

MER's Contribution to the Port Moller Rebuild

by Bob Allen

Peter Pan Seafoods' Port Moller facility is a 100+ year old remote salmon processing (freezing) plant serving the Alaska Peninsula fishing fleet. During peak production they maintain a crew of 140 people. Being a remote facility, the plant is totally self-sufficient, providing all housing, food, electricity, water, fishing vessel supplies and support.

After the plant suffered major damage from a fire in August 2017, Peter Pan needed to rebuild in order to continue to serve their fishermen and the nearby communities that depend on them. A new state-of-the-art facility was engineered, fully modernized conforming to applicable building codes with increased daily throughput and cold storage capacity.

In order to modernize the facility, Peter Pan needed to replace everything that had been destroyed, including the entire dock, fish handling - off load system, cold storage, process building, refrigeration, ice house, and the power generating facility. The new power house and electrical distribution system feed the onshore support operations, new office facility, as well as the processing plant.

BKR Construction Services was chosen to rebuild the facility including the docks, buildings, infrastructure, and commissioning of the facility. It was a huge undertaking in the time frame allowed, not to mention the scrutiny of the insurance budget.



New Diesel Electrics



Port Moller after the rebuild.



Power house control Console, remote access screen & monitor panel displaying all five generators in sync.

In support, MER supplied six MegaWatts of power and the fully automated distribution system.

The goal was to maximize fuel economy and plant efficiency. The integrated system allows for automated or manual remote control of the five generator engines and distribution breakers in various combinations depending on feedback from the Logix system operating the refrigeration compressors and the processing capacity required.

All engine and generator parameters can be remotely monitored and/or controlled manually via local operating panels on each generator or by a remote internet connection accessible from anywhere in the world.

After the devastating loss Peter Pan planned to be competitive and back in

full operation in 2019. MER worked closely with the BKR engineering staff on specifications to make that happen. Due to the sheer size of the project, purchases by BKR actually increased the worldwide cost of 4 x12 treated decking. After 264 days of construction, commissioning operations were put into full process mode on June 20, 2019.

The Port Moller project was a monumental effort by Kern Roberts and the exceptional crew at BKR along with their dedicated sub-contractors.

MER is proud to have been a piece of the puzzle that came together for Peter Pan Seafoods in the summer of 2019.



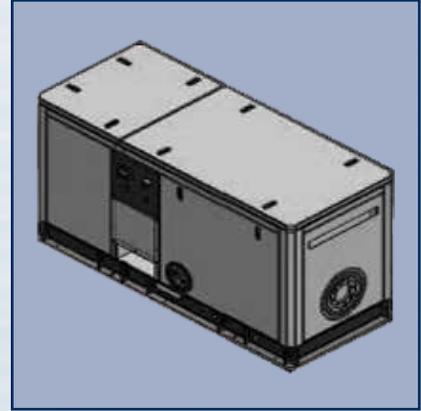
Power Distribution panels with automation.

Introducing the New BOLLARD™ Sound Enclosure

It's long overdue, but we're proud to announce the release of sound enclosures for our 40, 65, 99 and 104 kW generators. Our sound shields are the result of hundreds of hours of thoughtful design, providing, what we feel, is the best combination of features and benefits with an emphasis on equipment serviceability, functionality and system integration.

This is not just a box that an installer must figure out how to fit in a boat and hack full of holes to make work. Every connection point from fuel, to remote panels to block heaters to AC connection has been considered. The MER sound enclosure is the only model available with an integrated PTO option, allowing for quiet hydraulic pump operation. The fully sealed engine and generator air intake systems ensure the quietest, coolest, and most efficient generator operation possible.

We've built a lot of custom one-off enclosures over the past 20 years, and these sound shields are the culmination of the knowledge we've gained over all that time.



"I have had the privilege of working on several projects with MER. In my opinion their engine packages are a step above any I have worked on. Their attention to detail and support is outstanding it's a privilege to work with them in the field."

