When it comes to trawling, especially for shrimp, Mexico plays an important global role. Although its output is smaller than that of the Asian countries (particularly Thailand), Mexico is still recognized as a major player in the market.

In this region, one of the most active players is Mr. Oscar Valdez Rodriguez, who not only owns and operates his own shrimp trawling fleet, but also Commercializadora Maritima S.A. (CMI). The company imports and manufacturers trawling nets, and supplies those nets to trawling fleets throughout the region. His trawl fleet, Pesquera Delly S.A., is a highly innovative trawling company that consults with the Mexican government about ways to improve sustainability and profitability in the industry.

Started in 1999 with a small fleet of six vessels, the company now operates throughout the Pacific Ocean, based in the states of Sonora, Sinaloa, Oaxaca and Chiapas.

Like operators throughout the world, CMI is faced with the challenge of enabling its trawling customers (including Pesquera Delly) to increase their catch performance while keeping costs under control. Oil consumption, for example, is a major cost, especially when using small mesh nets.
Mr. Valdez Rodriguez recognized early the value of supplying gear that could help cut fuel costs, as well as reduce replacement and repair costs... all the while boosting catch performance. Oscar Valdez Rodriguez, shared his thoughts about his experience with nets made with Dyneema®, the world’s strongest fiber™.

Using UltraCross® nets ... and cutting costs
Oscar Valdez Rodriguez is convinced he has found a good solution. He uses UltraCross® Silver netting, manufactured by NET Systems (part of the Nichimo Group, Japan), an innovative leader in the design and production of trawl nets, trawl doors, cod ends and other products.

The UltraCross® nets are made with Dyneema®
After initial trials with two UltraCross® nets, Mr. Valdez decided to equip the entire Pesquera Delly fleet with them. Mr. Valdez Rodriguez: “This is the best route to reduce costs, not just in terms of saving on diesel, but also saving on the wear and tear of machinery and equipment. It also helps save on the costs related to the repair and replacement of the nets.”

He continues: “We have been able to see savings of up to 45%. We have been using this product for over seven years here in Mexico. The results have been great. We are still using it and have outfitted 100% of our fleet with it.” This success has convinced other companies to convert their gear as well. Even the Mexican government has been impressed. They have set up government programs to upgrade fishing nets made of traditional nylon or regular PE to those made with Dyneema®.

Cutting costs how?
How do these nets cut costs? With regard to fuel costs, the nets made with Dyneema® have significantly less drag, since they are lighter and can be used with a smaller mesh and twine. This enables the fishing vessels to fish longer (and boost the catch performance) on the same amount of fuel. Or to make the same trip on less fuel. Nets made with Dyneema® are also extremely durable, which means they have a much longer service life, thus reducing replacement costs. They also are much easier to handle, which can improve productivity on board as well as help reduce costly injuries to crewmembers. Mr. Valdez Rodriguez, referring to the gear made with Dyneema®; “What we saw is that in its lifespan, its costs and how long the pay-back is with regard to our initial investment, I can tell you with great certainty we are able to pay back our investment after the first fishing season. After the first year of use, we have recouped the cost of the nets and even had a bit of profit left over.”

Looking to the future
Based on his good experience with these nets, Mr. Valdez Rodriguez is taking his business one step further by investing in offshore aquaculture cages made with Dyneema® to be used for shrimp farming. A complete evaluation is being conducted in cooperation with the Commission Nacional de Pesca (CONAPESCA) de Mexico. The project is currently evaluating different systems of farming, including fish, shrimp and other species.

There was one evaluation of gear made with Dyneema® versus that made of nylon and PE. All of the benefits, advantages and disadvantages were measured.
Although the nets made with Dyneema® may initially cost more, at the end of the day that cost can be returned with the saving they provide.

Mr. Valdez Rodriguez: “For example, we have to replace nylon nets every season. The nets made with Dyneema® have lasted more than five years. And remember, with the other cost savings we can pay back the initial investment cost after just one year. So we have more profit in the other years.”

First trawling nets, soon aquaculture cages. But Mr. Valdez Rodriguez has not stopped there. In addition to nets, he is also using ropes made with Dyneema® - including head ropes and bridals - throughout his fishing operations.

Why fishing gear made with Dyneema®?
Trawling gear made with Dyneema® can contribute to a better, more profitable operation for the following reasons:

- Improved fuel economy, due to smaller twines and lighter nets and lines.
- Higher catch performance on same amount of fuel, due to longer trips.
- Lower maintenance costs, due to the wear and tear resistance of Dyneema® fibers.
- Improved lifetime of the netting as a result of the high durability of Dyneema® fibers.
- Enhanced safety onboard, due to light weight and soft texture of lines and nets.
- Lower costs from breakdowns or replacement.

About Net Systems
Net Systems is an innovative leader in the design and production of trawl nets, trawl doors, codends, and manufactured Offshore Aqua Culture products. Net Systems is part of the Nichimo Group of Japan, a world leader and manufacturer of netting, fishing nets and supplies, processing equipments, and seafood. Net Systems is well-known for its UltraCross® Silver netting made with Dyneema®. Website: www.net-sys.com

About Pesquera Delly S.A. de C.V. / Comercializadora Maritima Industrial S.A. de C.V.
Pesquera Delly S.A. de C.V. is a family owned shrimp trawling company in Guaymas, Sonora, Mexico. Established as a fishing company in 1993, Pesquera Delly has been at the forefront of technology and heavily involved in consulting with the Mexican government in ways to improve the sustainability and profitability of the industry. Specifically, they have focused on ways to reduce fuel consumption, by-catch, and impact to the sea bed.

A final word from Mr. Valdez Rodgriquez: “We are convinced this is the best route to reduce costs and to improve efficiency and profitability.”

Clearly, nets made with Dyneema® have made a difference for this fishing operator. The payback time for conversion is generally very small. Find out how nets and ropes made with Dyneema® can help improve your operation. Visit www.dyneema.com
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