

POLOTSK-STEKLOVOLOKNO



ПОЛОЦК-СТЕКЛОВОЛОКНО



Искусство создавать

Art of creation

*Свобода
в инновациях*

*Freedom
in innovation*



*Working with our partners
we create the future together!*

General director

A handwritten signature in blue ink, appearing to read "A. Bunakov".

A. Bunakov

About enterprise

Joint stock company "Polotsk-Steklovolokno" has been founded in 1958 and is one of the world leading manufacturers of glass fiber based materials such as glass rovings, glass yarns, glass fabrics, glass meshes, non-woven materials, glass fiber reinforced plastic articles.

The range of products of the company includes about 1000 different items made of E-glass, high temperature silica glass, high modulus glass of the type "VMP", as well as of basalt rock.

The enterprise produces the goods practically for all branches of industry. A team of highly qualified specialists is doing business with partners in more than 50 countries on 5 continents of the world.

Working at the international markets Joint stock company "Polotsk-Steklovolokno" has a key competitive advantage – availability of a full cycle of technological processes in production, such as batch preparation, glass melting and glass fiber forming, primary and secondary twisting, plying, warping, slashing, weaving, fabric finishing, production of glass fiber reinforced plastic articles.

Our own scientific-research center gives a possibility to develop and introduce new types of products and technologies at the company.



Glass yarns. Glass rovings. Chopped fiber.

Glass yarns and glass rovings produced by Joint stock company "Polotsk-Steklovolokno" are used as a semi-product for manufacturing of woven products by the company, as well as they can be a finished product for the customer.

Glass yarns are used in production of fabrics, tapes and meshes of different applications (electric insulation, building, for GRPs), as electric insulation winding of wires and cables; as a reinforcing filler of GRP materials, glass tissues.

Type of sizing, linear density and yarn structure (number of plies, twisting value) can be customized.

Assembled and direct rovings are used for the production of roving fabrics, meshes, chopped strand mats, composite articles by winding method (cylinder forms), pultrusion (profiles, armature), spraying, as well as for production of glass filled engineering plastics. Different sizing types allow to provide compatibility with different resin types in production of GRPs.

Chopped glass fiber is used in production of non-woven CSM, glass tissue; engineering plastics and press materials. Depending upon the field of application chopped fiber from E-glass are produced of different filament diameter, different length, on different types of sizing agreed at the customer's requirement.



Glass yarns

Yarn type	Nominal diameter of filament, microns	Number of complex yarn plies	Total linear density of yarn, tex	Twist direction: S – left Z – right	Twist value per 1 m	Specific tensile strength, mN/tex (gf/tex), not less	Loss on ignition, %	Sizing type
E-glass type								
EC4 3,4	4	2	6,8 +5% -7%	Z	150±10% 100±15%	610(62)	0,9-1,9 or 1,4-2,5 not less than 0,6	wax emulsion silane
EC5 5,5	5	1, 2	(5,5;11) +5% -7%	S, Z	(70,100)±15%	610(62) 570(58) 570(58)	0,9-1,9 or 1,4-2,5 1,4-2,5 0,7-1,1	wax emulsion starch silane
EC6 6,8	6	1, 2	(6,8;13,6) +5% -7%	S, Z	100±15% 50±20%	590(60) 590(60)	0,9-1,9 or 1,4-2,5 not less than 0,6	wax emulsion silane
EC5 11	5	1	11 +5% -7%	S, Z	(40,50)±20% 70±15%	610(62) 570(58)	0,9-1,9 or 1,4-2,5 1,4-2,0	wax emulsion silane
EC6 13	6	1, 2	(13,26) +5% -7%	S, Z	100±15% 50±20%	590(60) 590(60)	0,9-1,9 or 1,4-2,5 not less than 0,6	wax emulsion silane
EC6 17	6	1, 2	(17,34) +5% -7%	S, Z	(40,50)±20% (90,100)±15%	590(60)	0,9-1,9 or 1,4-2,5	wax emulsion
EC7 22	7	1, 2	(22,44) +5% -7%	S, Z	100±15% 40±20%	470(48) 470(48) 470(48)	0,9-1,9 or 1,4-2,5 1,1-1,5 0,7-1,1	wax emulsion starch silane
EC7 34	6, 7	1, 2, 3	(34,68,102) +5% -7%	S, Z	(28,30,40,50)±20% 150±10% 100±15%	590(60) 590(60) 590(60)	0,9-1,9 or 1,4-2,5 1,1-1,5 0,7-1,1	wax emulsion starch silane
EC9 52	9	1, 2	(52,104) +5% -7%	S, Z	40±20% (60,100)±15%	410(42)	0,9-1,9 or 1,4-2,5 0,7-1,1	wax emulsion silane
EC9 54	9	1, 2, 3	(54,108,162) +5% -7%	S, Z	(80,100)±15% 150±10%	420(43) 410(42)	0,7-1,1 0,9-1,9 or 1,4-2,5	wax emulsion silane
EC9 68	9	1, 2, 3	(68,136,204) +5% -7%	S, Z	(28,40,50)±20% 100±15% (110,150)±10%	410(42) 420(43) 420(43)	0,9-1,9 or 1,4-2,5 1,1-1,5 0,7-1,1	wax emulsion starch silane
EC9 71	9	1	71±5% -7%	Z	28±20%	420(43)	1,1-1,5	starch
EC10 84	10	1, 2	(84,168) +5% -7%	S, Z	396(40)	370(38)	0,9-1,9 or 1,4-2,5 0,7-1,3	wax emulsion silane
EC11 102	11	1	102±5% -7%	S, Z	28±20%	370(38)	1,1-1,6	starch
EC9 108	9	1	108 +5% -7%	S, Z	50±20%	410(42) 420(43)	0,9-1,9 0,7-1,1	wax emulsion silane
EC9(13) 136	9, 13	1, 2	(136,272) +5% -7%	S, Z	(28,50)±20% 100±15%	410(42) 420(43) 420(43)	0,9-1,9 or 1,4-2,5 1,1-1,5 0,7-1,1	wax emulsion starch silane
EC11 204	11	1	204±5% -7%	Z	28±20%	370(38)	1,1-1,9	starch
EC13(14) 300	13, 14	1	300±5% -7%	Z	20±20%	250(25)	0,3-0,7	silane
Type of high modulus glass VMP								
VMPS6 7,2	6	2	14,4±0,2-0,4	Z	100±10%	590(60)	0,5-1,5	silane
VMPS10 42	10	x2x4	336±16,8	S	55±15%	583(59)	0,7-1,5	silane
Glass polyester yarn								
EC6-P-11,8	6	x1(6,8)x1(5,0)	11,8±0,59-0,83	S	100±15%	339(34)	-	wax emulsion
Yarn from hollow fiber								
ECP11 18,8	11	2 3	37,6±5% -7% 56,4±5% -7%	S	100±15%	17640(1800) 26460(2700)	not less than 0,6	aminosilane
Direct yarn								
EC9 68	9	1	68±5% -7%	-	-	410(42)	0,4-1,7	silane
EC10 84	10	1	84±5% -7%	-	-	410(41)	0,8-1,4	wax emulsion
EC10 168	10	1	168±5% -7%	-	-	410(41)	0,8-1,4	wax emulsion
EC12 168	12	1	168±5% -7%	-	-	370(38)	0,4-1,7	silane
EC13 136	13	1	136±5% -7%	-	-	370(38)	0,4-1,7	silane

