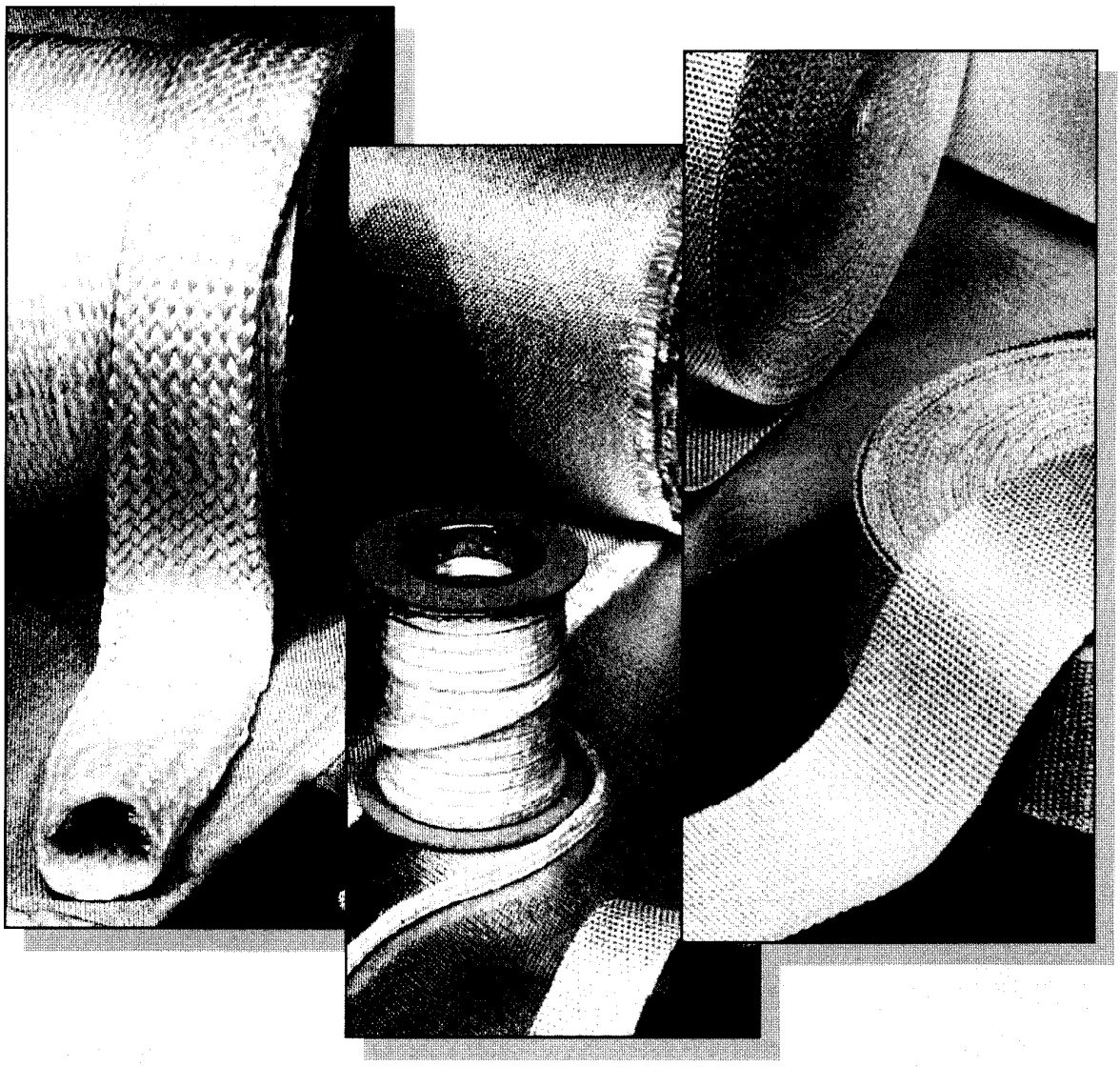
FUSED SILICA
HOT PRESS PLATENS
CASTABLE CERAMICS
FIRED SHAPES
AEROSPACE TOOLING

Foundry Service & Supplies, Inc.

