

## **PowerFuel® Technology to improve the fuel NET ZERO CONTRIBUTION TECHNIQUE**

**PowerFuel®** technology provides an increase in the completeness of combustion of marine and boiler heavy oil fuels (fuel oil, marine residual fuel), a decrease in the amount of fuel sludge separated by fuel separators and filters, fuel savings of at least 5% and in some cases reaching 10% or more percent, as well as reducing CO<sub>2</sub> emissions into the atmosphere.



The use of devices and **PowerFuel®** technology is especially advantageous on ships of the navy. So, with a typical ship fuel consumption of 1 ton per hour and an operating mode of 5000 ship running hours per year, fuel savings of 5%, or 0.05 tons of fuel per hour per year, will save at least 50 tons of fuel, which makes it possible to recoup the installation of the **PowerFuel®** system| concept on board for one year of operation.

An additional economic effect is formed by reducing the volume of fuel sludge, the delivery of which to coastal services is also quite expensive.

The use of **PowerFuel®** technology reduces the exhaust smoke of the ship's main engines, which has a positive effect on the environmental situation. In addition, reducing the emission of particulate smoke will reduce the cost of washing the deck and superstructures of the vessel, which has an additional economic effect.

WATCH [VIDEO OF COMBUSTION OF AN HYPER-IONIZED FUEL](#)



Typical chimney view of a vessel equipped with the **PowerFuel®** system, at full speed.

The **PowerFuel®** system can also be used effectively in heavy fuel oil boiler systems, primarily due to the reduction of harmful emissions.



Fig.5. Pipe of the port boiler house, the boiler works on processed by **PowerFuel®** technology fuel oil...

At the same time, there is no clogging of the fuel nozzles - the photo shows the boiler nozzle, which has worked without maintenance for more than 3 months in continuous mode. It appears to be completely clean.



Clean cut surface of the boiler nozzle when operating on fuel treated with **PowerFuel®** technology.



Heavy fuel:

**SAVING TABLE FOR ALPG TANKER vs PowerFuel®:**

<p>1. Vessel Type</p> <p>LPG tanker</p>	<p>ANNUAL FUEL BILL [no technology]</p> <p><b>\$10,041,915.81</b></p>
<p>2. Vessel Size</p> <p>50,000+ cbm</p>	<p>ANNUAL FUEL SAVING</p> <p><b>1,699.40mt</b></p>
<p>3. Technology Fuel Saving <b>guaranteed saving!</b></p> <p>11 %</p>	<p>TECHNOLOGY ANNUAL FUEL SAVING</p> <p><b>\$1,104,610.74</b></p>
<p>4. Installed Propulsion Power</p> <p>17224 kW</p>	<p>TECHNOLOGY ANNUAL CO2 SAVING</p> <p><b>5,285.14mt</b></p>
<p>5. Operating Days a Year</p> <p>281 days</p>	
<p>6. Design Speed</p> <p>14.4 kts</p>	
<p>7. Operating Speed</p> <p>14.4 kts</p>	
<p>8. Propulsion's Daily Fuel Consumption</p> <p>55 mt</p>	
<p>9. Today's Fuel Price</p> <p>650 \$</p>	