Glass rovings

Roving type	Nominal diameter of filament, microns	Roving linear density, tex	Quantity of complex yarns in roving	Loss on ignition, %	Specific tensile strength, mN/tex (gf/tex), not less	Moisture, %, not more	Type of unwinding	Sizing type
Assembled rovings								
EC9 600H-30A(68) EC9 600T-30A(68)	9	600±30	9	not less than 0,7 not less than 0,3	396(40) 245(25)	0,3	from inside	silane
EC9 1000H-30A(68) EC9 1000T-30A(68)	9	1000±50	15	not less than 0,7 not less than 0,3	396(40) 245(25)	0,3 -	from inside	silane
EC13 2400P-30A(400)	13	2400±120-240	6	0,3-1,4	396(40)	0,3	from inside	silane
EC13 2400H-53C(400)	13	2400±120	6	0,4-1,2	396(40)	0,1	from inside	silane
EC13 2400H-54C(400)	13	2400±120	6	0,3-1,9	396(40)	0,15	from inside	silane
EC13 2400H-30A(400)	13	2400±120	6	not less than 0,7	396(40)	0,3	from inside	silane
EC14 1440H-30A(480) EC14 1440T-30A(480)	14	1440±72	3	not less than 0,7 not less than 0,3	396(40) 245(25)	0,3 -	from inside	silane
EC16 1600T-16(400)	16	1600±80	4	not less than 0,3	245(25)	-	from inside	starch
EC16 4800H-4C(600)	16	4800±240	8	0,2-1,5	396(40)	0,3	from inside	silane
Direct rovings								
EC11 200 18T EC11 200 18S	11	200±5% -7% 200±5%	1	0,15-0,4 0,5-0,8	250(25) 400(41)	0,1 0,2	from inside	starch silane
EC11 300 30A	11	300±5% -7%	1	0,4-1,0	300(30)	0,2	from inside	silane
EC13 400 18T	13	400±5%	1	0,1-0,4	250(25)	0,2	from inside	starch
EC13 420 30A EC13 420 76	13	420±5% -7% 420±5%	1	0,4-1,0	300(30)	0,2 0,1-0,2	from inside	silane
EC14 300 30A EC14 300 18T EC14 300 18S	14	300±5%	1	0,4-0,8 0,1-0,4 0,5-0,8	400(41) 250(25) 450(46)	0,2	from inside	silane starch silane
EC14 320 18S	14	320±5%	1	0,5-0,8	450(46)	0,2	from inside	silane
EC16 400 18S	16	400±5%	1	0,5-0,8	400(41)	0,3	from inside	silane
EC16 600 18T	16	600±5% -7%	1	0,15-0,4	250(25)	0,1	from inside	starch
EC16 1200 30A EC16 1200 76T	16	1200±5%	1	0,4-1,2 0,2-0,5	400(41)	0,2	from inside	silane
EC18 1600 18T	18	1600±5% -7%	1	not less than 0,1	250(25)	0,1	from inside	starch
EC23 2400 53C	23	2400±5% -5%	1	0,4-1,2	250(25)	0,2	from inside	silane

Chopped glass fiber

Glass type	Fiber diameter, microns	Nominal length of fiber, mm	Tolerance in fiber length, mm	Uncut fiber, %	Moisture, %	Loss on ignition, %	Sizing type
E	6, 10, 13, 16	4,5; 6; 9; 12; 18; 24	4,5±1 (6, 9) ±1 12±2 (18, 24)±3	to 3	from 0,15 to 13	0,5-1,5 not more than 1,0 0,1-0,5	silane aqueous, dispersing in acidic medium aqueous, dispersing in neutral medium