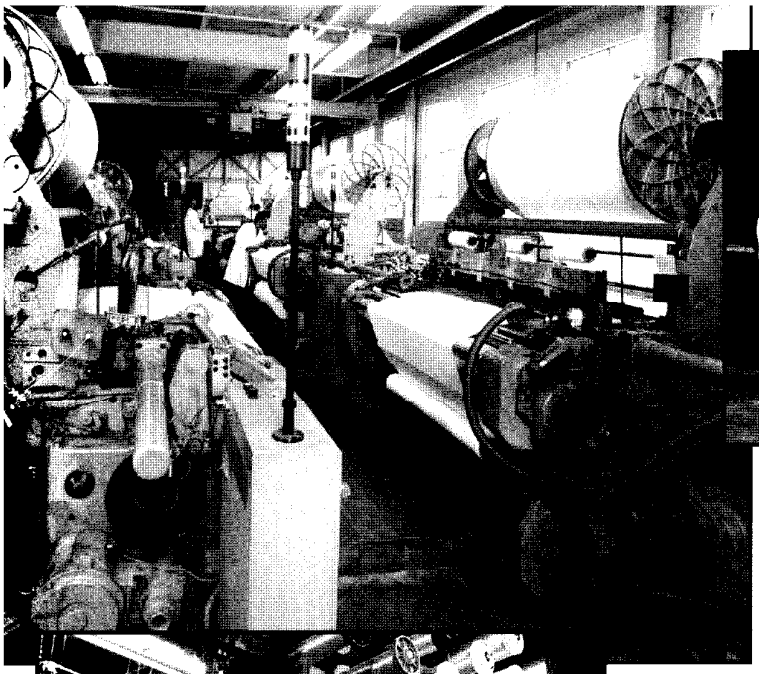
HI-TEMP INSULATIONS
CALCIUM SILICATE BOARDS
MILLBOARD AND BLANKET
PAPERS AND CEMENTS
CUTTING AND FABRICATING

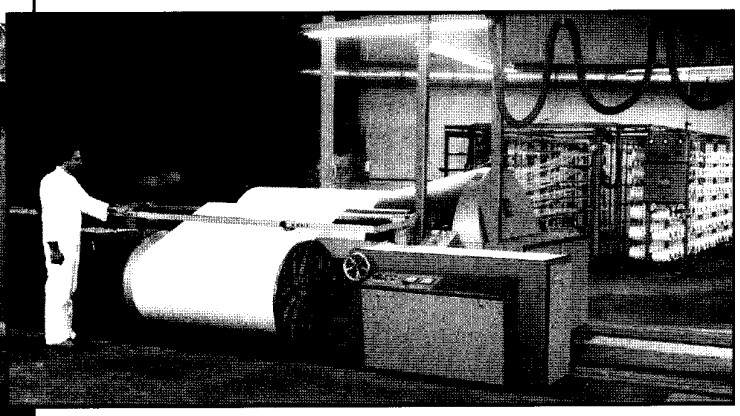
11808 E. Burke Street, Santa Fe Springs, CA 90670
Telephone: (562) 945-6511
Fax: (562) 696-1633

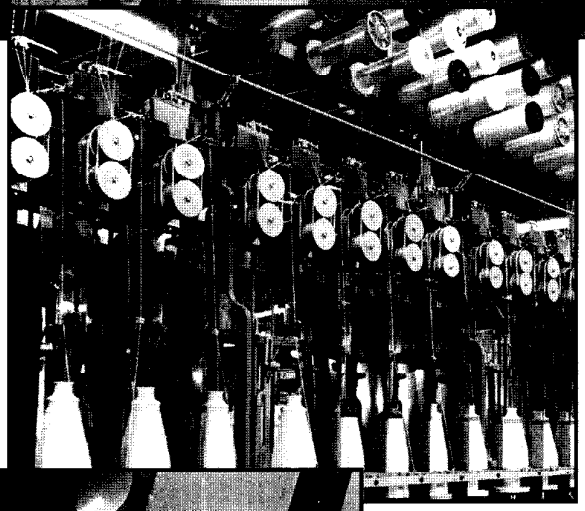


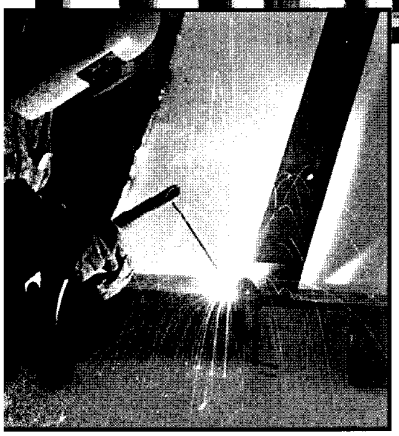
THERMOGLASS™

Heat Resistant Textiles









Thermoglass™ Textiles are engineered and manufactured to meet a wide variety of requirements

In the designing and engineering of Thermoglass™ textile products, the requirements of their end uses determine the yarn size and construction, weave pattern, fabric construction and fabric finish.

