

grease into the harbor waters. With KapaNeema Plus mooring ropes made with Dyneema®, these issues and concerns simply do not exist.

Kostas Koronakis said: “Compared to other synthetic ropes, those made with Dyneema® and Koronakis designed robust jacket, perform better.” First Officer B. Dimitrios explained: “Sometimes we use oil with synthetic ropes. I prefer to use protective sleeves made by D. Koronakis because there is no pollution on deck.”

### Appreciated for other reasons, too

First Officer B. Dimitrios cited other advantages of the ropes: “They simply cause no damage to the fairleads and other dock equipment. There is no need to repair bits. And because they are less elastic, there is much better control.” Master Captain Deligiannidis said, “The ropes are also easy for the longshoremen. They can take two lines on board the mooring boat, instead of just one SWR. “The fact that the lines float further simplifies the job of the longshoremen.”

### Why ropes made with Dyneema®?

There are many compelling reasons for using mooring ropes made with Dyneema®. Most important, they offer maximum strength and minimal weight. The superior strength-to-weight ratio of Dyneema® makes the fiber the ideal component for many heavy marine applications. Mooring lines, for example, can be as strong as steel-wire rope of the same diameter, yet they are less than one-seventh the weight.

This is especially important given the increased size of

vessels. In addition, a rope with Dyneema® is about 60% of the diameter and 30% of the weight of an equally strong polyester or nylon rope. All this means mooring lines made with Dyneema® are both strong enough to secure today’s larger vessels, and much lighter and easier to handle than other types of ropes.

This enables faster, easier and safer docking ... all of which can help improve the efficiency of any shipping operation. In addition, KapaNeema Plus mooring ropes with Dyneema® are:

- Durable. There’s less need to replace or repair them over time.
- Resistant to chemicals, have good UV resistance and are not affected by salt water.
- Low elongation... less than 2,5% at break, for more precise control and less threat from backlash.
- A good investment for any shipping operator, due to improved efficiencies, increased safety, no pollution concerns and lower maintenance costs.

Master Deligiannidis of the Coronis seemed to agree: “A few years ago I could not imagine replacing SWR now I cannot imagine working without the KapaNeema Plus lines made with Dyneema®.”

Second Officer Parastatidis was even more succinct: “I don’t want to use anything else.” Clearly, mooring ropes made with Dyneema® made a big impression on board the Coronis. Find out how they can boost the performance of your operation.

More details? Visit [www.dyneema.com](http://www.dyneema.com) / [www.koronakis.gr](http://www.koronakis.gr)

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# LNG tanker tie-ups made faster, safer, easier

Maran Gas vessel's crew testify to many benefits of using mooring ropes with Dyneema® produced by D. Koronakis S.A

**The trend is clear: today's shipping industry is defined by larger vessels that need to operate more efficiently. Quick turnaround times are important, and there is always the pressure to reduce operational costs. At the same time, worker safety needs to be improved. Choosing the right type of rigging certainly can play an important role in boosting operational efficiency, worker safety and easier handling.**

With these criteria in mind, an increasing number of ship and harbor operators are choosing ropes made with Dyneema® fiber. Mooring lines made with Dyneema® have a proven track record, providing secure and safe mooring for a range of vessels, such as oil tankers, containers, carriers, bulk cargo vessels, as well as RoRo and Navy ships worldwide. They also are found on board many LNG carriers, including those operated by Maran Gas.





### Maran Gas Maritime

Maran Gas Maritime, the gas-shipping unit of the Angelicoussis Shipping Group Limited (headquartered in Athens, Greece), currently operates a fleet of five LNG vessels and two VLGC vessels. Each LNG carrier has a capacity of 145,800 m<sup>3</sup> and each LPG carrier a capacity of 84,000 m<sup>3</sup>. All of these vessels, including the Maran Gas Coronis featured here, have been using KapaNeema Plus mooring ropes made with Dyneema®.

The mooring lines aboard the Maran Gas Coronis were made by D. Koronakis, a leading manufacturer of high-quality maritime ropes. The mooring ropes that the company supplied to the Maran Gas Coronis were made with Dyneema®. Recently, the master and the captain of the Maran Gas Coronis, as well as several crewmembers, shared their opinions of working with these ropes.

#### About Maran Gas Maritime & ASGL.

Maran Gas Maritime Inc. ("Maran") is the Gas Shipping unit of the Angelicoussis Shipping Group Limited ("ASGL"). Maran was set up in 2003 to manage the LNG and LPG carriers of ASGL. ASGL has a well established track record in shipping dating back to 1947. ASGL's fleet now comprises bulk carriers, tankers, LNG vessels and LPG vessels. Today it employs a staff of approximately 200 shoreside professionals as well as over 1,500 officers and crew.

### The crew agree... about easy handling

In general all crewmembers were impressed with the light weight and easy handling of the KapaNeema Plus ropes with Dyneema® made by D. Koronakis. Virtually every member noted that the ropes were "very good, very powerful and very fast to operate." According to I. Deligiannidis, off-signing Captain, "Mooring time is reduced by 40% to 50% from about one and half hours with SWR (steel-wire ropes) to approximately 45 minutes. In addition, only one crewmember is needed to handle the rope." The fast, easy handling properties were appreciated by many other crewmembers. E. Tsiopogrannis, current captain, said "They're very good. I would recommend them. Everybody should use them."

#### About D. Koronakis S.A..

D. Koronakis S.A., established in 1967, is a leading producer of advanced synthetic ropes and wire rope for mooring and other industry applications. The head office is in Piraeus and production near Thebes. D. Koronakis distributes its products all over the world through local stocks, ship suppliers or directly to the interested party duty paid and in transit. The company is renowned for its quality products and very strong rope concepts with Dyneema® under the brandname Kapanema. D. Koronakis enjoys a good market reputation for its ever fast service and entrepreneurial attitude.

Henry Bombalis, bosun, said, “They’re easy to work with. Compared to SWR, they are also very easy to splice.” Even one of the linesmen working with the ropes when the Coronis docked in Zeebrugge, Belgium, was impressed. “Can’t be better. These lines are excellent to work with.” stated Peter Vermael, of CVBA, Zeebrugge.

#### **Safety: ... about increased safety**

After working with the mooring ropes at many docking locations, the crew was impressed with how the ropes enhanced safety on board. Bosun Bombalis said, “Using SWR is very dangerous, especially during winding operations.... the lines made with Dyneema® make it an easy job.” Captain Tsipogrannis had this to say: “We didn’t have to use shackles. Instead we could use a cow hitch for safety. The overall weight reduction of the ropes is a plus for the deckhands.” Many operators confirm this, citing the reduced incidence of injuries to the back, shoulders, legs and hands. “Furthermore, due to the advanced method of production by D. Koronakis S.A., the specific ropes offer a significantly reduced backlash danger”, says Kostas Koronakis, CEO of D. Koronakis S.A.

#### **... and about safety related to low maintenance**

Safety onboard is also improved due the lack of grease needed, due to the smooth nature of the Dyneema® fiber. This allows a cleaner, safer environment on deck. Second



Officer I. Parastatidis said this about not having to grease the ropes, “It keeps deck space clean and makes our work much easier. It also enables us to focus on other important tasks on board.” The lack of grease on board has several other benefits. “Not having to use grease anymore,” said Captain Tsipogrannis, “means we don’t have to purchase expensive environmentally friendly (bio-degradable) grease any longer.” Cleaning up grease on the decks is a labor-intensive job, one that can take two men all day to perform. All the while, great care needs to be taken not to spill the