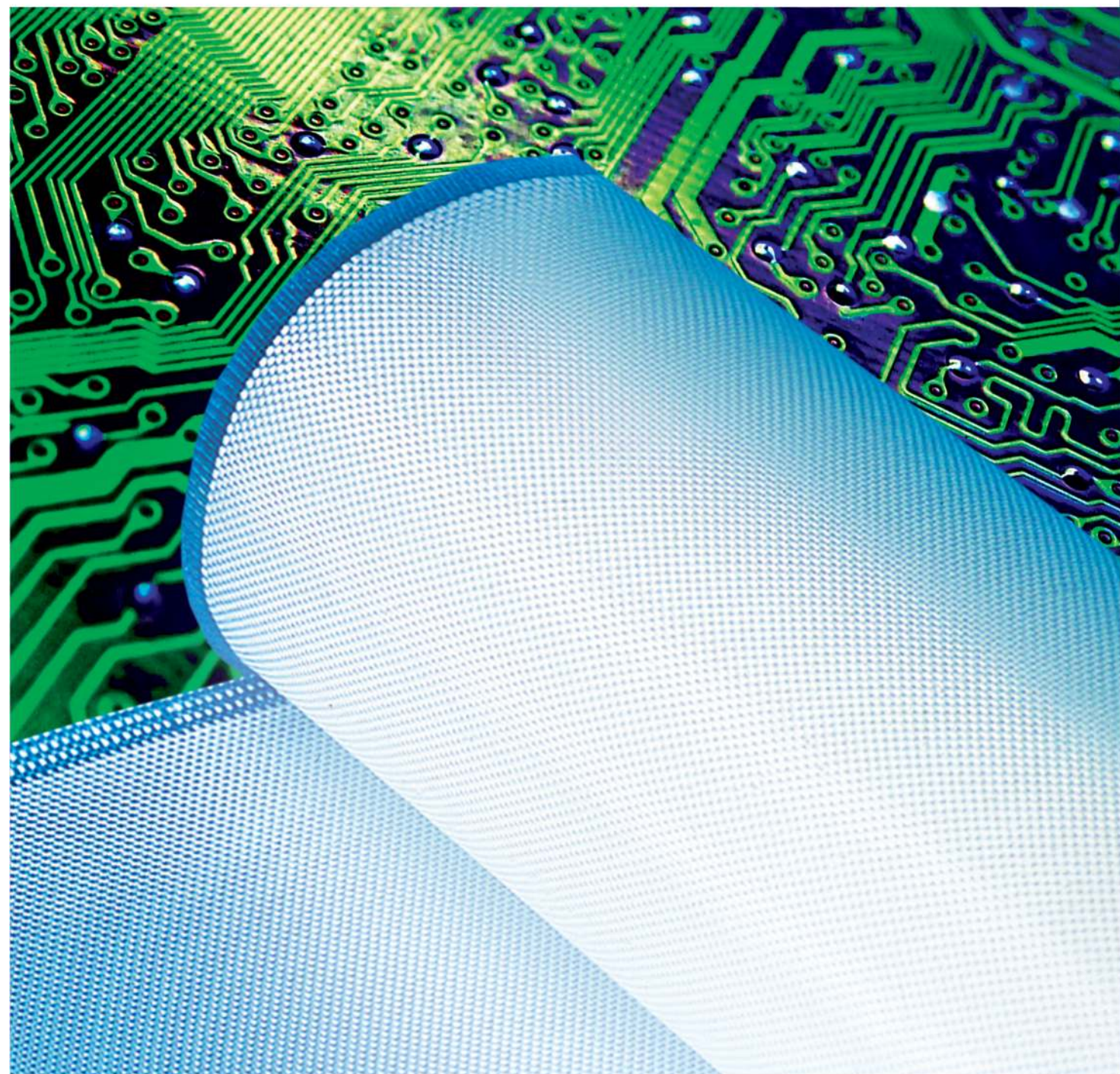
Electric insulation glass fabrics

Joint stock company "Polotsk-Steklovolokno" produces electric insulation glass fabrics with the density from 24 to 400 g/m² for electronic and electric and technical industries. Glass fabrics are produced on textiles sizing or finished.

Thanks to the unique properties of electric insulation glass fabrics the materials on their basis have high mechanical and electric insulation properties, are easily handled in the process of cutting, drilling and impact molding. High mechanical density and electrical stability allows to make mechanical treatment of the material and use it for structural parts of electrical equipment.

Traditionally electric insulation glass fabrics are used for production of:

- foiled laminates, from which single layer and multi-layer printed circuit boards are produced;
- technical plastics used for production of structural parts of electric equipment and its insulation;
- flexible insulation (varnished glass fabrics, micanites and other mica like products found a wide application as electric insulation materials in electrical machinery, units of equipment and in power engineering in general



Electric insulation glass fabrics

Fabric type	Weave type	Fabric count, yarns per 10 cm		Weight per unit area, g/m ²	Fabric thickness, mm	Tensile strength, N, not less		Loss on ignition, %	Width, cm	Type of sizing (finish)
		warp	weft			warp	weft			
Glass fabrics for production of foiled and non-foiled laminates										
E3-180PM-19 E3-180PM-20 E3-180PM-21 E3-180PM-22	plain	170+10	120±10	200±15	0,180±0,020	246	196	0,07-0,30	(95-132)±1%	silane (Z 6040, Z 6224)
E3-400PM-T-19	plain	120+10	60±10	360±25	0,40±0,05	1470	539	0,3-1,1	107+0,5-1	silane (Z 6040)
7628L 7628M 7628-TO 7628L/S	plain	170+4	118±4	206±3	0,180±0,018	392	294	0,07-0,30	(96-132)+1-0 (96-132)+1-0 (96-132)±1% (100,107,110,120,127,145) +2-0%	silane (Z 6224) textile
7630	plain	120+4	120±4	165±8	0,165±0,020	344	344	0,07-0,30	(96-132)+1-0	silane (Z 6224)
7637 7637M	plain	170+4	82±4	230±10	0,220±0,035	540	344	0,07-0,30	(96-132)+1,8-0	silane (Z 6224)
7642	plain	170+4	78±4	230±8	0,250±0,03	540	294	0,07-0,30	(96-132)+1,8-0	silane (Z 6224)
2157	plain	236±8	135±8	148±5	0,150±0,020	200	400	0,07-0,30	(96-132)+1,8-0	silane
E3-200	plain	100+10	90±10	200+16-10	0,190+0,010 -0,020	1127	1078	1,0-1,9	100±2	textile
Glass fabrics for production of flexible insulation										
E1-62PM-19 E1-62PM -20	plain	200+10	200±10	67±4	0,080±0,008 0,073±0,007	196	108	0,1-0,3	(50-127)±1%	silane (Z 6224)
E2-62P	plain	200+10	200±10	67±4	0,062±0,005	392	294	1,0-1,9	(70,90,95,107)±1%	textile
E2/1-80P	plain	200+10	160±10	80±8	0,075±0,006	588	490	1,0-1,9	(70,90,95,107)±1%	textile
E4/1-46P E4/1-80P	plain	200+10	110±10	46±6	0,044±0,005 0,075±0,007	294	216	1,0-1,8	(90,95)±1%	textile
EC-38P EC-38P-R	plain	240+10	140±10	38±4	0,035±0,005 0,038±0,005	343	117	1,2-1,8	(90,103)±1%	textile

Fabric type	Weave type	Fabric count, yarns per 10 cm		Weight per unit area, g/m ²	Fabric thickness, mm	Tensile strength, N/2,5 cm, not less		Loss on ignition, %	Width, cm	Type of sizing (finish)
		warp	weft			warp	weft			
Glass fabrics for production of flexible insulation										
E(c)4-40P	plain	200+10	110±10	38±4	0,040+0,006 -0,002	294	98	1,0-1,8	(90,95,107)±1%	textile
E1/1-100PM	plain	160+10	165±10	110±6	0,100±0,010	588	588	1,0-1,8	(90,100,107)±1%	textile
E1/1-100PM-19 E1/1-100PM-20	plain	160+10	160±10	110±6	0,11±0,01	245	216	0,1-0,3	(90,100,107)±1%	silane (Z 6224)
771	plain	236±8	105±8	33±5	0,045±0,008	270	30	not more than 4,5	(90,103)±1	textile
792*	plain	260±10	150±10	23±2	0,03±0,001	200	100	not more than 3,0	(90,103)±1	textile
2116	plain	240±8	228±8	99,0-108,5	0,094±0,01 0,094±0,008	210 206	200 196	not more than 0,3	(100,110,127)±1% (110,120,127)±1,3-0	textile silane (Z 6224)
2165	plain	240±8	205±8	114,3-126,5	0,105±0,005 0,105±0,010	210 206	220 196	not more than 0,3	(110,127)±1% (107,110,127)±1,3-0	textile silane (Z 6224)
1080	plain	240±8	190±8	47,8-49,2	0,053±0,005	147	98	not more than 0,3	(107,110,127)+1,3-0	silane (Z 6224)
2113	plain	236±8	220±8	74,5-84,4	0,072±0,005	294	147	not more than 0,3	(90-132)±1%	silane (Z 6224)
E-120	plain	120±6	115±5	122±6	0,120±0,012	440	790	1,0-3,0	(100,103,107,110,120,122,127,167)±1%	textile
E-130	plain	120+4	120±4	128±6	0,130±0,013	900	550	not more than 2,5	(100,103,107,110,120,122,127,167)±2%	textile
E1-280	plain	100+10	100±10	280±10	0,240±0,020	520	380	not more than 0,3	105(+1-0)%	silane (Z 6224)
E1-280-TO	plain	100+10	100±10	280±10	0,260±0,020	360	300	-	105(+1-0)%	-
04994	plain	120±6	105±5	115±6	0,120±0,020	440	750	1,0-3,0	(100,103,107,110,120,122,127,167)±1%	textile
1674	plain	160±8	125±6	99±9	0,110±0,010	750	575	1,0-3,0	101,5±1	starch
162237	plain	70+2	70±3	195±10	0,212±0,028	400	300	0,07-0,3	(55-113)±1	starch

