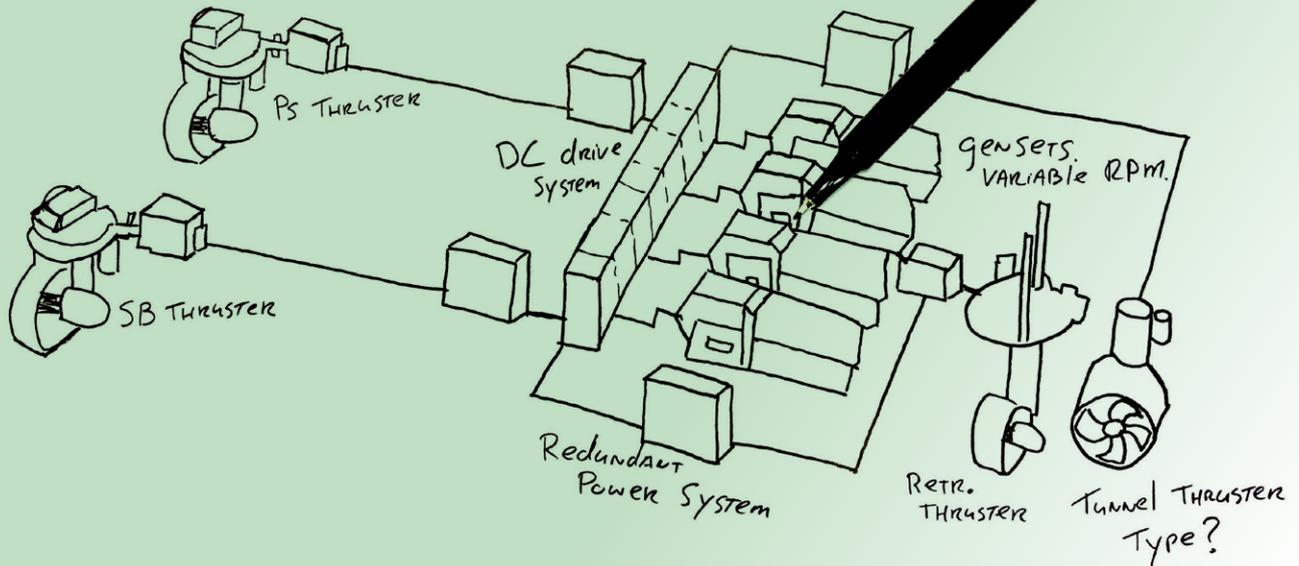


# VUYK ENGINEERING ROTTERDAM GREEN DESIGN SOLUTIONS



## GREEN SOLUTIONS

Vuyk supports measures to advance the energy transition. Our world should be treated with care, which means that the complete ecosystem should be affected in as limited a way as possible by the presence of maritime activities. Vuyk believes that the industry has an obligation to minimise its contribution to global pollution by every means possible.

## MORE THAN A VISION

With regards to the above, the most beneficial solutions have to be more than a vision. They must be realistic for the operational and geographic profile of a vessel and/or its equipment. They also need to be economically viable, now and in the future. Achieving this requires an integrated knowledge of vessels and equipment, and a close cooperative approach – which is exactly what Vuyk provides.



**FINDING GREEN SOLUTIONS STARTS WITH UNDERSTANDING THE CUSTOMER CHALLENGES**



**DESIGN TO  
FUNCTION.**

**VUYKROTTERDAM.COM**



**FULLY ELECTRIC VESSEL PROVIDING SUPPLIES IN THE CANALS**

## EFFICIENCY

Vuyk believes that reducing environmental impact starts with maximising energy efficiency. For new vessels, this starts with hull optimisation to reduce vessel resistance, For this purpose, Vuyk can employ state-of-the-art computational fluid dynamic (CFD) calculations.

For new as well as existing vessels, there are various options available for energy savings that will have a positive effect on both the sustainability and maintenance costs of your fleet. Vuyk has comprehensive experience in marine systems design and implementing different methods for creating efficiency improvements, including solutions based on: diesel-electric; hybrid systems with energy storage and recovery; and energy saving accommodations.

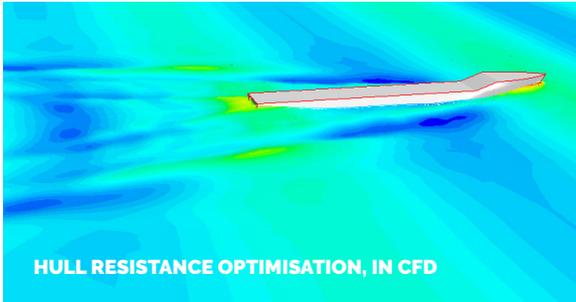
## EMISSIONS AND POLLUTION

To meet and surpass the latest and upcoming environmental regulations, alternative fuels or hybrid solutions including the possibility of wind or solar applications must be considered. However, pollution is not limited to power generation. Ballast water discharge also forms an environmental risk and, as such, it is constantly becoming more stringently regulated.

Vuyk has extensive experience in implementing exhaust after-treatment solutions, for example SCR and scrubber systems, and ballast water treatment equipment ranging from concepts designs through to full implementation.



**LNG POWERED MEGA CUTTER DREDGER**



**HULL RESISTANCE OPTIMISATION, IN CFD**

## ENVIRONMENTAL LEGISLATION

The IMO and local authorities are increasingly implementing legislation relating to ship emissions, water ballast discharge and anti-fouling, as well as in some cases noise pollution. Vuyk has widespread experience of all IMO, multiple class and flag state regulations.

## VUYK ENGINEERING ROTTERDAM

Vuyk Engineering Rotterdam services the maritime industry with integrated design and engineering packages. It is renowned in its market for high-tech performance and tailor-made vessel designs or conversions, as well as equipment design and marine operations engineering.

Through a combination of these activities, Vuyk understands your operations and needs. As independent designers, Vuyk can guide you through the 'environmental jungle' and support you in finding the optimal solution for your green project.