The filament diameter, count, twist, and the ply of the yarn all affect the thickness, weight, pliability, surface texture and tensile strength of the fabric. The weave pattern controls its stability and directional strength. The fabric construction influences strength, pliability and appearance. The fabric finish stabilizes the weave and/or improves its resistance to high temperature, moisture, flame, abrasion, etc.

TYPICAL THERMOGLASS™ APPLICATIONS

CLOTH APPLICATIONS

G9 Lagging
Rubber Reinforcing

G12 Lagging
Light Pads

G19 Medium Pads
Flange & Valve Covers
(alum) Spray Shields

G22 Light Wt. Curtains
Heavy Pads

G26T Expansion Joints
Flue Liners
Rubber Reinforcing
Welders Curtains

G32 Expansion Joints
Fire Blankets
Gasket Cloth
Insulation Blankets
Rubber Reinforcing
Tank Seal Liners
Welders Curtains

G70 Gasket Cloth
Insulation Blankets
Tank Seal Liners
Welders Curtains

TAPE APPLICATIONS

Pipe & Hose Wrapping
Electrical Insulation
Oven Door Seals
Tadpole Gasketing
Pipe Hangers
Thermal Insulation

TUBING APPLICATIONS

Metal Tubing Protection
Hose Covering
Oven Door Seals
Thermal Insulation
Wire & Cable Sleeving

ROPE APPLICATIONS

Packing and Seals
Metal Wipes
Tadpole Tape Core
Gasketing

Thermoglass™ offers many unique characteristics and advantages for a broad variety of industrial and marine applications

Non-Flammable
Thermoglass™ products will not burn or smolder.

High Heat Resistance
May be used at surface temperatures ranging from 120°F to 1000°F. Retains 50% of tensile strength at 700°F, and as much as 25% at 1000°F.

Excellent Dimensional Stability
Will not stretch or shrink. No more than 3% elongation under maximum stress. Retains stability even at high temperatures.

High Tensile Strength
Highest strength-to-weight ratio of any industrial textile.

Chemical Resistance
Inorganic Thermoglass™ is highly resistant to most chemicals except hydrofluoric and hot phosphoric acid and wet hydrogen chloride. Will not rot or mildew.

Excellent Electrical Properties
High dielectric strength and low constants.

Great Flexibility
The very fine filaments used in making Thermoglass™ give it a high degree of flexibility.

Finishes
Thermoglass™ textiles can be treated with special finishes to meet specific requirements. These finishes include: heat treatment to improve cutting qualities, weave set treatment to improve cutting and sewing, waterproof finish, rewet with pre-applied adhesive, flameproofed, siliconed and color dyed (red, orange, gray, etc.). It can also be supplied with laminated aluminum foil, aluminized Mylar® film, Neoprene or vinyl coating.

Formulation–Percent By Weight
All Amatex Thermoglass™ products listed in this catalog are made of "E" (Electrical) grade fiberglass. The chemical composition is as follows:

Silicone Dioxide	52-56%	Magnesium Oxide	0-6%
Calcium Oxide	16-25%	Sodium Oxide	0-1%
Aluminum Oxide	10-12%	Potassium Oxide	0-1%
Boron Oxide	8-12%		

Meet U.S. Coast Guard Requirements
Thermoglass™ conforms to U.S. Coast Guard requirements for Incombustible Materials, subpart 164.009

Applicable Specifications
Amatex Thermoglass™ products can be manufactured to meet U.S. Government specification MIL-C-20079 and other customer specifications, as required. For insulation materials with special corrosion and chloride requirements. Thermoglass™ products can be supplied in conformance to MIL-I-24244.

Amatex offers four distinct categories of Thermoglass™ fabrics:

1) MARINE ... These lightweight fabrics, made from our own texturized yarns, are used primarily in shipyard applications and are in compliance with MIL-C-20079;

2) INDUSTRIAL ... This group of medium and heavyweight fabrics, made from our own texturized yarns, is especially suitable for general industrial uses;

3) ROVING ... These heavy grade fabrics are woven with texturized roving yarns, and may be used for industrial applications with less rigid requirements;

4) WIRE-INSERTED ... Made from our own texturized yarns, these wire-inserted fabrics are available to order for use where extremely high strength is required.

CLOTH

Other widths and styles available upon request.
Wire-inserted cloth made to order only.