* the type under development, physical-mechanical characteristics are specified after collection of statistic data

Materials for glass reinforced plastics

Emulsion chopped strand mat produced by the company from chopped strands, fabrics for GRP and roving fabrics are designated for manufacturing of composites.

Thanks to the fact that composite materials on the basis of glass fabrics and CSM have such properties as high impact strength, temperature resistance, high tensile strength, corrosion resistance, anti-magnetic properties, locality of destruction of a damaged area, high dielectric properties, their application is irreplaceable in all the branches of industry: in production of car body parts, yachts, aircraft and railway engineering; different structures of any kind of profiles; chemical tanks, apparatus, pipe work and other glass fiber reinforced plastic articles.

Joint stock company "Polotsk-Steklovolokno" also produces glass fabrics which are used as technical insulation of the equipment and structures. Different types of thermal and sound insulation materials (flexible joints for air ducts, textile compensators, thermal jackets) can be made on their basis.

A number of glass fabrics for GRP can be used for production of articles for special designation (for example, in such fields as helicopter industry, missile engineering, aerospace industry and others).

Glass fabrics on the basis of hollow fiber manufactured at the special technology belong to a separate group. The given type of fabrics is used as a reinforcing material in production of light-weight glass reinforced plastics, which are 20-30% lighter with retention of the same strength properties.



Конструкционные материалы

Марка ткани	Тип переплетения	Количество нитей на 10 см, шт.		Масса на единицу площади, г/м ²	Толщина, мм	Разрывная нагрузка, Н/2,5 см, не менее		Массовая доля веществ, удаляемых при прокаливании, %	Ширина, см	Вид замасливателя
		основа	уток			основа	уток			
Конструкционные стеклоткани										
T-10-14, T-10П-14	сатин 8/3	360±10	200±10	290±5%	0,23±15%	2940	1568	не менее 0,3	92 (+2-1)%	аминосилановый, парафиновая эмульсия
T-10, T-10П* (П* с перевивочной кромкой)	сатин 8/3	360±10	200±10	290±5%	0,23±15%	2450	1323	не более 2,0	92 (+2-1)%	парафиновая эмульсия
T-11, T-11П	сатин 8/3 или сатин 5/3	220±10	130±10	385±5%	0,30±15%	2744	1568	не более 2,0	92,100,105 (+2-1)%	парафиновая эмульсия
T-11-ГВС-9 T-11П*-ГВС-9 (П* с перевивочной кромкой)	сатин 8/3 или сатин 5/3	220±10	130±10	385±5%	0,30±15%	1764	931	не более 0,5	92,100,105 (+2-1)%	винилсилановый
T-13П	полотняное	160±10	100±10	285±5%	0,27±15%	1764	1176	не более 2,0	92,97,100,107 (+2-1)%	парафиновая эмульсия
T-13ПМ	полотняное	120±10	80±10	285±14	0,27±0,04	1764	1176	не более 2,0	100 (+2-1)%	крахмальный
УТС-П-30А	сатин 4/3	200±10	100±10	243±20	0,19±0,02	2450	294	не менее 0,5	(87,100,120)±2%	силановый
СЭ-О-1	полотняное	100±10	90±10	195±16	0,20±0,02	686	583	-	(90,95,100)±2	винилсилановый
Тип 120	4-х ремизный сатин	236±10	229±10	105±10	0,095±0,015	700	700	не менее 0,6	100+2%-1%	силановый
ТР-0,3/2-30А	полотняное	50±1	20±1	350±30	0,30±0,05	3200	1200	0,5-1,0	(103,107)±1	силановый
ТР-0,7-30А	полотняное	30±2	20±2	830±80	-	3200	2450	не менее 0,5	(90,120)+2-1	силановый
Ровистан-30А Ровистан-30А (исполнение 2)	Комбинированный материал: ровинговая каркасная ткань ТР-0,37-30А (ТР-0,47-30А) и основной ровинг высокой линейной плотности, соединенные вязально-прошивным способом переплетением трико.			590±30 730±40	-	3500 3728	1500 1570	0,5-1,0	92±1,102+2-0 (92,103)±1	силановый
ТРШП-0,7-30А	полотняное	50±1	25±1	600±30	0,7+0,1-0,2	-	-	не менее 0,5	(97,107)±1%	силановый
ТР-560-30А	полотняное	30±1	30±1	560±40	0,45±0,05	2800	2800	не менее 0,35	(90,100)±2	силановый
ТР-720-30А	полотняное	30±1	29±1	720±70	0,65±0,07	3500	3500	не менее 0,35	(100,120)±2	силановый
ТРК-600-30А	Комбинированный материал: ровинговая каркасная ткань ТР-0,32 и основной ровинг высокой линейной плотности, соединенные вязально-прошивным способом переплетением трико.			600+35-25	-	3800	1000	не менее 0,3	(92,103)±1,5	силановый
Стеклоткани технического назначения										
TG-200	саржа 2/2	170±10	120±10	210±5	0,180±0,018	1570 Н/5,0 см	1250 Н/5,0 см	не более 1,8	(100,110,122)+2-0	крахмальный
TG-300-30А	сатин 8/3	224±10	210±10	300±20	0,22±0,03	3000 Н/5,0 см	3000 Н/5,0 см	не более 1,4	127+2-0	силановый
TG-380	полотняное	100±10	80±10	380±30	0,32±0,03	3000 Н/5,0 см	2000 Н/5,0 см	не более 1,8	(102,155)±1	крахмальный
TG-430 TG-430-ТО TG-430-30А TG-430-30А-Z	сатин 4/3	200±10	100±10	420±30	0,38±0,03 0,38±0,03 0,34±0,03 0,34±0,03	3920 Н/5,0 см 3500 Н/5,0 см 3920 Н/5,0 см 3920 Н/5,0 см	1960 Н/5,0 см 1800 Н/5,0 см 1960 Н/5,0 см 1960 Н/5,0 см	не более 1,8 не более 0,5 не более 1,4 не более 1,4	(100-200)+2-0 (100-200)±1 (100-200)±1 (100-200)±1	крахмальный силановый
TG-530-Z	саржа 2/2	250±10	120±10	535±20-10	0,50±0,03	4500 Н/5,0 см	2000 Н/5,0 см	не более 1,8	102±1	крахмальный
TG-600 TG-600-30А	шашечное	140±10	140±10	600±40	0,50±0,07	4000 Н/5,0 см	3500 Н/5,0 см	не более 1,8 не более 1,4	100+2-0	крахмальный силановый
TG-660 TG-660-ТО TG-660-30А	сатин 8/3	160±10	160±10	660±40	0,50±0,05 0,60±0,06 0,50±0,05	5880 Н/5,0 см 5000 Н/5,0 см 5880 Н/5,0 см	3920 Н/5,0 см 3500 Н/5,0 см 3920 Н/5,0 см	не более 1,8 не более 0,5 не более 1,4	(100,120,150)±1 (100,120,200)±1	крахмальный силановый

