## MARITIME REPORTER AND

AND ENGINEERING NEWS

MARINELINK.COM

August 2017

# Shipbuilding

Mega Yards Largesse

Voices

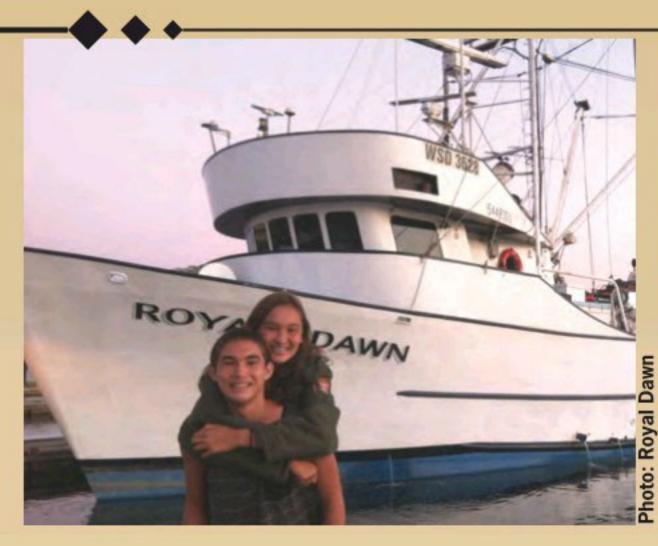
Dr. Cleopatra Doumbia-Henry, President, World Maritime University

Ship Design
The Quest to Build a New National
Security Multi-Mission Ship

Port Report
Port Corpus Christi:
Energy Port of the Americas

Marine Fuel 2020

**Engine Makers Take Center Stage** 







FITCH FUEL CATALYST

## Making Engines More Efficient

Fuel quality is a perpetual focus of the commercial maritime sector, as not only is it the major operating expense, the quality of fuel greatly affects performance and lifespan of major mechanical systems onboard. More complete combustion means less fuel needed, as well as reduced maintenance and unscheduled downtime, cleaner injectors, cleaner piston crowns and cleaner firing tubes. The Fitch Fuel Catalyst is designed to reverse the natural aging process of fuel by inducing a chemical reaction using a patented metal alloy catalyst (not a liquid additive) that reforms diesel fuel, reportedly creating a more combustible, cleaner burning product.

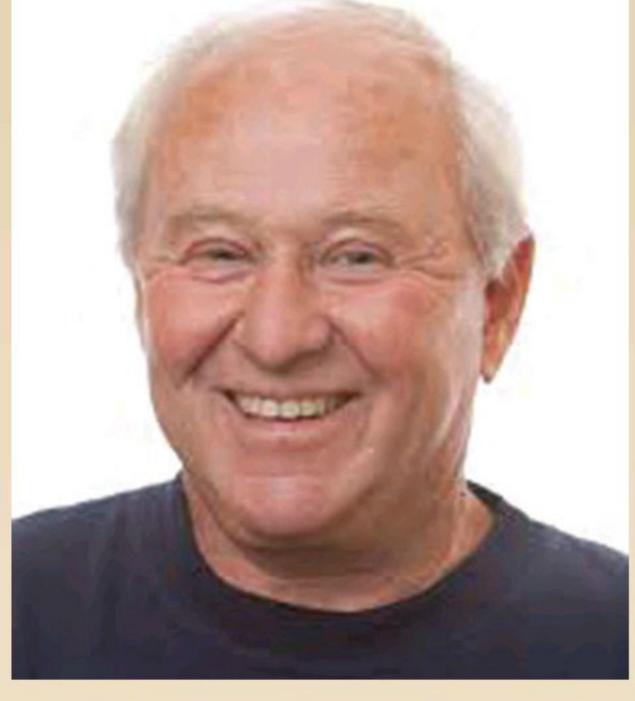
The Fitch technology is designed to reverse oxidization and promote oxygenation of all carbon-based fuels. Oxidization begins the day a fuel is created and continues until the time it is combusted. Oxidization causes the fuel quality to deteriorate, reducing the amount of energy that can be produced and greater pollution and residue. Oxygenation takes place at combustion. By adding oxygen to the combustion process more energy is created meaning less fuel is needed to do the same work.

The 305 ft. fish processing vessel Golden Alaska, which first started using Fitch in 2014, closely monitors its fuel consumption at all times and reports an increase in fuel efficiency of 8.51 percent when using Fitch Fuel Catalyst to treat fuel. In addition, "There has been a clear reduction in smoke and a significant reduction in carbon build up which translates into reduced engine maintenance and unscheduled downtime," said Mark Purdue, Chief Engineer, Golden Alaska Seafoods, LLC.

#### CASE STUDY: SACRED SEATUNA

According to Captain Rick Goche, Sacred SeaTuna is a family owned business, fishing the F/V Peso II out of Charleston, Ore. "We fish tuna and salmon (when they let us) and all of our products are sold under our family label Sacred Sea Tuna," said Captain Goche. "We normally fish from June 15 till the end of October. We provision for 14 days and hope we are full before then. Annually we use 4,000 to 5,000 gallons of fuel."

According to Captain Goche, since he was having



smoke and filter clogging problems, and was looking for a means to improve fuel economy, too. After installing the Fitch Fuel Catalyst "I've seen a noticeable improvement in exhaust and engine responsiveness. The most impressive aspect of improvement though is how clean the top end of my engine is. When my mechanic pulled the valve cover he was so impressed he started taking pictures. He said, 'This is the way a new engine looks when I pour oil over the rockers before it's first started up."

The clean engine is one thing, the fuel savings another. "It's hard to say (what our exact fuel savings is) since we don't have a fuel consumption meter but just looking at hours run vs gallons I'd have to say (we've saved) around 10-13 percent since we've gone from about 75 gallons per hour to about 65 gallons per hour."

#### CASE STUDY: ROYAL DAWN

Brent Bixler of Royal Dawn considers himself an early pioneer to evaluate the Fitch Fuel Catalyst in the mid-90s when he bought a unit for a Cummins KTA1150 main engine and another smaller unit for a Caterpillar 3304 generator engine. "Fishing the South Pacific, traveling for 30 day clips to reach the fishing

Brent Bixler of Royal Dawn considers himself an early pioneer to evaluate the Fitch Fuel Catalyst in the mid-90's when he bought a unit for a Cummins KTA1150 main engine and another smaller unit for a Caterpillar 3304 generator engine.

grounds, I was provided the ideal environment to track fuel consumption operating at normal running speed," he said in written response to our questions. "Using a FloScan metering system, I was able to compare fuel consumption without Fitch and retrofitted with Fitch during these lengthy trips. At an AAFA (American Albacore Fishing Association) meeting just recently, I expressed to the Association that I saved 12% after retrofitting my engines with Fitch almost 15 years ago."

Being the Fitch units purchased in the mid 90s were past their life expectancy, Bixler recently purchased three new heavy-duty Fitch catalyst canisters for the Royal Dawn. In addition, he bought an auto kit for his Dodge RAM 2500 diesel pickup with a Cummins 5.9 liter engine with the expectations of quieting down the truck and picking up a bit more mpg.

### FITCH FUEL CATALYST

The Fitch Fuel Catalyst is designed to save operators money. Here's how:

- Reformulates the fuel to extract more energy/gallon
- Reduces fuel consumption by 5 to 10%
- Pays for itself in five working months, lasts for years
- Helps to reduce emissions, maintenance costs and unscheduled downtime
- Easy to install, maintenance free
- Approved by LR and ABS
- Installed on more than 500 commercial vessels