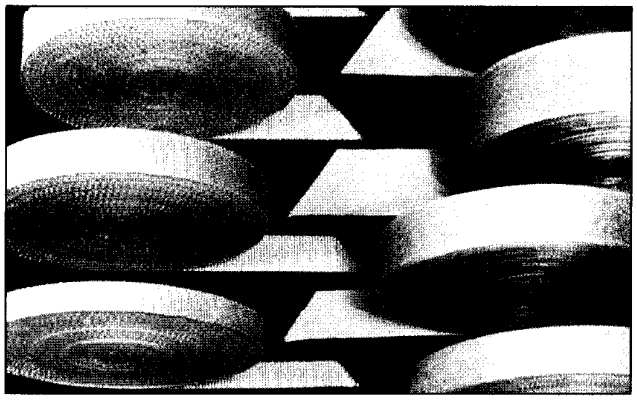
	Style No.	Oz. per sq. yd.	Gauge	Ends per 1"	Picks per 1"	Std. Roll Widths*
MARINE	G09P77	8.5	.020	18	14	40" 60"
	G12P73	12.0	.026	18	14 (x2)	
	G19P33	18.5	.033	20	14	
	G19P33AL	20.5	.038	20	14	48"
	Marine cloths comply with MIL-C-20079					
INDUSTRIAL	G22P34	22.0	.038	20	12 (x2)	40" 60"
	G26T33	26.0	.040	32	18	40" 50" 60"
	G32P44	32.0	.055	18	12	40" 60"
	G36P44	36.0	.058	18	9 (x2)	
	G40P44	40.0	.065	18	11 (x2)	
	G70P44	70.0	.140	32	10 (x2)	40"
ROVING	G24PBB	24.0	.050	10	8	40" 50" 60"
	G30PAB	30.0	.055	10	8	
	G32PAA	32.0	.060	10	8	
	G35PAA	35.0	.065	10	9	
	G40PAE	40.0	.070	10	8	
	G64PFF	64.0	.115	10	7	
WIRE-INSERT	G30PVV*	30.0	.050	18	9	40" 60"
	G38PVV*	38.0	.060	18	9	
	G49PVV*	49.0	.070	18	9	
	G69TTT*	69.0	.125	18	8	40"
	G24PUU**	24.0	.041	20	14	*0.007 Brass **0.005 St. Steel ***0.007 St. Steel
	G49PYY***	49.0	.070	18	9	

Finishes (Non-metallic cloth only)

Wear Resist	#30	Flame Retardant	#35
Heat Treated	#31	Silicone Coated	#36
Weave Set	#32	Firm Hand	#39
Rewet Adhesive	#34	Water/Oil Repel	#41

MANY OTHER FINISHES AVAILABLE

ALL DATA GIVEN TO WITHIN 10% ACCURACY



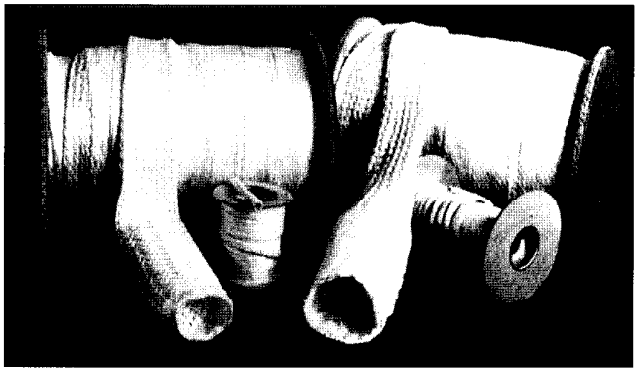
*G65P752 complies with MIL-C-0020079, Type II, Class 4 (USN pipe hanger liners.)

Lighter weight tapes, other widths, and Drop Warp tapes available.

TAPES

Standard roll length: 100 feet.
All supplied #9731 Heat-treated unless specified.