Марка ткани	Тип переплетения	Количество нитей на 10 см, шт.		Масса на единицу площади, г/м ²	Толщина ткани, мм	Разрывная нагрузка, не менее		Массовая доля веществ, удаляемых при прокаливании, %	Ширина, см	Вид замасливателя
		основа	уток			основа	уток			
Стеклоткани технического назначения										
TG-667	саржа 2/2	200±10	110±10	667±40	0,60±0,05	5000 Н/5,0 см	2600 Н/5,0 см	не более 1,8	142+2-0	крахмальный
TG-800 TG-800-30А	шашечное	140±10	140±10	800±60	0,65±0,06	6000 Н/5,0 см	4500 Н/5,0 см	не более 1,8 не более 1,4	100±1	крахмальный силановый
1523	полотняное	110±10	75±5	390±30	0,37±0,03	3900 Н/5,0 см	2600 Н/5,0 см	не более 1,8	127±1	крахмальный
ЕТ-700	полотняное	80±10	60±2	700±50	не менее 0,9	1860 Н/5,0 см	1470 Н/5,0 см	0,5-1,5	100+3-0	крахмальный силановый
ЕТ-1100	рогожа	120±10	60±2	1100±110	не менее 1,5	3720 Н/5,0 см	1270 Н/5,0 см	0,5-1,5	100+3-0	крахмальный силановый

Стеклоткани на основе полых волокон										
Марка ткани	Тип переплетения	Количество нитей на 10 см, шт.		Масса на единицу площади, г/м ²	Толщина ткани, мм	Разрывная нагрузка, Н/2,5 см, не менее		Массовая доля веществ, удаляемых при прокаливании, %	Ширина, см	Вид замасливателя
		основа	уток			основа	уток			
T-15(П)-76	сатин 5/3 или сатин 8/3	240±10	180±10	160±16	0,19±0,03	784	687	не менее 0,6	(92,95)+2-1%	аминосилановый
T-15(П)П*-76 (П*- с перевивочной кромкой)	сатин 5/3 или сатин 8/3	240±10	180±10	160±16	0,19±0,03	784	687	не менее 0,6	(92,95)+2-1%	аминосилановый
T-45(П)-76	сатин 5/3	220±10	160±10	216±16	0,26±0,03	1176	784	не менее 0,6	(80,95)+2-1%	аминосилановый
T-300(П)-76	полотняное	100±10	100±10	300±40	0,33±0,03	1280	1280	1,0-2,5	(100,120,140)±1%	аминосилановый
T-С 8/3(П)-76	сатин 8/3	360±10	200±10	205±15	0,26±0,03	1470	784	не менее 0,6	95+2-1	аминосилановый

Стеклоткани фильтровальные										
Марка ткани	Переплетение	Количество нитей на 1 см, шт.		Масса ткани, г/м ²	Разрывная нагрузка, Н/2,5 см, не менее		Массовая доля веществ, удаляемых при прокаливании, %	Воздухопроницаемость при разряжении 0,1 кПа, дм ³ /(м ² ·с)	Ширина, см	Вид замасливателя (аппрета)
		основа	уток		основа	уток				
ТСФТ-4П	саржа 1/3	16±1	13±1	424±26	1960	784	не более 1,8	не менее 230	45x2 (44,0-45,2) (90,100) +0,4-2,0	парафиновая эмульсия
ТСФТ-4П-СФБМ					1764	637	не менее 1,2	не менее 200		СФБМ
ТСФТ-4П-СГФ					1764	637	не менее 1,2			СГФ

Стекломаты конструкционные из рубленого волокна (CSM)										
Марка мата	Масса на единицу площади, г/м ² ±12% для среднего значения ±20% для единичных значений	Разрывная нагрузка, Н/15,0 см, не менее	Массовая доля веществ, удаляемых при прокаливании, %	Растворимость связующего в стироле, с, не более	Массовая доля влаги, %, не более	Тип кромки	Ширина*, см	Область применения		
CSM 300 CSM 300-N	300	150	6,0±1,2 не более 5,4	40	0,3	Е – обрезная с одной стороны S – обрезная с двух сторон	125±2,5 (для кромки E) 125±0,5 (для кромки S)	под ненасыщенные полиэфирные и ненасыщенные винилполиэфирные смолы		
CSM 450 CSM 450-N	450	150	5,5±1,1 не более 4,8	40	0,3					
CSM 600 CSM 600-N	600	150	5,0±1,0 не более 4,8	50	0,3					
CSM 900 CSM 900-N	900	150	5,0±1,0 не более 4,8	50	0,3					

* по согласованию с потребителем возможен выпуск стеклоплатов других ширин (100 ÷ 142) см

Joint stock company "Polotsk-Steklovolokno" manufactures glass meshes, glass fabrics, needle felts, which find their application in building industry – from construction of underground lines and facilities to installation of roofs.

Building meshes are used:

- for plaster reinforcement;
- as a reinforcing material in outdoor thermal insulation systems of buildings and facilities;
- for interior finishing of buildings;
- for reinforcement of cutting wheels, glass magnesium sheets.

Building glass fabrics are used as a basis for production of rolled bitumen roofing and waterproofing materials used in construction of new and repair of old roofs as well as for waterproofing of buildings.

Joint stock company "Polotsk-Steklovolokno" also produces windbreak building membranes.

Non-woven needle felts are used for thermal insulation in a wide temperature range as insulation of equipment, pipelines, buildings, equipment, as well as for home use, where changing of temperature conditions is not allowed and sound insulation is required.

Rolled glass fiber reinforced plastics manufactured by the enterprise are used as a covering layer in thermal insulation of pipes and equipment.