~ Greg Noel, J&M Diesel



By Mike Hudson

Since 1964, the reputation of MER Equipment and BOLLARD™ generator sets has been based on taking care of our customers. In the beginning, the relationships were face to face, with handshakes, and long term. As we have grown over the years, we have made many friends in the engine business all over the map who have supported operators of the BOLLARD™ machinery we have built.

Today, BOLLARD™ operators enjoy support from a global team which includes authorized factory trained engine dealers and our Product Support group. For example, John Deere has teamed up with MER as an OEM to support large fleet customers which operate vessels locally and also to ports far away. Commonly, the first call from the operator comes into MER. We assist in troubleshooting and providing an important link to the nearest dealer.

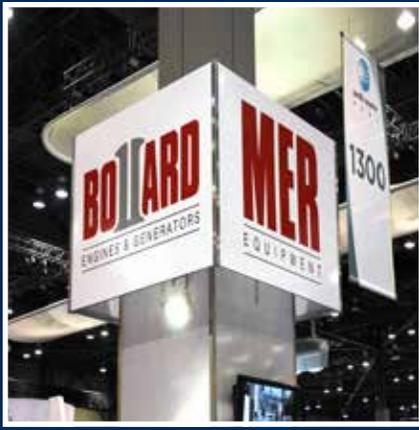
As a commercial operator, you want peace of mind that comes from reliable generator sets and low operating costs long term. When you need support you can rest assured that MER and our dealer support network will be there for you when you need it.

"We asked for a Bollard genset specially equipped for a repower on the Olympic Tug & Barge (OTB) tug Kestrel.

The engineering and advance planning from MER made for a very smooth installation and reduced labor by OTB.

We look forward to teaming up with MER on future projects."

~ Andrew Moon, Harley Marine Services



Pacific Marine Expo 2018 - Booth 1321

November 21-23

International WorkBoat Show - Booth 721

December 4-6 (with Dellner Brakes)

There are a lot of great projects in the works, stop by & see us and learn what's new!

BOLLARD™ Marine & Industrial
Generators

IRON™ Marine Generators

SCOR™ Oil Regeneration Systems

SeaFire™ Marine LED Lighting

Generator Monitoring & Control
Panels

Paralleling & Switchgear

MER Intelligent Power Production Storage & Distribution

by Bob Allen



Challenges: Climate change, carbon dioxide emissions, warming oceans, increasing ocean acidity.

At the 2019 United Nations convention on climate change, 100 leading scientists from the 30 top industrialized nations in the world submitted their recent findings on climate change. Of the 100 scientists, there were no sceptics or disbelievers, every climate expert on the committee agrees that climate change is the result of human activity. Specifically, carbon emissions to the atmosphere which are in turn absorbed by our oceans. The results are a warming planet, changes predicted to our world are happening at an accelerated rate. The “rate of change” has doubled since the 1990s.

Worldwide, if we choose to remain on the current path of carbon emissions the oceans are conservatively predicted to rise in excess of 3 feet by the end of the century. Our grandchildren will run out of food and clean water. Typical 100-year storms will be a common yearly occurrence. A billion people located near the ocean will be forced to move to higher ground. A million species of plants and animals will be extinct. The oceans will become so acidic they will no longer support life as we know it today. This is no longer speculation. This is not a political football. This is the world we live in

and will die in, maybe sooner than we expected.

What can we do? We can't change everything overnight. No, but we can start moving in an alternate direction.

MER is committed to downsizing our carbon footprint. We're investing all our available resources in new products to help our customers burn less fuel and put less carbon into the atmosphere. We know you can't tie up your boat, it's your source of livelihood. We also know there are good investments that will pay for themselves over time. Investments you can make to reduce your carbon emissions and thereby, operating costs. Such as, more efficient engines and generators. More efficient LED lighting and vessel systems, battery storage and inverters that allow you to turn off your engines when they are lightly loaded. Energy storage that can be recharged from more efficient shore-power. Better use of previously wasted heat and power on board.