Width Inch	Code Suffix	Weight (pounds) per 100 feet G19P752 .033" thick	G36P752 .070" thick	G65P752* .125" thick	G120P752 .250" thick
1/2	04	0.50	1.00	2.20	–
3/4	06	0.80	1.60	3.20	–
1	08	1.00	2.10	4.20	9.80
1-1/4	09	1.30	2.60	5.20	12.30
1-1/2	10	1.50	3.10	6.20	14.60
2	12	2.00	4.10	8.20	19.50
2-1/2	14	2.50	5.10	10.20	24.40*
3	16	3.00	6.20	12.20	29.30
4	20	4.00	8.20	16.50	39.00
5	21	5.00	10.30	20.50	48.80
6	22	6.00	12.30	24.50	–
7	46	7.00	14.40	28.40	–
8	23	–	16.40	32.70	–



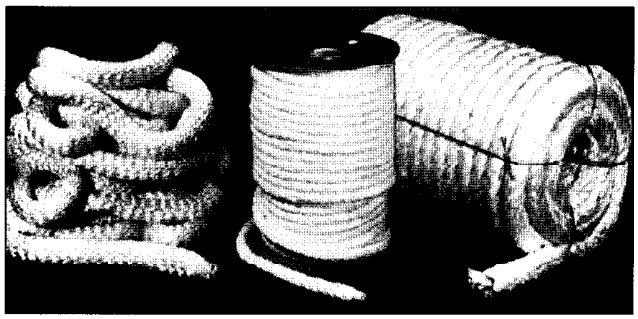
Sleeving supplied untreated.
Supplied on spools of approx. 25 lbs.
G32 could be made available with 9731 heat treatment.

SLEEVING

Measured over Mandrel

Part No.	Size I.D.	Wall Thick	Approx. Ft./Lb.
G32-25	1/8"	1/32"	140.0
G32-29	3/16"	1/32"	92.0
G32-01	1/4"	1/32"	78.0
G32-02	3/8"	1/32"	62.0
G32-04	1/2"	1/32"	57.0
G32-05	5/8"	1/32"	27.0
G32-06	3/4"	1/32"	21.0
G32-08	1"	1/32"	17.6
G32-09	1-1/4"	1/32"	14.3
G32-10	1-1/2"	1/32"	12.4
G32-11	1-3/4"	1/32"	10.0
G32-12	2"	1/32"	8.7

Part No.	Size I.D.	Wall Thick	Approx. Ft./Lb.
G60R-25	1/8"	1/16"	89.0
G60R-29	3/16"	1/16"	78.0
G60R-01	1/4"	1/16"	47.0
G60R-02	3/8"	1/16"	32.0
G60R-04	1/2"	1/16"	25.4
G60R-05	5/8"	1/16"	20.8
G60R-06	3/4"	1/16"	19.6
G60R-08	1"	1/16"	13.3
G60R-09	1-1/4"	1/16"	10.1
G60R-10	1-1/2"	1/16"	9.0
G60R-11	1-3/4"	1/16"	8.2
G60R-12	2"	1/16"	7.8
G60R-13	2-1/4"	1/16"	7.0
G60R-14	2-1/2"	1/16"	6.2
G60R-15	2-3/4"	1/16"	5.3
G60R-16	3"	1/16"	5.0
G60R-18	3-1/2"	1/16"	4.5
G60R-20	4"	1/16"	4.2
G60R-43	4-1/4"	1/16"	4.0
G60R-34	4-1/2"	1/16"	3.9



Knit Braided Rope with metallic insert available upon request.

Standard Putups: Twisted & Braided Rope, 25 lb. reels or coils; Knitted Rope, loose packaged, approximately 34 lb. cartons; Wicking, 1/8" on tubes, 1/4 & 3/8" approx. 25 lb. spools

Graphited Black Dyed Knitted Rope available up to 3/4" Dia.

WICKING AND ROPES – Feet per pound x Diameter (inch)

O.D. Size	Code Suffix	Wicking 10-787G	Twisted 10-786G	Braided 10-814	Knitted Rope (Density) Low 10-862KT	Medium 10.863KR	High 10-864KR
1/8	25	–	–	–	–	–	–
3/16	39	–	78.0	66.5	170.0	105.0	82.0
1/4	01	54.0	55.0	45.0	88.0	73.0	61.0
5/16	30	–	46.0	32.0	63.0	53.0	44.0
3/8	02	29.0	24.5	23.0	48.0	39.0	31.0
7/16	03	–	20.0	16.0	34.0	29.0	23.0
1/2	04	–	513.5	11.5	28.0	22.0	17.0
5/8	05	–	9.0	7.0	20.0	16.0	11.4
3/4	06	–	6.5	5.0	15.4	11.6	7.6
7/8	07	–	4.5	4.0	12.7	8.3	6.2
1	08	–	3.7	3.4	11.5	6.7	4.2
1-1/4	09	–	2.7	2.4	7.3	4.8	3.0
1-1/2	10	–	2.1	1.8	5.6	3.7	2.0
2	12	–	1.2	–	–	–	–

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