Building materials

Fabrics

Fabric type	Weave type	Fabric count, yarns per 10 cm		Weight per unit area, g/m ²	Tensile strength, not less		Moisture, %, not more	Bending stiffness in weft, mN·m, not less	Width, cm
		warp	weft		warp	weft			
RATL-120	plain	60+1	24±1	120+20-10	784 N/5,0 cm	882 N/5,0 cm	not more than 0,5	2,2	(100, 108)±1
RATL-160H	plain	60+1	18±1	160+10-20	830 N/5,0 cm	930 N/5,0 cm	not more than 0,5	2,4	(100, 108)±1
RATL-190	plain	50-60	17-25	190+15-20	882 N/5,0 cm	980 N/5,0 cm	not more than 0,5	3,5	(100, 108)±1
RATL-210	plain	50-60	23-30	210+20-0	1000 N/5,0 cm	1000 N/5,0 cm	not more than 0,5	3,7	(100, 108)±1
ARGIS-200	plain	60+1	21±1	200+15-0	1000 N/5,0 cm	1000 N/5,0 cm	-	3,7	100+0,5-0
TSR-110	plain	60+10	30±10	110±10	350 N/2,5 cm	400 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-120	plain	90±5	80±10	120±15	450 N/2,5 cm	450 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-140	plain	90±5	70+10	140±20	500 N/2,5 cm	500 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-160	plain	160+10	70+10	160±20	490 N/2,5 cm	490 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-230	plain	100+10	70+10	230±25	800 N/2,5 cm	700 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-260-1	plain	120+10	70+10	260±25	900 N/2,5 cm	800 N/2,5 cm	-	-	(100, 110, 150)+2-1
TSR-260-2	plain	160+10	90+10	260±25	900 N/2,5 cm	800 N/2,5 cm	-	-	(100, 110, 150)+2-1
MSV-NG	plain	-	-	not less than 207	980 N/2,5 cm	784 N/2,5 cm	not less than 0,3	-	120 (+2-0,5) %
S 7628	plain	-	-	not less than 209	392 N/2,5 cm	294 N/2,5 cm	not less than 7	-	(100, 110, 120, 127)±1%
S 2116	plain	-	-	not less than 106	210 N/2,5 cm	200 N/2,5 cm	not less than 7	-	(100, 110, 120, 127)±1%

Building glass meshes

Mesh type	Weight per unit area, g/m ²	Mesh count, yarns per 10 cm		Tensile strength, not less		Loss on ignition, %	Hole size in warp and weft	Width, cm
		warp	weft	warp	weft			
SSSH-160 grade A	160+10-15	50±2	21+1,5	2000 N/5,0 cm	2000 N/5,0 cm	not less than 18	(4,0 x 4,5)±0,3	25, 100 (+1-0,5)%
SSSH-160	160+10-15	50±2	21+1,5	1800 N/5,0 cm	1800 N/5,0 cm	not less than 11	(4,0 x 4,5)±0,3	25, 100 (+1-0,5)%
SSSH-145	145+15-10	41±2	20±1,0	1400 N/5,0 cm	1400 N/5,0 cm	not less than 11	(5,0 x 5,0)±0,5	100±1%
SSSH-120	120+20-10	50±2	12±1,5	1500 N/5,0 cm	1000 N/5,0 cm	not less than 10	from 3 to 7	100±1%
SS-50	50±5	50+2	21±1	250 N/2,5 cm	100 N/5,0 cm	not more than 2,2	-	100-0+1
SS-125	125+8-5	40+2	21±1	500 N/2,5 cm	550 N/2,5 cm	not more than 2,2	-	100-0+1
SSP-50	45-55	80+2	40±1	600 N/2,5 cm	300 N/2,5 cm	not more than 15	2,0-3,0	100±2
SSP-50M	40-45	80+2	40±1	600 N/2,5 cm	200 N/2,5 cm	not more than 5	2,0-3,0	100±2
SSP-25	20-30	50+2	25±1	350 N/2,5 cm	150 N/2,5 cm	3-10	3,5-5,0	100+2-5
SSdor-50-01	not less than 315	-	-	50 kN/m	50 kN/m	18	(7 x 7)±1	(100, 200)±2
SSdor-50-02	not less than 315	-	-	50 kN/m	50 kN/m	8	not less than (4 x 4)±1	(100, 200)±2
SSPmp	100+45-30	100+10	62±5	250 N/2,5 cm	200 N/2,5 cm	45±5	warp - 2; weft - 1,6	140-0+2

Glass meshes for reinforcement of cutting wheels and glass magnesium sheets

Mesh type	Weight per unit area, g/m ²	Mesh count, yarns per 10 cm		Tensile strength, N/2,5 cm, not less		Loss on ignition, %, not more	Width, cm
		warp	weft	warp	weft		
SPA-50	50±5	80±2	40±1	230	230	1,5	(128, 146, 164, 186)+1,5-1,0
SPA-80	80±10	80±2	40±1	450	450	1,5	(128, 146, 164, 186)+1,5-1,0
SPA-100	100+15-10	80±2	40±1	540	540	1,5	(128, 146, 164, 186)+1,5-1,0
SPA-150	150±15	40±2	20±1	800	800	1,5	(128, 146, 164, 186)+1,5-1,0
SPA-170	170±15	40+2	20±1	882	882	1,5	(128, 146, 164, 186)+1,5-1,0
SPA-260	260±20	40+2	20±1	1000	1000	1,5	(128, 146, 164, 186)+1,5-1,0
SPAP-65	65±10	80+2	40±1	180	180	30-33 33-36	(128, 146, 164, 186)±1%
SPAP-100	100±15	80+2	40±1	250	250	30-33 33-36	(128, 146, 164, 186)±1%
SPAP-120	120±15	80+2	40±1	300	300	30-33 33-36	(128, 146, 164, 186)±1%
SPAP-150	150±15	80+2	40±1	360	360	30-33 33-36	(128, 146, 164, 186)±1%
SPAP-180	180±15	80+2	40±1	450	450	30-33 33-36	(128, 146, 164, 186)±1%
SSM-50	50±5	40+2	20±1	200	200	not more than 2,2	128±1
SSM-85	90±5	50+2	25±1	450	400	not more than 2,2	(120 + 210)+ 2-1

