



An introduction to
BEYOND FIBRE

BEYOND|FIBRE®

ULTRA HIGH MOLECULAR WEIGHT POLY ETHYLENE FIBRE



BEYOND FIBRE

SW200 is the new benchmark.



- **BEYOND FIBRE** the strongest Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre in the world.
- **BEYOND FIBRE** is available in 4 grades:

SW200 / SW100 / SW90 / SW85

In terms of tenacity and modulus, **BEYOND FIBRE** SW200 is the world's strongest Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre. If your industry needs the absolute best quality, **BEYOND FIBRE** SW200 is your only possible solution.

- **BEYOND FIBRE** SW100 equals the old benchmark.
- **BEYOND FIBRE** SW90 and **BEYOND FIBRE** SW85 are simply the strongest AND best value for money Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre.
- **BEYOND FIBRE** is used in commercial fishing, aquaculture nets, ropes, slings, cut-resistant gloves and apparel, vehicle and personal ballistic protection.
- **BEYOND FIBRE** is the result of 15 years' experience in production.

Advantages of BEYOND FIBRE

- **BEYOND FIBRE** is 18 times stronger than steel, and 50% stronger than aramids on a weight-for-weight basis. BEYOND FIBRE has the highest tenacity and modulus in the world, and therefore has the world's best high strength / low weight ratio.
- **BEYOND FIBRE** floats on water and is ideal for lightweight solutions.
- **BEYOND FIBRE** is chemically inert, and can withstand the harshest dry, wet, salty and humid environments for a longer time.
- **BEYOND FIBRE**, and its products made from it, show high UV resistance.
- **BEYOND FIBRE** resists water absorption (hydrophobic).
- **BEYOND FIBRE** can withstand the harshest environments for a longer time. This is due to its inherent strength, and its resistance to many damaging chemical agents.



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BEYOND FIBRE

Applications

About BEYOND FIBRE

BEYOND FIBRE is simply the best Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre. It has exceptional characteristics in terms of tenacity, modulus and abrasion resistance.

BEYOND FIBRE Applications

To name just a few possible applications:



Commercial fishing nets and ropes



Aquaculture nets



Towing ropes



Mooring ropes



Sailing ropes



Sails



Offshore



Cut resistant gloves



Protective Clothing




Ballistic protection



Armor solutions for vehicle and personal armor



About BEYOND FIBRE

- **BEYOND FIBRE** is the brand name of the Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre produced by ICD Lab.
- **BEYOND FIBRE** is simply the best UHMWPE value for money fibre. It has exceptional characteristics in terms of tenacity, modulus and abrasion resistance, and it is used in commercial fishing and aquaculture nets, ropes, slings, cut-resistant gloves and apparel, vehicle and personal ballistic protection.
- **BEYOND FIBRE** is member of EUROCORD. 

ABOUT US: HISTORY:


Since 2005, we produce Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre.



The BEYOND FIBRE brand was set up in 2019 after independent testing confirmed that, after 15 years of experience in producing UHMWPE fibre, we now can produce a tenacity and modulus which exceeds the qualities of even the most well-known and established western brands. Hence its name 'BEYOND FIBRE'™...

You will find that the top premium range of BEYOND FIBRE SW200 is BEYOND any other UHMWPE Fibre.

You will find that the quality of BEYOND FIBRE is BEYOND your expectations ...

BEYOND FIBRE is a registered brand under depot nbr 018088463

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4.

BEYOND FIBRE

in Commercial Fishing



TRAWLING

The thinner the yarns in your trawl net, the less drag you have. This makes that bigger trawl net workable with the same boat. Or less diesel use. So the logic is clear. Nets and ropes made with BEYOND FIBRE will give you that extra edge to beat the competition. There's truly light fishing in heavy seas.

AQUAFARMS

You want the best for your precious product. BEYOND FIBRE is your best choice. It is lighter, stronger and great in aquatic conditions.



