



## Refueling the world of defense

Helicopter operations maximize the operational flexibility of Naval and Government vessels. In order to optimize helicopter operations it is vital that on board fuel handling systems are designed according to the latest technologies in the refueling business.

DGI Sypack has extensive experience in providing helicopter refueling systems for marine vessels, with a strong focus on quality, reliability, operational efficiency, safety and ergonomics. Our fuel handling systems are currently operational on a range of vessels such as; Replenishment Ships, Frigates, Offshore Patrol Vessels, Coast Guard and Research Vessels.





## RELIABLE REFUELING SYSTEMS THROUGH INNOVATIVE ENGINEERING

All of our systems are custom designed and fully adapted to the specific needs of Naval and Government vessels. Our solutions are focused on reducing the footprint and seamless on board integration. We use components that have proven their performance in both the defense and offshore industry. The systems are equipped with innovative features such as three-stage-filter vessels, PLCs and remote controls to maintain the highest levels of reliability.

Our refueling solutions are designed to minimize the number of crew members on deck and the risk of human error. By integrating the control logic onto the skid, the refueling operation can be monitored. The operation can be controlled from the Integrated Platform Management System (IPMS), or performed locally in order to maximize flexibility during high-intensity operations. Optional systems can be fully automated in order to allow efficient operation with only 3 crew members including the Landing Officer.

“ Custom designed  
refueling systems  
for onboard  
equipment ”



Based on operational requirements, systems can be designed for a flow rate up to 1000 l/min. Typically our refueling systems will be designed for both NATO F-34 (JP-8) and NATO F-44 (JP-5) fuel using Military Off the Shelf (MOTS) parts. This allows our systems to operate with both military grade fuel and commercial aviation fuels such as Jet A-1.

With worldwide manufacturing and service locations, DGI Sypack can offer high-quality solutions, product support, after sales and training. Our combination of experience, expertise and global presence make us the perfect partner for your helicopter refueling systems.

### HELICOPTER IN-FLIGHT REFUELING (HIFR)

Helicopter In-Flight Refueling (HIFR) assemblies can be retrofitted to all DGI Sypack systems for military use without any profound modifications. These assemblies can easily be fitted to the existing hose and allow refueling operations with use of the existing pump and filtration solution. All of our HIFR solutions are in compliance with STANAG 3847.

### PROVEN TRACK RECORD

Over the past 15 years, we have used our experience in the offshore helicopter refueling business to develop a range of refueling packages including petrol, diesel and jet fuel systems. These can be provided with custom-made fuel tanks, pumps and dispenser-skids. With over 300 systems in operation, it is safe to say that we have supplied equipment to all of the major players in the industry and have justified our position as the preferred supplier for refueling systems.

We have in-depth knowledge and detailed experience with all of the applicable legislation and standards such as STANAG, MIL-STD, CAP 437 and Lloyds. This knowledge is further strengthened by our close cooperation with all of the classification societies including DNV, ABS, Lloyds and RINA. We are confident that we can supply refueling systems which fully comply with all of the applicable standards. This makes us the reliable and flexible partner for tailor-made refueling systems.



## SERVICE, MAINTENANCE AND SPARE PARTS

After delivery and installation, our qualified service engineers are more than happy to assist during start-up. Once the system has been commissioned we gladly provide training and service to its future operators.

In order to ensure safe operation and reliability of the equipment and extend the service life of our systems, we offer our clients a tailored service plan based on our experience, best engineering practice and, of course, client wishes. As part of our commitment to clients, DGI Sypack maintains a comprehensive range of spare parts on stock, therefore any operational part can be delivered quickly and efficiently worldwide.



**“ DGI Sypack,  
your partner  
in refueling  
systems ”**