Thermal insulation materials

Needle felts

Felt type	Weight per unit area, g/m ²	Thickness, mm	Loss on ignition, %, not more	Thermal conductivity at 25°C, W/(m·K), not more	Compressibility %, not more	Vapour permeability, mg/(m·h·Pa), not less	Frost resistance, cycles	Elasticity, %, not less	Width, cm	Roll length, m	Temperature range of application
IPM-E-6-600	600±12%	6±1	2	0,030	35	0,30	30	64,8	(25-200) ±1	10-50	from - 40 °C to + 550 °C
IPM-E-6-800	800±12%	6±1	2	0,031	33	0,26	30	66,7			
IPM-E-9-1000	1000±12%	9±1	2	0,031	30	0,25	30	88,3			
IPM-E-9-1500	1500±12%	9±1	2	0,033	14	0,25	30	66,7			
IPM-E-12-2000	2000±12%	12±1	2	0,033	19	0,24	30	86,4			
IPM-E-20-3000	3000±12%	20±2	2	0,039	10	0,22	30	86,9			

Needle cloth

Cloth type	Weight per unit area, g/m ²	Thickness, mm	Tensile strength, N/5,0 cm, not less		Thermal conductivity at 25°C, W/(m·K), not more	Density, kg/m ³	Loss on ignition, %, not more	Width, mm	Roll length, m, not less	Temperature range of application
			in length	in width						
IPC-T-1000	1000±200	6,0±2	20	20	0,041	140±40	2,5	(1400, 1040) ±35	15	from - 200 °C to + 550 °C
IPC-T-2300	2300±500	12,0+3-2	35	35	0,038	130±30	2,5		10	

Non-woven stitch-bonded cloth

Cloth type	Weight per unit area, g/m ²	Thickness, mm	Width, mm	Roll length, m, not less	Temperature field of application
PSH-T-550	550±30%	from 1,3 to 4,0	(1400, 1800) ±2,5%	20	from - 200 °C to + 550 °C

Rolled glass reinforced plastics

Glass reinforced plastic type	Weight of 1m ² , g	Polymer binder type	Mass fraction of polymer binder, not less	Web width, mm	Roll length, m	Fire technical indices	Field of application
Glass reinforced plastic 250 L	250+20% -15%	latex	20	(1000, 1070, 1100, 1200, 1270)±20	200±0,5	Combustibility grade G1 Flame spread group RP1 Flammability group B1 Moderate fume-forming	Insulation of indoors pipe lines
Glass reinforced plastic 420 X	420+20% -15%	Chemically resistant varnish			100±0,5		Insulation of outdoors pipelines

High temperature silica materials

Silica materials are a superb high temperature insulation and are manufactured from two types of silica glass with operating temperature up to 1100°C and 1200°C.

Silica fibers, yarns, fabrics and meshes are used as replacement of asbestos in different branches of industry:

- as insulation for gas exhaust systems in automotive industry;
- as filters for cleaning metal alloys in metallurgy;
- as high temperature industrial insulation (insulation of furnaces, turbines, oil platforms, equipment, aerospace engineering, nuclear power reactors);
- for production of finished articles (welding blankets, fire protective blankets, smoke and fire protective screens and curtains, thermal insulation mats and sleeves, covers for equipment protection)
- for weaving of tapes, production of braiding, cords, needle felt.

Joint stock company "Polotsk-Steklovolokno" also produces finished articles from silica materials. Fire protection blankets and thermal insulation sleeves are most widely used.

At the customer's requirement silica fabrics manufactured by the company can be thermally or chemically treated additionally.



High temperature silica materials

Silica fabrics (SiO₂ content not less than 94%)

Fabric type	Weave type	Fabric count, yarns per 1 cm		Weight per unit area, g/m ²	Tensile strength, N/5,0 cm, not less		Mass fraction of Na ₂ O, %, not more	Loss on ignition at temperature 1000°C, %	width, cm
		warp	weft		warp	weft			
KT-120	plain	16±1	13±1	120±20	392	392	1,0	7-12	(88,95,100)±2
KT-180	plain	10±1	10±1	180±20	539	539	1,0	7-12	(88,95,100)±2
KT-11-30K	plain	9±1	8±1	300±30	780	740	0,8	7-12	(62-210)±3
KT-11-TO-30K	plain	9±1	8±1	300±30	300	300	0,7	not more than 1,0	(62-210)±3
KT-300-C	satın 8/3	20±1	14±1	300±30	690	540	0,7	7-12	(62-210)±2
KT-300-C-V	satın 8/3	20±1	14±1	300±30	690	540	0,7	7-12	(62-210)±2
KT-300-C-CV	satın 8/3	20±1	14±1	300±30	690	540	0,7	7-14	(62-210)±2
KT-600-C	satın 8/3	19±1	13±1	600±60	1370	1080	0,7	7-12	(62-210)±2
KT-600-C-V	satın 8/3	19±1	13±1	600±50	1370	1080	0,7	7-12	(62-210)±2
KT-600-C-CH	satın 8/3	19±1	13±1	600±50	1370	1080	0,7	7-14	(62-210)±2
KT-600-C-CV	satın 8/3	19±1	13±1	600±50	1370	1080	0,7	7-14	(62-210)±2
KT-600-C-O	satın 8/3	19±1	13±1	650±60	980	690	0,7	not more than 1,0	(62-210)±2
KT-600-C-TO	satın 8/3	19±1	13±1	550±100	980	690	0,7	7-12	(62-210)±2,5
KT-1000-C	satın 12/7	17±1	13±1	1100±100	1960	1470	0,7	7-12	(62-210)±2
KT-1000-C-V	satın 12/7	17±1	13±1	1100±100	1960	1470	0,7	7-14	(62-210)±2
KT-1000-C-CV	satın 12/7	17±1	13±1	1100±100	1960	1470	0,7	7-14	(62-210)±2
KT-1000-C-CH	satın 12/7	17±1	13±1	1100±100	1960	1470	0,7	7-14	(62-210)±2
KT-1000-C-O	satın 12/7	17±1	13±1	1100±100	1960	1470	0,7	5-12	(62-210)±2
KT-1000-C-TO	satın 12/7	17±1	13±1	1100±100	1470	980	0,7	not more than 4,0	(62-210)±2,5

Silica fabrics (SiO₂ content not less than 98%)

PS-120	plain	16±1	13±1	120±25	392	392	0,8	7-12	(88,95,100)±2
PS-180	plain	10±1	10±1	180±30	490	392	0,8	7-12	(88,95,100)±2
PS-300	plain	9±1	8±1	300±30	590	540	0,8	7-12	(62-210)±3
PS-300-S	satın 8/3	20±1	14±1	325±25	690	550	0,7	7-12	(62-210)±3
PS-600-S	satın 8/3	19±1	13±1	580±40	1100	800	0,7	7-12	(62-210)±2
PS-600-S-V	satın 8/3	19±1	13±1	600±50	1100	800	0,7	7-12	(62-210)±2
PS-600-S-CV	satın 8/3	19±1	13±1	600±50	1100	800	0,7	7-14	(62-210)±2
PS-600-S-CH	satın 8/3	19±1	13±1	600±50	1100	800	0,7	7-14	(62-210)±2
PS-600-S-TO	satın 8/3	17±1	13±1	580±60	500	300	0,7	not more than 2,0	(62-210)±2,5
PS-600-S-O	satın 8/3	17±1	13±1	580±60	500	300	0,7	5-12	(62-210)±2