BEYOND FIBRE for Lifting

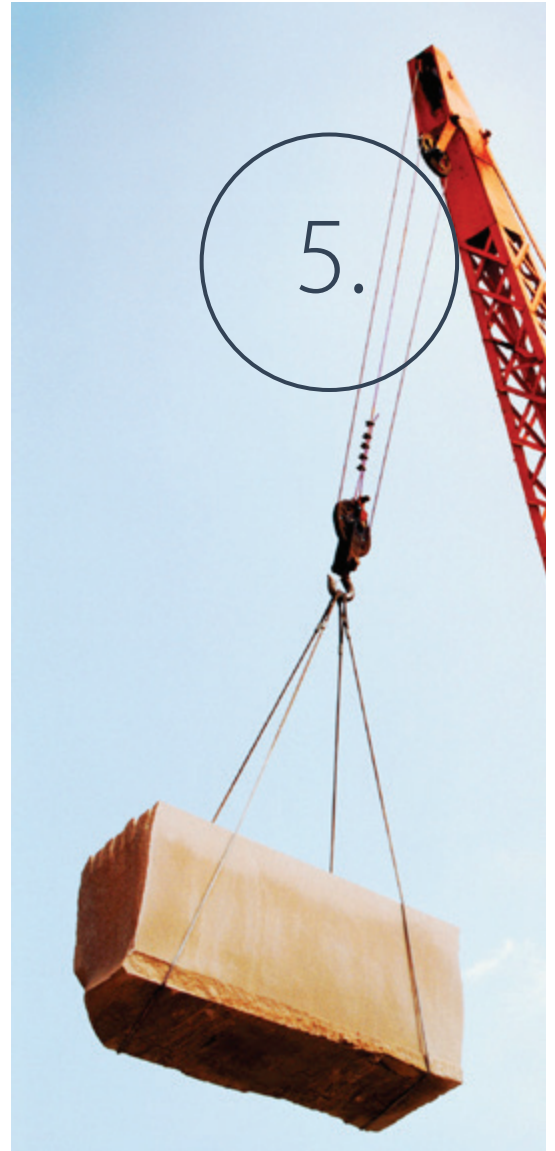
Today, there is a growing need to handle loads faster, more precisely,
and—as labor costs rise—with fewer people.

Ropes from **BEYOND FIBRE**: lighter weight so easier handling!

BEYOND FIBRE for lifting applications.

Compare slings made from steel-wire or polyester with slings made from **BEYOND FIBRE**, and anyone will see the huge difference in weight and diameter. It is therefore logical that **BEYOND FIBRE** ropes will be much easier to handle for your workers (which translates into fewer injuries).

Secondly, as the abrasion resistance of **BEYOND FIBRE** is excellent, it means a much longer product life.



BEYOND FIBRE

for Maritime applications

- **BEYOND FIBRE** ropes: lighter weight so easier handling
- **BEYOND FIBRE** ropes: greater strength.
- **BEYOND FIBRE** ropes: superior abrasion resistance.
- **BEYOND FIBRE** ropes: longer product life.

TOWING

BEYOND FIBRE ropes: lighter weight so easier handling! Greater strength so longer product life!

If you want less crew to do more work on your vessel, you have to make life easier for them. In that case, lighter ropes are a must. If you want to take measures to further lower the risk of injury, easier-to-handle ropes are a must.

