

filtec precise inc.

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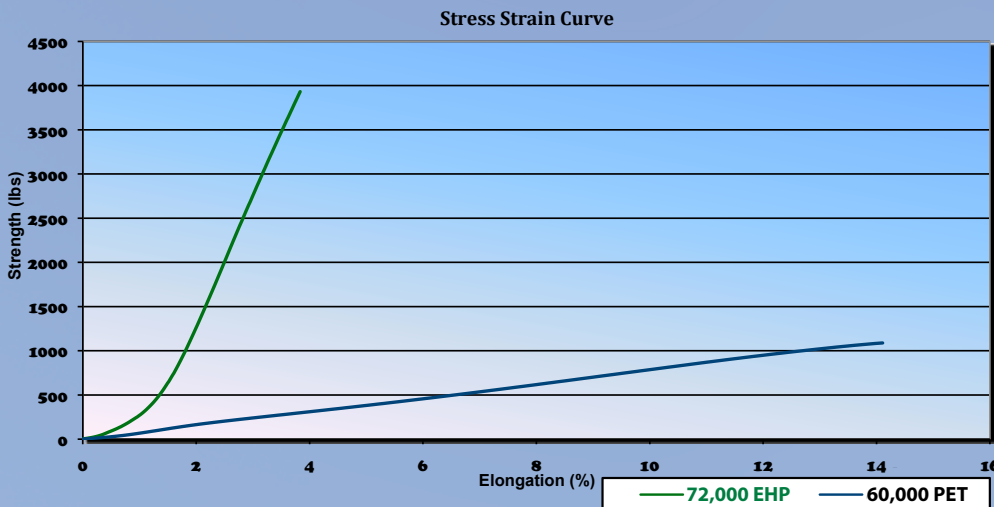
EHP Engineered Hybrid Power[®]

Core Yarns for High Performance Roundslings
featuring Honeywell Spectra[®] fiber

Testing Below Done at
Honeywell's Advanced Fibers
& Composites Lab

Tensile Strength and the effect of cyclic loading

Sample	Applied load (lb)	Tensile Strength (lb)			Tensile Strength Increase (%)	
		As received	after 25 cycles cyclic loading	after 50 cycles cyclic loading	after 25 cycles cyclic loading	after 50 cycles cyclic loading
72k EHP w/Green	720	3,888	3,926	4,011	1.0%	3.2%
108k EHP w/Red	980	5,212	5,309	5,378	1.9%	3.2%



Material Used	EHP Type (denier)	Certified Breaking Strength	Twist Level	Put-up on 2.36" I.D. x 12.6" Tubes	Length per Standard Package
Custom Blend of HMPE Spectra [®] & Aramid	72k EHP Green Tracer	3,600 lbs Minimum	0.5 Z tpi (20 Z tpm)	packed in ~350 lb cartons of 13-15 packages	1,400 meters (4,595 ft)
	108k EHP Green & Red Tracer	4,900 lbs Minimum			925 meters (3,035 ft)

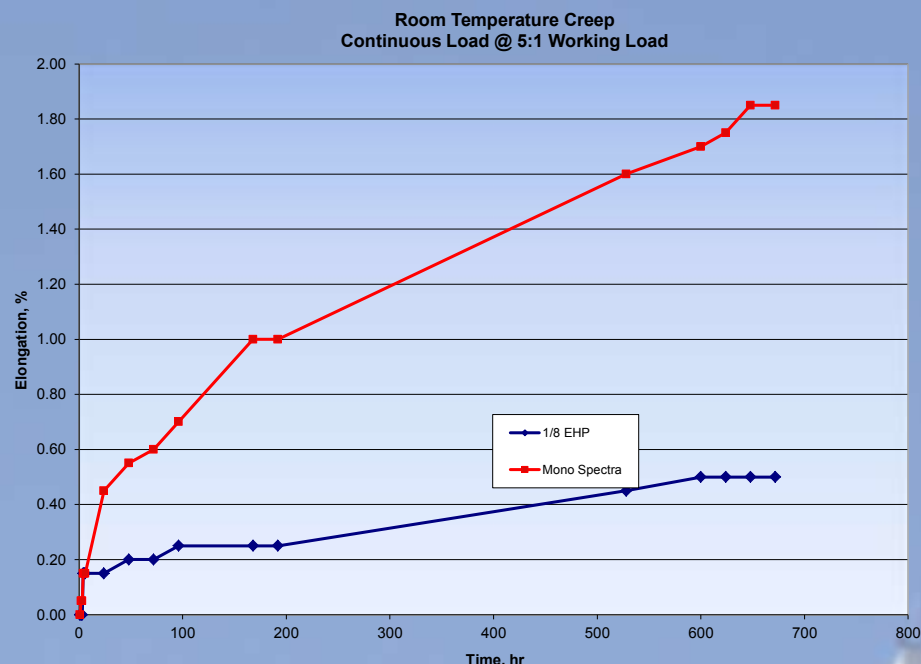
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General Guidelines

EHP core yarns for High Performance Roundslings have less than one third the stretch of high tenacity polyester and therefore are less “forgiving”.

- Polyester elongation is ~12% at break vs. less than 4% for EHP core yarns.
- At working load, EHP stretch is well under 1%.
- Best results are obtained when the EHP wraps are kept as even in length and tension as possible.
- Slack or drooping ends will NOT “pull out” and equalize like they do in polyester roundslings.

Proof testing (five to ten times at 2x working load) is recommended for all High Performance Roundslings.

The maximum recommended temperature for all HMPE roundslings is 158 F (70 C).

- Typically, the wider the jacket the better the EHP results.
- Results among different sling manufacturers can vary widely based on production methods.
- **ALL FABRICATORS MUST DO THEIR OWN BREAK TESTING TO VERIFY EHP RESULTS.**
- For higher capacity slings, it is recommended to use EHP in multiple bundles.
- EHP efficiency is increased by separating into multiple yarn bundles.



Using this product to fabricate slings requires refined skills to manufacture a good suitable roundslings. As all sling makers fabrication methods differ, each sling manufacturer must do their own testing to determine the suitable rating of their products. While Filtec's 72k EHP yarn is over three times stronger than 60,000 denier PES, this does not necessarily make slings made with the same # wraps three times stronger. Only internal testing by the manufacturer can verify their suitable rating.