

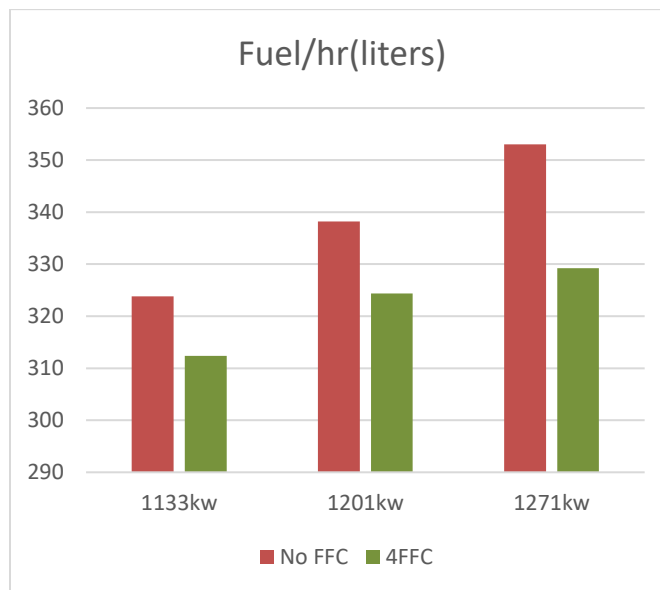
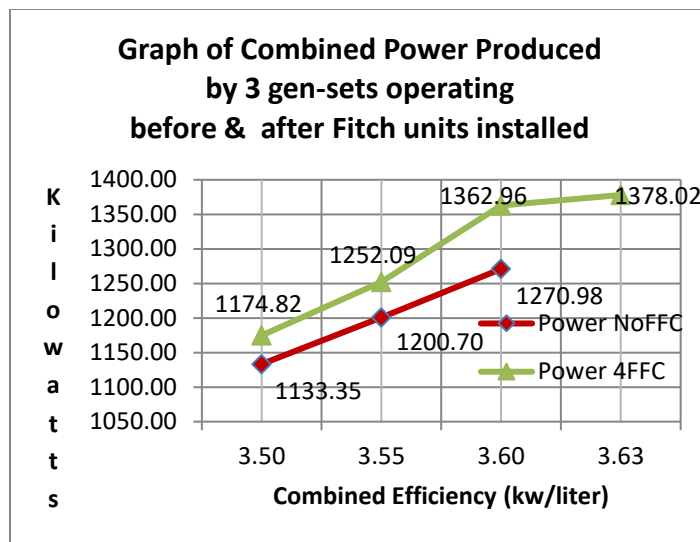


Customer: Tri-Marine - Soltuna Tuna Cannery – Noro, Western Solomon Islands
Installation Date: April 2016 (data collection throughout 1 year period)
Engines Installations: 3 qty Mitsubishi 1000HP Genset engines & 1 qty 2000 liter day tank
Fitch Models: 4 qty. - FHD5-19-1.5
Testing Equipment: KRAL fuel meters (Austria), EKW power meters & a real-time data recording and analysis system supplied by Opdaq (Quebec, Canada)



The data was recorded at 1-second intervals for long-term comparison purposes.

Data Collection Procedure: Fitch was installed along with bypass system. The Fitch Fuel Catalyst was bypassed on all 3 generators during the 1st month of baseline data collection. During the month of May, the 3-FHD units were individually brought on line. Later that week the remaining 2 units were engaged in the fuel supply. In late October, a 4th FHD unit was installed on the day-tank to treat new fuel added to the tank. During this time, an archive of all data was collected and results are illustrated in graphs below.



Results: Typically, the plant employs all 3 gen-sets to meet the power demand during canning operations as shown in top chart. One notes the increased power produced with the FFC (green line) which increases at each plotted point without the units engaged (red line). By calculating what the fuel consumption would have been at the lower power with the FFC, one can compare the relative fuel consumption. The daily savings over the range of 1130 to 1270 kilowatts would be 264 to 576 liters for the 3 generators. Overall fuel savings for the one-year period since installation are estimated to be 90,000 liters of fuel.

The monitoring software and display system combined with the accurate fuel and power meters has provided the plant manager with the tools to better leverage the benefits of the Fitch Fuel Catalyst to improve overall operating efficiency and detect any operational problems that may need to be addressed.

Conclusion: The Fitch Fuel Catalyst improved energy output, reduced fuel consumption and eliminated noticeable exhaust smoke. The Fitch technology provides an excellent return on investment. The improved fuel efficiency and superior combustion will extend the operational life and the maintenance interval of each generator.