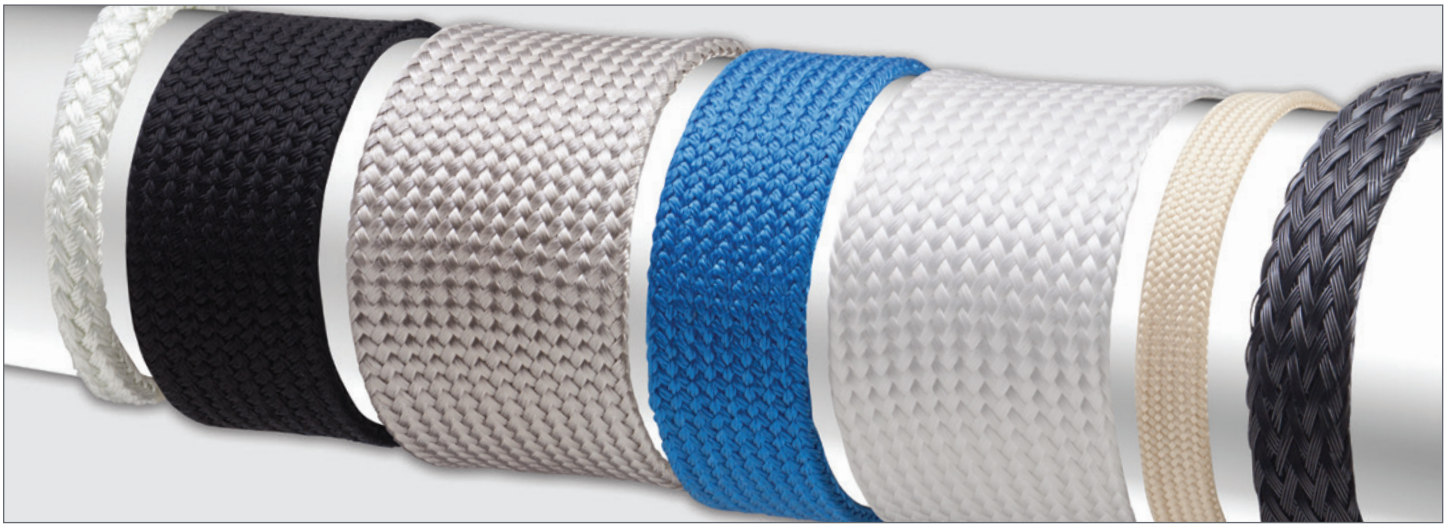
Custom Overbraiding



BRAIDING SOLUTIONS

From simple hoses to complex braiding solutions for harnesses and assemblies, Amphenol CIT has the experience and production capability to supply all of your braiding needs. We offer a wide range of braiding materials and full engineering support, which gives us the ability to customize cost-effective solutions for your cable protection needs. We also specialize in quick-turn manufacturing with the ability to turn product in 24-48 hours.

Our braiding solutions are approved by many prime contractors in the aerospace and defense markets, including Boeing, Honeywell, GE, Lockheed Martin, and Northrop Grumman.

PRODUCTS

Short lead times on sleevings, from 1/16" to 3" ID:

- SF2600® braided ceramic sleeving and tape
- SF398® black nylon sleeving per A-A-59301

SERVICES

- Overbraiding of customer-supplied products:
  - Hoses
  - Cable assemblies
  - Cable harnesses, including those with multiple breakouts
- AOG harness braiding repairs (24-48 hour turnaround time)
- Custom bobbin winding
- Quick-turn manufacturing
- Full engineering support
- Our Cerritos, CA location is an FAA-certified repair facility for harnesses

APPLICATIONS

- Aerospace
- Military
- Industrial
- Heavy Equipment
- Power Generation
- Automotive

