



Dyneema®
With you when it matters

DSM presents: Dyneema® Diamond Technology

The inventor of the world's strongest fiber presents: the most cut resistant fiber in the world

Dyneema® Diamond Technology is DSM's latest innovation for cut protective gloves. DSM is a leading materials sciences company with more than 50 years of expertise in polymers. Since inventing Dyneema® in 1990, we've invested heavily in a global research program that has yielded continuous innovations.

Dyneema® Diamond Technology takes gloves to a new level of protection by providing greater cut resistance with no compromise in comfort or durability.

DSM Dyneema is the only High Modulus Polyethylene (HMPE) fiber producer in the world that is vertically integrated from producing the base polymer through to spinning the actual yarn used to knit gloves. This has enabled us to combine the design of a completely new and specially engineered base polymer with new hardware technology to produce Dyneema® Diamond Technology. This technology is the result of several years of Research & Development on polymer, hardware and fiber technology.

The unique polymer used for Dyneema® Diamond Technology gloves provides high strength, cool-touch comfort and high durability (abrasion and tear resistance). DSM's unique and patent-protected technology more than double the cut resistance of the yarn over the standard Dyneema® fiber by spinning specially engineered micro-particles into the polymer.



Cut-resistant micro-particles protect the fiber

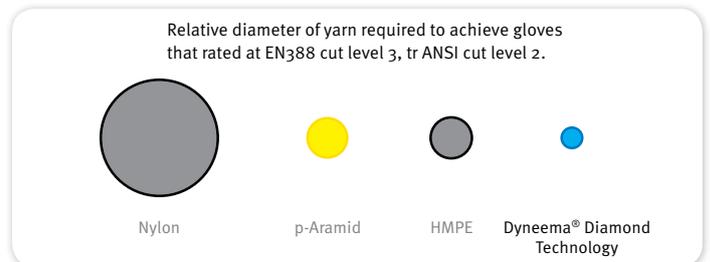
Unique polymer providing high strength, cool-touch comfort and maximum durability

Cross-section of fiber based on Dyneema® Diamond Technology

The most comfortable cut-resistant glove

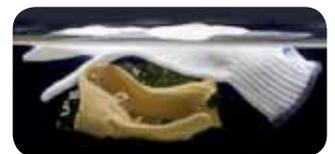
Applying this technology to very fine yarns provides our partners with the ability to manufacture ultra-lightweight gloves with the same cut resistance as thicker and heavier gloves made from aramid, HMPE or commodity fibers such as nylon.

The graph below illustrates the diameter ratio of yarn required to achieve EN388 cut level 3 and ANSI cut level 2 gloves. Yarns based on Dyneema® Diamond Technology can achieve the same cut performance with considerably thinner fibers compared to alternative products.



Dyneema® Diamond Technology fiber is 40% lighter (less dense) than aramid fiber, enabling gloves that are both thinner and much lighter, while offering the same cut protection.

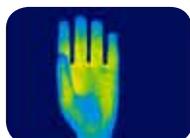
The combination of durability, thinness and lightness means that workers no longer have to compromise on comfort and tactility when choosing gloves with high cut protection.



DSM
BRIGHT SCIENCE. BRIGHTER LIVING.

Additional benefits of Dyneema® Diamond Technology

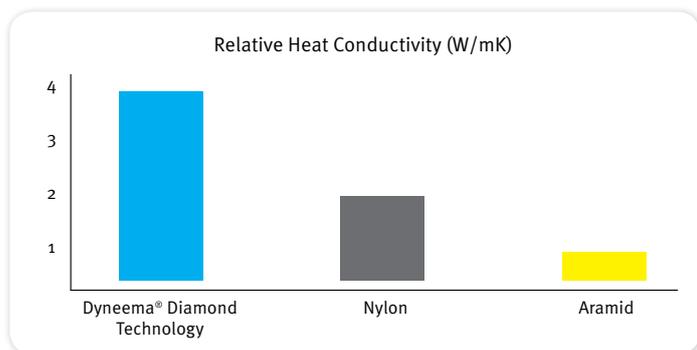
- Gloves made with Dyneema® Diamond Technology will keep your hands cool. Thanks to the fiber's high heat conductivity, gloves made with Dyneema® Diamond Technology offer a cool touch. Comparative tests of Dyneema® Diamond Technology versus aramid have proven noticeably better heat release. (see two infra red images of a glove with Dyneema® Diamond Technology and a glove with Aramid)



Dyneema® Diamond Technology



Aramid



- Oekotex certified: Dyneema® Diamond Technology fiber complies with Oekotex.
- Food contact: Dyneema® Diamond Technology is compliant with food contact regulations laid out by the Food and Drug Administration in the US, and relevant bodies in the EU.
- Sustainability: Dyneema® Diamond Technology requires far less material to achieve same performance as heavy materials, resulting in a positive carbon footprint versus competitive materials

About DSM Dyneema

DSM Dyneema is the inventor and manufacturer of Dyneema®, the world's strongest fiber™. Dyneema® is a High Modulus Polyethylene (HMPE) fiber that offers maximum strength combined with minimum weight. It is up to 15 times stronger than quality steel and up to 40% stronger than aramid fibers, both on a weight-for-weight basis. Dyneema® fiber floats on water and is extremely durable and resistant to moisture, UV light and chemicals. Its applications are practically unlimited. It is a key component in ropes, cables and nets in the fishing, shipping and offshore industries. Fine yarns made from the material are ideal for applications in sporting goods and the medical sector. Dyneema® offers excellent safety features, whether for metalworking gloves, or for bullet-resistant armor and clothing for police and military personnel.

More information about DSM Dyneema is available at www.dyneema.com.

DSM Dyneema

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