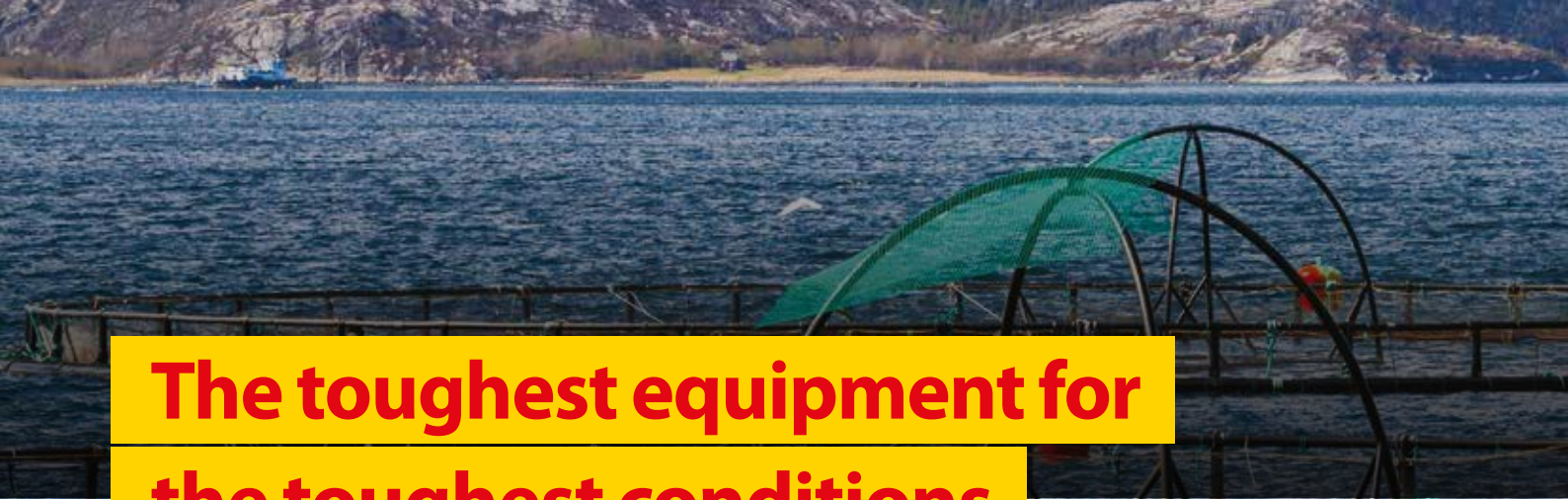




**If you're fish farming
in harsh conditions,
you better be sure.**

Endumax[®]

Be sure.



The toughest equipment for the toughest conditions

Whether in fjords, inshore waterways or the high seas, nets, ropes and rope protection sleeves need to cope with some of the harshest and most challenging conditions imaginable.

Day after day, year after year, they must withstand a multitude of forces – from heavy loads and abrasion to intense water pressure and direct exposure to seawater and harsh chemicals. What’s more, with operations growing in size, today’s aquaculture products must be light and easily maneuverable. They must also be easy to clean and resistant to predator attacks, fish biting, algae growth and bio-fouling. In aquaculture, UHMWPE material provides top product performance because of its unrivaled strength compared to nylon and other netting materials. But Endumax® UHMWPE offers even more. Thanks to its unique film-structure – compared to filament-based UHMWPE yarns – products made with Endumax® are known for offering maximum durability and lifetime, so you can be sure that your operations deliver long-lasting performance.

Read more on our website

www.teijinaramid.com/aquaculture-products



Key benefits when using Endumax® UHMWPE material:

- > **Excellent strength-to-weight ratio**
- > **Outstanding resistance to abrasion, UV and chemicals**
- > **Best shrinkage behavior of all UHMWPE nets and ropes**
- > **Minimal algae growth thanks to low surface area of the material**
- > **Reduced need for harmful anti-fouling coatings**
- > **Superior long-term durability: fewer repairs and inspections**

Endumax® nets: The new catch in aquaculture. A unique structure. A long-term performance.

