

June 27, 2023

Decades of Partnership: The Past, Present, and Future of Kort Propulsion's Relationship with HydroComp

A conversation with Dave Parsons of Kort Propulsion

When you think of an internet search, Google comes to mind. Lip balm; Chapstick. Sticky notes; Post-Its. The phenomenon of a brand name becoming synonymous with the universal product indicates impressive, unwavering industry success. Kort Propulsion has experienced this firsthand – it's not uncommon for a propeller nozzle to be referred to as a "Kort nozzle", whether it was actually manufactured by Kort or not. As one of HydroComp's very first NavCad users, it's been an honor to both be a part of and witness to Kort's continuous accomplishments. We recently spoke with Dave Parsons, Managing Director of Kort Propulsion, to take a walk down memory lane. Plus, we discussed how Kort and HydroComp are currently collaborating on a project - and how that collaboration came to be.

Almost 90 years old, Kort Propulsion was founded in 1935 in the UK, initially with the purpose of producing Kort nozzles for the British market via an agreement with German developer Dr. Ludwig Kort. This relationship ended four years later; Kort Propulsion continued its own development and designs of the nozzle.

Dave's parents, as managing directors, have both been fixtures at the company - they have worked there for decades. The business has a rich history as an industry leader. Dave says, "What I've learned in the last 20 years is that the brand is very strong around the world. Everyone says, 'I have a Kort nozzle,' but that doesn't mean it is actually from Kort."

Reflecting on their global growth, Dave continues, "One of the things I first said to my dad was that we need to look outside of the UK. He gave me a company credit card and said, 'Off you go! Go and visit new markets.' And that's what I did. I soon believed that the Kort name and logo obviously meant quite a lot."



Dave Parsons, pictured with his sister, Annmari, and his mother, Rose.

Looking at where they are today, he says, "We work all over the world. Most tugboats and workboats, if it's a slow-moving vessel with high thrust, then you'd see a Kort nozzle. We also started doing some manufacturing over in Romania - we've got four facilities that we use there. Anything from 500mm diameter up to 4.5m in diameter - there's a big range."

One would think that a company with such a worldwide reach would be a large business, but they've kept the sense of family at Kort's headquarters, with a total of 10 employees. The manufacturing business in Romania has 250 employees across four facilities.



Kort acquired NavCad software in 1990, long before Dave joined the company himself in 2002. "I always remember my dad and his business partner Malcolm Breeze - they had this DOS program and they swore by it. Even when I was young and I'd come into the office during the summer holiday, I'd always see this DOS program just keep clicking through with different numbers. When I got involved in the company, I then realized what all this information was and how it was calibrated."

"There aren't many times we get it wrong, but one of the backups for all of this is using NavCad, using PropExpert, just to check calculations. A bit like HydroComp, you've got so much data, and we have a lot of real trial data."

Dave says that they generally use PropExpert 2-3 times a week. As mentioned, Kort has a lot of historical data in-house, but whenever they have some uncertainty, they don't hesitate to verify their work with PropExpert. He says that PropExpert "is so easy to follow a few steps and get something out."



In Dave's mind, HydroComp and Kort are a power couple. "In this industry, there's a lot of propeller manufacturers and when I talk to all of them, I would say the majority have some form of HydroComp product. I think with the history that Kort has, and with the HydroComp software available, the combination is really good. Again, if it's a project that we're not too sure on, we always reach out. The customer service, the support is great."

As a subject matter expert, HydroComp is always ready to educate its customers. "There's nothing worse when you've got an owner asking so many detailed questions, but we're not vessel designers. The hydrodynamics of the vessel is so critical, and the pressures and flows into the nozzle or the propeller," elaborates Dave.

Dave has been very appreciative of HydroComp's hands-on approach to training. "It's been a really good experience. If I'm honest, I'm not a propeller designer - we have people inside of the company to do that. Four years ago when we decided to renew NavCad and PropExpert, I got Don [Technical Director at HydroComp] to do some training for us. We see a lot where people go to university, become a naval architect, but they have no practical experience - so going back to the basics of the reason why and how was really interesting for me to spend that time with Don and Adam."

Don reflects on the educational aspect of his position. "One of the best parts of my job is helping customers and clients understand the physics and hydrodynamics behind performance. I love seeing the 'light bulb' go on when we get into a topic," notes Don. "Both of my parents were teachers, so I guess it's in my DNA. And I also learn a lot myself working with folks like Dave and his staff that bring a lot of experience to a discussion."

Kort and HydroComp recently completed a collaborative project with Dormac in South Africa. The shipyard approached Kort, despite the fact that they didn't even have a Kort nozzle. "These guys came to me and said, 'Look, we're in a bit of a difficult situation here. The customers chopped the nozzles off - 'We need new nozzles. How quickly can you make two 2.5m nozzles?' And I said, 'Normally our production schedule would be probably 16 to 20 weeks.' But we're probably going to make these in about 8 weeks, but we've got the resources to do that. When you've got a vessel in a dry dock that needs something, you need to be really reactive and try and make it happen.

After their initial meeting, Dave contacted Don saying, "I think this is a project where we can help each other." He continues, "We made some calculations ourselves, and the pitch figure was such a big difference. We didn't want to comment too much to the end-user. I said, 'You need to get someone like Don involved to run some more in-depth calculations.' What they came out with runs in line with the numbers that we put into PropExpert. It's good to know that the information that we get out is similar to what we expect."

Looking to the future, Dave says their focus is on triple rudders and improved simulations with CFD - and, of course, with HydroComp's software tools. Dave is grateful for Kort's long successful history with HydroComp; both parties look forward to more shared victories.

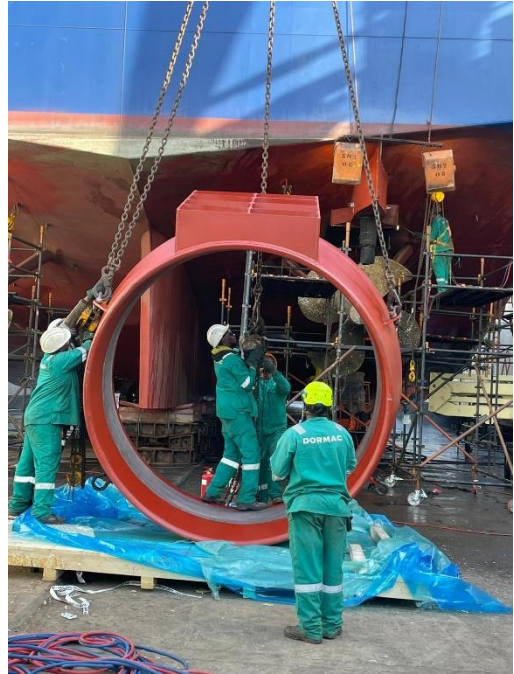
About HydroComp

Since 1984, HydroComp has been a leader in providing hydrodynamic software and services for resistance and propulsion prediction, propeller sizing and design, and forensic performance analysis. Through its unique array of software packages and services, HydroComp now serves over 1400 naval architectural design firms, shipyards, yacht owners, ship operators, propeller designers, universities and militaries around the globe.

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Dormac installing the new Kort nozzles.