



MDEM participation in Cadmatic Digital Wave Forum 2023

On October 11 and 12 2023 another meeting of leading companies using the Cadmatic software was held in Hamburg. Key-users Viktor Salov and Artem Kostiuk, and lead engineer Anatoliy Zaliznyak took part in the Cadmatic Digital Wave forum from the side of MDEM.

Anatoliy Zaliznyak shared with us his expressions. "The Cadmatic software plays a significant role among CAD-systems for the marine, processing and energy industries, so representatives of various design organizations, shipyards and shipping companies from all over the world came to the event. Among the guests we met acquaintances of many of our employees – Canadian shipping company SeaSpan, Belgium engineering company MULTI.Engineering, C-Job and our friends from Damen Engineering Gdansk.

Representatives of Cadmatic talked about achievements of the coming years after the last meeting, as well as about ambitious goals and innovative ideas that inspire program developers.

Thanks to close cooperation with the company CONTACT, all CAD-modules were combined into one solid software product on the effective PLM platform – Wave, which incorporated all the various capabilities necessary for design, building, operation and utilization of a ship.

In essence, Wave is a set of applications that a client can combine into a system based on their own requirements and experience.

The presentation of the yacht-building company LURSSSEN aroused great interest, in which examples of the practical application of augmented reality technology in real time using the eGo, eShare and MS Hololens applications were demonstrated:

- superimposition of virtual drawings on the real steel structure of a ship's deck, to check the correct placement of holes cutouts;
- the process of virtual transportation of an electrical panel through a real corridor right on board, for analyzing such a possibility;
- the compare process for dimensions of control panel in the warehouse with its' virtual model.

The classification society DNV shared their first experience in the innovative «paperless» approach of ships' hull structure acceptance. Digitalization of the process consists in the fact that the ships 3D information model will be exchanged between designer and the Register in the new «OCX – Open Class 3D standard» format. There is no need to prepare a traditional

2D drawings and calculations for approval anymore. 32 leading companies of the industry, such as ABS, SIEMENS, BV, DELTAMARIN, AVEVA and others, have already joined the initiative. Damen is participating in this innovation already and is even in the process of acceptance for first projects.

In the final session, the Cadmatic developers shared information about the fact that they are actively looking for opportunities to integrate artificial intelligence into engineering process and data analysis. For this, “Machine” should be able to learn from projects databases. The idea that an engineer can dictate by voice, or create a text file with specific instructions on how the structure should look like (thickness, profiles, spacing, end cuts, etc.) and Cadmatic Bot with access to Hull module tools will be able to model that, looks quite likely and even realistic, in the same way as it creates paintings, music or writes stories.”

We are grateful to the organizers of "Cadmatic Digital Wave" for the opportunity to join the event of leading technical innovations and we look forward to the next opportunity! ◀◀