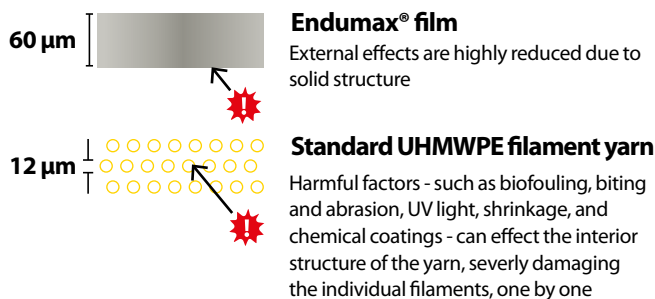
Endumax® is 11 times stronger than steel, weight for weight. Compared to filament-based materials, its unique structure offers extraordinary durability and increased lifetime for nets, meaning fewer fish escapes, predator threats, and net inspections or repairs. If you’re fish-farming in exposed locations, harsh conditions or close to the shore, facing dangerous predators, you better be sure your nets will provide your operations with long-lasting protection for thriving fish. Thanks to the qualities of Endumax® – with its higher abrasion, biting and UV resistance, and lower shrinkage – our aquaculture products drive profitability and sustainability, offering the longest service lifetimes.



"In recent years, the aquaculture industry has boomed, bringing with it new opportunities but also new challenges: larger sites, for example, and more exposed locations. These require top-performing aquaculture products, both in terms of sustainability and operational performance. With Endumax[®], we can offer aquaculture products that deliver both, without compromises."

Jakub Kral

Global Market Manager of Aquaculture Products at Teijin Aramid



Reduced bio-fouling, reduced cleaning times.

Performance, safety and reliability are non-negotiable when it comes to creating eco-efficient products. Aquaculture nets that are made with our high-performance UHMWPE material, Endumax[®], are designed to cope with whatever the water throws at them: its low surface area reduces the effect of bio-fouling and, together with extremely thin net twine, allows for improved water flow during work, with more nutrients and oxygen reaching the fish. Less algae growth means less cleaning, which is both time- and cost-efficient.

Bio-fouling test, showing the results of three-week bio-fouling activity in the North sea



UHMWPE filament-based



Endumax[®] UHMWPE

Protect the fish. Protect the environment.

Our solvent-free production and low or no use of harmful copper-based coatings on nets made with Endumax[®] also reduces, or even fully eliminates, the amount of harmful chemicals released into the environment. Endumax[®] enables you to tackle bio-fouling in more sustainable way and lowers the negative impact on your farm's surroundings and on the fish.

Ropes and protective sleeves: safer, sustainable solutions

Due to the multitude of forces impacting aquaculture operations, nets are not the only products that require abrasion resistance and improved durability. Ropes and rope covers made with Endumax[®] provide unrivaled abrasion resistance, even in the most severe conditions. In addition, the lack of filaments in the film translates into zero-to-low shrinkage of the ropes and excellent UV-resistance, thus ensuring a higher lifetime without the need for early replacements, and exceptional return on equipment investments.

When your aquaculture ropes, straps and loops are being challenged on a daily basis, sleeve protection is the only solution. With Endumax[®] fabrics, you can be sure that your operations get the best protection – with sleeves that are proven to achieve up to nine times better abrasion resistance than other UHMWPE filament-based materials.

Maximum performance. Zero compromise.

Lightweight but with ultra-high strength, our Endumax[®] material enables the production of extremely resistant aquaculture products that reduce the cost of farming operations over time. Whether it's improved UV resistance, abrasion resistance, low-to-zero shrinkage attributes or incredible strength, all of these are crucial to ensure long-lasting performance. With our aquaculture products, you can expect higher returns on your operations and increased efficiency. Whatever the challenge, whatever the environment, no solution works better.



Be sure.

At Teijin Aramid, everything we do is guided by our ambition to shape a better future for generations to come. Day after day, we move forward, continuously improving our processes, our technology and ourselves. As market leaders, we drive progress through collaboration and set new standards for high performance. We connect with our customers at every level, wherever they are in the world. Because we believe that, together, we can be something bigger. Together, we can challenge conformity.

From automotive and oil & gas, to civil engineering, ballistic protection and beyond, our products are empowering excellence in diverse markets and applications around the globe. By enabling lighter, stronger and more resistant materials. And by taking durability, protection and efficiency to new levels. Whether you choose Twaron®, Teijinconex®, Technora® or Endumax®, our high-performance materials are an enduring guarantee of reliability. You can be sure of that.



For more information

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or visit www.teijinaramid.com

Endumax®

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