Custom Overbraiding

COMPARATIVE ANALYSIS OF COMMON TEXTILE PROPERTIES

Textile Type	3M™ Nextel™ Ceramic	Fiberglass (S Glass)	Fiberglass (E Glass)	Flame-resistant Meta-aramid	Nylon 6.6	Polyester	PTFE	Para-aramid
Specification	N/A	MIL-R-60346 Type IV, Class I	MIL-Y-1140	MIL-C-572, Type PAA	MIL-C-572, Type Polymide, Form Y, VT295	MIL-C-572, Type PSTR, Form Y, VT258	N/A	AMS3901A
Abrasion Resistance	Poor	Poor	Poor	Good	Excellent	Excellent	Good	Good
Heat Resistance	Excellent	Very Good	Good	Good	Fair	Very Good	Very Good	Very Good
Flame Retardancy	Very Good	Will Not Burn	Will Not Burn	Will Not Melt	Fair	Flammable	Will Not Burn	Will Not Melt
Acid Resistance	Good	Good	Good	Good	Fair-Good	Good	Very Good	Fair-Good
Alkali Resistance	Good	Good	Good	Good	Good	Fair	Very Good	Good

*The above chart represents a qualitative comparison of material properties and should be used as a general guide only.

PROPERTIES OF COMMON TEXTILE

Textiles	Fiber Type	Temperature Rating, Continuous	Breaking Tenacity (gms/denier)	Tensile Strength ('000 psi/Mpa)	Breaking Elongation	Specific Gravity (gms/cc)
3M™ Nextel™ 440	Yarn	+2500 °F (1371 °C)	N/A	300 (2068)	1.1%	3.05
3M™ Nextel™ 312	Yarn	+2200 °F (1204 °C)	N/A	250 (1723)	1.2%	2.70
Astroquartz®	300 2/2 - 480 Filament	+1832 °F (1000 °C)	N/A	870 (5998)	4.6%	2.20
Fiberglass (S Glass)	Yarn	+1000 °F (538 °C)	19.8	709 (4888)	5.7%	2.48
Fiberglass (E Glass)	Yarn	+1000 °F (538 °C)	15.3	500 (3447)	4.8%	2.54
Flame-resistant Meta-aramid	Yarn	+500 °F (260 °C)	4.9	90 (620)	28.0%	1.38
Nylon 6.6	High Tenacity Monofilament & Multifilament	+350 °F (175 °C)	8.8	40-134 (275-923)	21.1%	1.14
Polyester	Regular Tenacity Monofilament & Multifilament	+350 °F (175 °C)	9.5	50-99 (344-682)	13.4%	1.38
PTFE	Monofilament & Multifilament	+350 °F (175 °C)	2.0	14-50 (96-344)	19.0%	2.10
PEEK	High Tensile & Tenacity Monofilament	+482 °F (250 °C)	6.5	12-15 (82-103)	20.0%	1.32
Para-aramid	29 Filament	+300-350 °F (149-177 °C)	23.0	520 (3585)	3.6%	1.44
Para-aramid	49 Filament	+300-350 °F (149-177 °C)	23.6	550 (3792)	2.4%	1.44
ECTFE	ECTFE Monofilament	+302 °F (150 °C)	2.0	45 (310)	25.0%	1.68

COMMON SLEEVING

P/N	Description	MIL-SPEC
SF2600	Braided Ceramic Sleeving	
SF398	Black Nylon Sleeving	A-A-59301, MIL-I-47203, MIL-S-47053
SF440	Heavy Wall E Glass	
SF880	E Glass Sleeving	
SF1200	S Glass Sleeving	
GB440	Nextel 440	

COMMON METAL BRAID

Metal	MIL-SPEC
Stainless Steel	QQ-W-423, ASTM-A-313
Tin-Plated Copper	A-A-59569, QQ-B-575
Nickel-Plated Copper	A-A-59569, QQ-B-575, ASTM-B-355
Silver-Plated Copper	A-A-59569, QQ-B-575

Note: These standard specifications have been met with the use of test equipment and procedures developed by Amphenol CIT. This sales sheet does not constitute a warranty that the product will meet the above specifications while used in specific applications or attached to specific test equipment.

Amphenol CIT
Cable & Interconnect Technologies

Learn More:
Amphenol-CIT.com

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