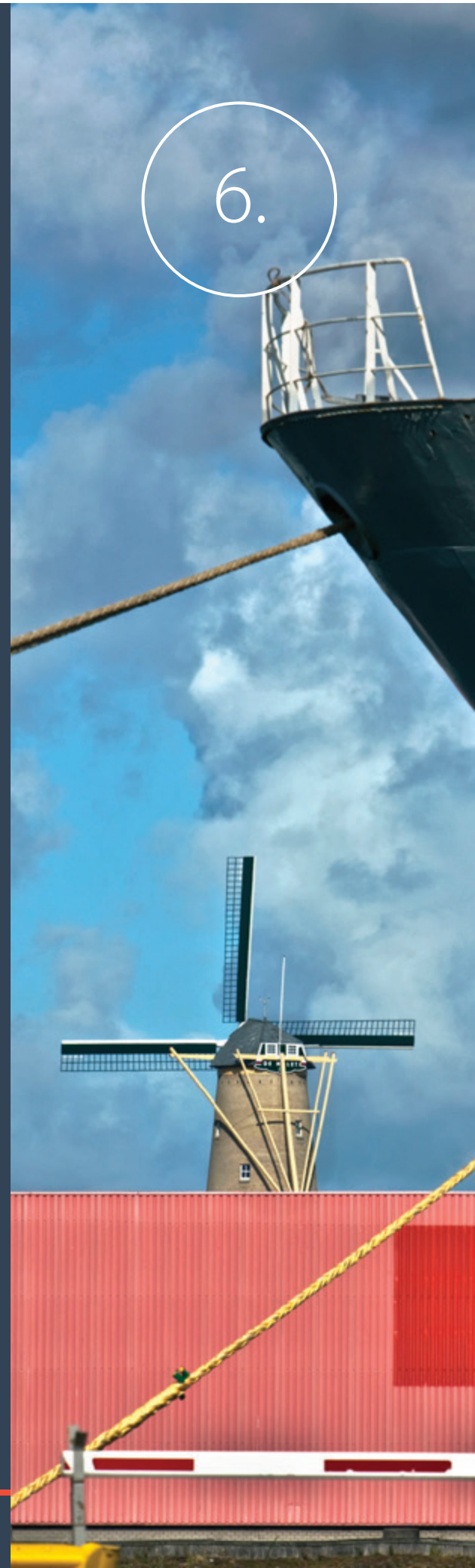
Ropes that float, ropes that are easy to carry (1/9 of the weight of steel-rope). Combine that with its high strength and its very long product life (often at least twice as long compared to polyester ropes), and you will understand that BEYOND FIBRE can't be beaten. Especially for tug-boats, the difference in elongation compared to polyester makes BEYOND FIBRE ropes much safer. It is of perfect use in towing arrays as well.

MOORING

On your platform you want the best-from-the-best. Delays are costly. Therefore BEYOND FIBRE is used for installation, lifting, mooring, turret handling.

Steel is too heavy, and has the risk of developing razor-sharp hooks.

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7.

BEYOND FIBRE

Offshore

BEYOND FIBRE -offshore Exploration, drilling & production

When the oil is found in seas kilometers deep, and your platform needs mooring, there is no “other option” compared to rope made from UHMWPE fibre. Steel ropes will break under its own weight, and for polyester ropes to reach the required strength means they become much too thick to handle.

THE BEST

On your platform you want the best-from-the-best. Delays are costly. Therefore BEYOND FIBRE is used for installation, lifting, mooring, turret handling.

Steel is too heavy, and has the risk of developing razor-sharp hooks. Polyester's elongation compares very unfavorably compared to BEYOND FIBRE.

8.

BEYOND FIBRE for Gloves

BEYOND FIBRE GLOVES

- **BEYOND FIBRE** is the best when it comes to cut- resistance. This results in the best cut-resistant gloves and work-cloth.
- **BEYOND FIBRE** Gloves give the highest level of safety without compromise on comfort.
- **BEYOND FIBRE** Gloves are thin and therefore offer an outstanding sensitivity, and still protect against mechanical dangers.
- **BEYOND FIBRE** Gloves can be washed many times over, and have a long product life, thereby decreasing your cost.
- **BEYOND FIBRE** Gloves (including lower-arm protection) is used in automotive, glass, steel& construction industry.



BEYOND FIBRE in Sailing

BEYOND FIBRE SAILING ROPE

The sport of sailing demands ever-improving innovations in ropes, sails and rigging in order to set new limits of speed—and reflect the highest standards of the critical racer / yacht owners. UHMWPE fibre already is the leader for top-end usage, be it racing or luxury yachts. With its unsurpassed weight/strength combination, nothing can beat BEYOND FIBRE on a boat.

BEYOND FIBRE SAILCLOTH

The perfect balance of strength and weight, new sails use BEYOND FIBRE fiber. Due to the low stretch of BEYOND FIBRE, sails retain their optimal shape. The bright-white color of BEYOND FIBRE adds to the attractiveness. BEYOND FIBRE sails are resistant to salt, UV rays and abrasion.

9.



BEYOND FIBRE

in Life Protection

POLICE AND ARMY FORCES

BEYOND FIBRE is the new benchmark.

Whether it is armor for the police or for the military, Life Protection products made from BEYOND FIBRE are the best combination of maximum protection made the lightest weight materials.

Forces face more and more complex threats today when guarding their countries and people. Light and flexible solution made from BEYOND FIBRE provide the most effective protections to keep military and law enforcement officers safe during missions.

Life protection product made from BEYOND FIBRE out-perform any product made from Aramid and or any other brand Ultra-High Molecular Weight Polyethylene (UHMWPE) fibre.

