Frag Knits with Dyneema®

Ultimate protective performance with unmatched comfort

Designed for IED threat profile garments, Frag Knits with Dyneema® are more comfortable, compressible, and ultra light. For protection against micro-mass and meso-mass fragments.

Comfort
- Flexibility, elasticity, stretch recovery
- Light weight, low bulk, compressible
- Air permeability, moisture transport, soft & cool touch
- Durability & launderability

Catching the fragments
- Hinder micro fragments from penetration
- Reduce number of penetrating particles
- Reduce penetration depth
- Limit back-face deformation

Energy transmission
- Structural elongation, yarn on yarn movement
- High tear strength, high E-modulus, specific stiffness
- High transversal breaking strength to the yarn-axis

Situation ready Frag Knits with Dyneema®
- Penetration-inhibiting textiles for increased personal protection
- Unique benefits to the user include
  - IED-fragment protection
  - Moisture management
  - Heat-stress management
  - Hygiene management
  - Exceptional next-to-skin comfort
  - Full mobility
- Excellent flex-durability, abrasion resistance, tear and bending strength
- Stable against environmental influences
- Use of single layer and hybridization to meet full range of protection needs
- All fabrics can be laundered
<table>
<thead>
<tr>
<th>Textile characteristics</th>
<th>Unique benefits to the user</th>
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<tbody>
<tr>
<td><strong>Protection</strong></td>
<td>High fragment protection with single and multiple layer constructions&lt;br&gt;Focus on micro-mass and meso mass fragment protection: &lt; 0.13g – 1.1g (2 – 17 grain)</td>
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<td><strong>Light weight</strong></td>
<td>Low burden: Excellent integration into PPE and garment systems as single and multiple layer construction</td>
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<td><strong>Mobility management</strong></td>
<td>Body's motion adaption: Elastic, flexible, good stretch retention&lt;br&gt;Low bulk, compressible&lt;br&gt;Smooth motion: good fabric-on-fabric and yarn-on-yarn movement</td>
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<td><strong>Thermal management</strong></td>
<td>Air permeable, good ventilation&lt;br&gt;Cool touch based on Dyneema® fiber properties</td>
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<td><strong>Moisture management</strong></td>
<td>Hydrophilic: moisture transport, capillary effect&lt;br&gt;Quick drying&lt;br&gt;Hydrophobic: water repellent</td>
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<td><strong>Hygiene management</strong></td>
<td>Easy laundering for all grades&lt;br&gt;Odor prevention: inherent Dyneema® fiber properties</td>
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<td><strong>Tactile comfort next to skin</strong></td>
<td>Smooth, soft, suppleness&lt;br&gt;Dyneema® fibers with ECO-Tex II certificate&lt;br&gt;Excellent fiber and textile bending properties = no skin irritations!&lt;br&gt;Stable against alkaline/acidic body fluids</td>
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<td><strong>Excellent durability</strong></td>
<td>High tensile, tear and breaking strength&lt;br&gt;High abrasion resistance and flex- durability&lt;br&gt;Low yarn and fabric friction&lt;br&gt;Cut/ slash resistance&lt;br&gt;Environmental stable performance properties&lt;br&gt;Micro body climate stable performance properties</td>
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