academic Session, which discusses finished papers by young scientists. CEDA sponsors the participation of 70 selected students, enabling them to attend the conference free of charge."

i. www.cedaconferences.org/dredgingdays2017