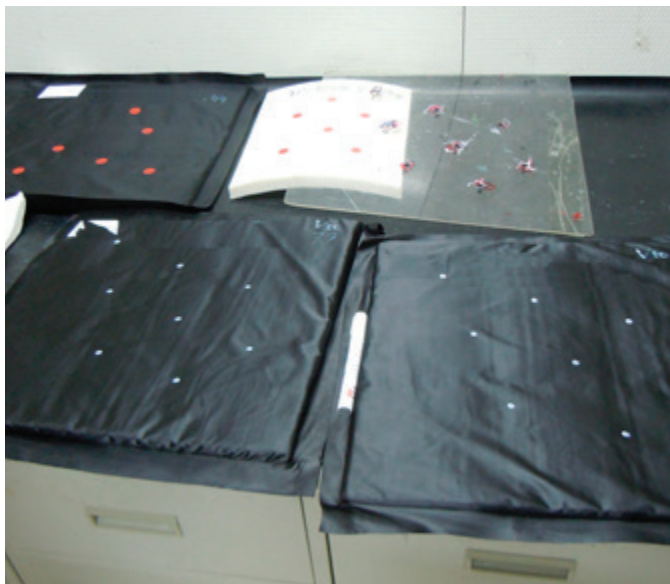
BEYOND FIBRE not only has the highest tenacity in the world, but also highest modulus! This combined with a very low elongation rate, makes that products made from BEYOND FIBRE are the best to absorb kinetic energy to stop bullets and fragments. Its high modulus permits the rapid dispersion of shock waves, reducing blunt trauma caused by deep indentations.

BEYOND FIBRE provides a broad portfolio of fibre grades for products including protective vests, military vehicles, helmets and explosion-proof blankets.



BEYOND FIBRE can be combined with ceramic, fiberglass or steel plate.

Those composite plates can effectively guard against heavy weapons like armor-piercing bullet and high-speed secondary fragments.



Plates can be easily processed to shape to fit varied body figure and size, improving comfort and providing protections anywhere needed in more parts of body. Their far lower weight allows for more plates placed in the front, back, and side of panels within the required weight limitation, providing more protection against attacks from all directions.



Helmets made from BEYOND FIBRE significantly protect wearer against fragments and bullets attacks, as well as reducing self-weight to increase protective acreage. Moreover, the light weight also allows wearer to equipped with masks, goggles, and other communication facilities on heads.

When served on vehicle armoring, products made from BEYOND FIBRE help to reduce fuel consumption, save payloads and increase effective loading capacity, maneuverability as well as speed, leaving more room for wires, pipelines and wireless apparatus. Especially for helicopters, light weight means larger flying range. Plates made from BEYOND FIBRE can fit the highest protection standard, making it the most reliable materials in vehicle armoring system.

Due to excellent resistance against water and chemicals, protective products made from BEYOND FIBRE require no waterproofing processing. With density of 0.97g/cm³, it can float on water, making it the prime choice for buoyancy protective vests.

BEYOND FIBRE boasts excellent aging resistance and high resistance to acid, alkali and most chemicals. Moreover, it can withstand UVs, moistures and cutting and wearing. Compared with other materials, products made from BEYOND FIBRE are more stable and durable and will remain so after years of service.

WIDE APPLICATIONS

BEYOND FIBRE provides a broad portfolio of grades for protective fields. Meanwhile, we work closely with governmental authorities, institutions and dedicatedly engage in innovation and improvement of the performance of our fiber, which together permits us to provide the best solution for our clients.

	Manufactured products	Applications	Standard
BEYOND FIBRE	UD	Bulletproof/stab proof vest	Low-speed fragment, lead shot, knife, awl, club
		Bullet proof plate	High-speed bullet
		Helmet	Musket bullet
		Shield	Heavy machine gun bullet
		Transport protection plate	Grenade
		Tank/armored vehicle	Armor piercing bullet
		Police vehicle, private car, cash transporter	Mine
		Vessel, patrol boat	Antitank missile
		Helicopter, transport plane	IED
			EFP
			RPG
	Non-woven	Explosion-proof mat	Explosive
		Explosion-proof cover	
		EOD protective closing	
	Woven	Explosion-proof blanket	Explosive
		Cut resistant gloves	Knives, glass
	Net	Protective net	Others

