

PRESS RELEASE

RICK VAN DE WETERING WINS THE IADC YOUNG AUTHOR AWARD 2025

Voorburg, the Netherlands, 26 June 2025

The International Association of Dredging Companies (IADC) bestowed the Young Author Award 2025 to Rick van de Wetering, Research Engineer at Royal IHC and Ph.D. candidate at Delft University of Technology, the Netherlands. IADC's Young Author Award is given annually to "stimulate the promotion of new ideas and encourage younger men and women in the dredging industry". The award is granted at industry-leading conferences, with 2025's winning young authors selected from the proceedings of the 24th WODCON Congress, held from 23-27 June 2025 in San Diego, USA.

THE WINNER

Rick van de Wetering was selected as the Young Author Award winner for his contribution to the paper "A laboratory scale linear rock cutting setup to study cutting forces of blunt chisels". Dredging hard rock with a cutter head, as used on a cutter suction dredger, is becoming increasingly important as drilling and blasting are often restricted. Understanding the cutting process and resulting forces on the chisel can improve design and efficiency. Literature shows most studies focus on sharp chisels and often ignore the normal force, which arises from wear flats that resist penetration.

This paper presents the linear rock cutting setup, developed by Royal IHC, to study the impact of chisel wear on cutting and normal forces. Repeatability tests with a sharp chisel showed consistent results, with a maximum variation of 16%. The normal force was slightly negative, pulling the chisel into the rock – consistent with literature. A test with a worn chisel showed increased cutting forces, with a much larger rise in normal force, confirming its significance during rock cutting with worn tools.

"In cooperation with the paper committee of WODCON, a selection of papers was reviewed by senior experts within IADC's member companies to select the winner," said Arnold de Bruijn, Director of IADC. "The jury was of the opinion that the winning entry provides added value to the developments within the dredging industry. We praise the methodical approach of the research and laboratory setup allowing for parametric studies and clear conclusions. We look forward seeing results using materials with higher, more realistic uniaxial compressive strength values. It is a relevant topic and the entry represents solid research, backed up with good references and self-explanatory illustrations. Building knowledge and optimising techniques is something we have to do. But also something we must continue to invest in."

THE AWARD

Every year at selected conferences, the IADC recognises the best paper written by authors younger than 35 years of age. The Conference Paper Committee recommends a shortlist of qualifying papers that make a significant contribution to the literature on dredging and related fields. Winning authors receive 1,000 EUR and a trophy of recognition as well as publication of the paper as an article in the IADC's quarterly journal *Terra et Aqua*.



Photo caption: *The Young Author Award 2025 was handed over by IADC's Director Arnold de Bruijn (right) to Rick van de Wetering for his contribution to the paper "A laboratory scale linear rock cutting setup to study cutting forces of blunt chisels".*

ABOUT IADC:

The International Association of Dredging Companies (IADC) is the global umbrella organisation for contractors in the private dredging industry. IADC has over a hundred main and associated members. Together they represent the forefront of the dredging industry. An industry that makes the world a safer, better and more sustainable place to live. IADC is driven to help that industry move forward with a variety of activities and publications, all available on our website www.iadc-dredging.com.

FOR MORE INFORMATION:

Ria van Leeuwen
Senior PR & Communications Officer, IADC
Phone: +31 (0)70 352 3334
Email: vanleeuwen@iadc-dredging.com