“Smart” efficient energy storage and distribution systems are available to us. We at MER are engineering and implementing systems that are moving

us in the direction we must go. The science is no longer a debate “If you don't like change, you're going to hate extinction”.

Our current investment project is a hybrid electric system that will allow our customers to run their generators at peak efficiency and then to turn them off and run the vessel systems on stored energy. Carbon emissions from ship generators will be cut in half or even better. New inverter and phase conversion technology is allowing us to do things never before possible. We can now use battery storage in constant parallel with ship generators to boost power when needed to allow the installation of smaller generators and to take over when power demand is low. We're utilizing distribution controllers that automatically switch power sources and optimize generator run time.

Technology is allowing us to design solutions for the next generation. I hope you will join us in the adaption to a new carbon-less generation. Change is hard, but the results of not changing will be harder still.

From The Captain

Have Courage - Be Kind

I met Joe Harlan in Kodiak the summer of 1989. Christy and I were fishing our setnet site in Uganik, Joe was running the tender, M/V Deliverance for Ocean Beauty. Joe's job was to pick-up our salmon and deliver them to the cannery.

For three months every summer the tender was our only contact with the outside world. Whatever we needed, mail, groceries, fuel, had to come to us on Joe's boat. We were an 8 hour boat ride from Kodiak. There were no roads or telephones, no contact with anyone other than each other and the tender via radio. There were no satellite dishes, no internet, or emails. If anyone needed help it was at best a 45-minute wait for the Coast Guard helicopter out of town.

Joe had recently survived the sinking of the Tidings, a 53' crabber that went down off the North side of Kodiak. As Joe told the story around the campfire, "The Tanner season was done, they were driving the boat back to town on a cold shitty night when she started taking on water a mile offshore. The crew was on deck with baseball bats breaking Ice at the time. When Joe saw the water rising fast in the bilge, he told the crew, cut the pots loose, shove them overboard. No sooner had they cut the lines than the boat rolled hard and didn't come back. She went down bow first throwing all three crewmen into the freezing water. Only the stern rail was left above the waves when the crew surfaced in the darkness, no survival suits, no raft, only the clothes they had hastily donned to get on deck. Joe had remained at the wheel trying to get off a Mayday as the lights went out. As the bow went down several thousand pounds of Crab pots slammed against the galley door. Joe's only exit was sealed. Trapped inside a sinking tomb, the boat quickly filling with water, he tried desperately to kick out the galley window. The footing was bad, and the portholes were stout, made to hold out the sea they wouldn't yield.

As the boat was slipping beneath the sea the last of the air trapped in the galley leaking quickly from the voids, he took a deep breath sank below the freezing water in total darkness and made one final attempt at the galley porthole. He had no leverage with his legs, so he grabbed the sink faucet and beat out the glass with his head. Fortunately, Joe had some hard-headed ancestors. The glass gave way and he wiggled his way to freedom as the boat was falling 1,000' to the ocean floor. When Joe's head broke the surface, lungs bursting, no doubt in concussion all he could think was thank God I'm alive. The reality of four men floating in the darkness in winter, in the Gulf of Alaska, not knowing if the Mayday had been heard began to sink in as the adrenaline faded. Just as they were saying their goodbyes, the life raft cannister burst to the surface, with great effort they managed to inflate it, right it, climb aboard and survive till the Polar Star found them hours later in the misty darkness. Having heard the Mayday, Pat Pikus and crew had turned around and as luck would have it, found them in the open ocean. Hypothermic and near death, thanks to Pat and lady luck they lived to tell the tale."

The last time I talked to Joe, Christy and I were fishing out on the Shelikof, Joe passed us in the distance pounding his way down the straights on the Deliverance. Christy, a Jimi Hendrix fan, got on the radio and said, "Hey Joe, where you goin' with that gun in your hand?" Without missing a beat Joe came back, "Goin' to town to shoot my ol lady."

Not too many years later Joe came down with terminal cancer. Having stared death in the face, with great courage, not wanting to be a burden to anyone, Joe took his own life. I miss Joe, he was kind to us, a rare bird, bigger than life.

Stay in touch