Silica fabrics (SiO₂ content not less than 98%)

Fabric type	Weave type	Fabric count, yarns per 1 cm		Weight per unit area, g/m ²	Tensile strength, N/2,5 cm, not less		Mass fraction of Na ₂ O, %, not more	Loss on ignition at temperature 1000°C, %	Width, cm
		warp	weft		warp	weft			
PS-650-S	satın 8/5	20±1	13+1-0,5	630±50	1100	800	0,7	7-12	(62-210)±2
PS-650-S-TO	satın 8/5	21±1	13,5±1	630±50	500	300	0,7	not more than 2,0	(62-210)+4-0
PS-1000-S	satın 12/7	17±1	13±1	1100±100	1800	1400	0,7	7-12	(62-210)±2
PS-1000-S-V	satın 12/7	17±1	13±1	1100±100	1800	1400	0,7	7-12	(62-210)±2
PS-1000-S-CV	satın 12/7	17±1	13±1	1100±100	1800	1400	0,7	7-14	(62-210)±2
PS-1000-S-CH	satın 12/7	17±1	13±1	1100±100	1800	1400	0,7	7-14	(62-210)±2
PS-1000-S-TO	satın 12/7	17±1	13±1	1100±100	790	490	0,7	not more than 4,0	(62-210)±2,5
PS-1000-S-O	satın 12/7	17±1	13±1	1100±100	790	490	0,7	5-12	(62-210)±2

Silica fabrics from texturized yarns (SiO₂ content not less than 98%)

PS-1400T	basket	12±1	6±1	1400±140	740	340	0,8	7-12	(62-210)+3-2
PS-1400T-V	basket	12±1	6±1	1400±140	740	340	0,8	7-12	(62-210)±2
PS-1400T-CV	basket	12±1	6±1	1400±140	740	340	0,8	7-14	(62-210)±2
PS-1400T-TO	basket	12±1	6±1	1400±140	450	220	0,8	not more than 4,5	(62-210)+3-2
PS-1400T-TO-V	basket	12±1	6±1	1400±140	450	280	0,8	not more than 6,5	(62-210)+3-2

Silica meshes (SiO₂ content not less than 94%)

Mesh type	Weave type	Fabric count, yarns per 10 cm		Weight per unit area, g/m ²	Tensile strength, N/2,5 cm, not less		Loss on ignition, %, not more	Mass fraction of Na ₂ O, %, not more	Width, cm
		warp	weft		warp	weft			
KC-11-LA	mock leno	32±1	27±1	530±60	1470	980	-	1	(82, 84, 85, 88, 100)±3
KC-11-LA-A	mock leno	32±1	27±1	610±50	1470	980	-	1	(82, 84, 85, 88, 100)±3
KC-11-LA-2	mock leno	26±1	22±1	470±60	1470	980	-	1	(82, 84, 85, 88, 100)±3
KC-11-LA-2-A	mock leno	26±1	22±1	490±60	1564	1078	-	1	(82, 84, 85, 88, 100)±3
KC-11-LA-1,0-TO	mock leno	34+1-0	30+2-0	540±60	490	392	1,5	1	(82, 84, 85, 88, 100)±3
KC-11-LA-1,5-TO	mock leno	27+1-0	25+2-0	620±60	490	392	1,5	1	(82, 84, 85, 88, 100)±3
KC-11-LA-2,0-TO	mock leno	25+1-0	23+2-0	560±60	490	392	1,5	1	(82, 84, 85, 88, 100)±3

Filtering meshes made of silica fiber (SiO₂ content not less than 94%)

Mesh type	Weave type	Hole size, mm		Mesh count, yarns per 10 cm		Weight per unit area, g/m ²	Tensile strength, N, not less		Mass fraction of Na ₂ O, %, not more	Loss on ignition at temperature 1000°C, %	Width, cm
		warp	weft	warp	weft		warp	weft			
OSM 27 NLP	mock leno	2,0±0,2	2,2±0,2	24-26	23-25	560±60	1000	800	2,0	1,0	84±4
OSM 28 NLP	mock leno	1,5±0,2	1,5±0,2	27-28	25-27	620±60	1000	800	2,0	1,0	84±4
OSM 31 NLP	mock leno	1,3±0,2	1,2±0,2	34-36,5	30-32	540±60	1000	800	2,0	1,0	84±4

Silica yarns (SiO₂ content not less than 94%)

Yarn type	Total yarn linear density, tex	Twist value per 1 m	Twist direction: S - left Z - right	Tensile strength, N(kgf), not less	Loss on ignition, %
K11C6 44	44±3	150±15 or 250±25	S	12,0(1,2)	7-12
K11C6 68	68±5	200±20	S	15,0(1,5)	7-12
K11C6 90	90±7	150±15	S	20,0(2,0)	7-12
K11C6 136	136±10	130±13	S	29,0(3,0)	7-12
K11C6 180	180±14	150±15 or 250±25	S	39,0(4,0)	7-12
K11C6 180 x 2 K11C6 180 x 3 K11C6 180 x 5	360±28 540±42 900±69	20±4 or 100±15	Z	69,0(7,0) 98,0(10,0) 157,0(16,0)	7-12
K11C6 170 BA	170±20	150±15	S	39,0(4,0)	not more than 2
K11C6 170 BAF (sewing yarn)	220±26	250±25	S	59(6,0)	not less than 17
K11C6 170 x 2 BA K11C6 170 x 3 BA	340±40 510±60	100±15	Z	69,0(7,0) 98,0(10,0)	not more than 2
K11C6 180 S 150(100)-30K	180±14	150±15-30	S	39,0(4,0)	7-12

Silica yarns (SiO₂ content not less than 98%)

PS6 136 PS9 136	136±10	130±13	S	29,0(3,0) 25,0(2,5)	7-12
PS6 180 PS9 180	180±14	150±15	S	39,0(4,0) 29,0(3,0)	7-12
PS6 180 x 2 PS6 180 x 3 PS9 180 x 3 PS6 180 x 5	360±28 540±42 540±42 900±69	20±4 or 100±15	Z	69,0(7,0) 98,0(10,0) 88,0(9,0) 157,0(16,0)	7-12
PS6 170 BA	170±20	150±15	S	39,0(4,0)	not more than 2

Silica yarns texturized (SiO₂ content not less than 94%)

Yarn type	Filament diameter, microns	Total yarn linear density, tex	Specific tensile strength, mN/tex(gf/tex), not less than	Loss on ignition, %
K11C6 540 T	6±1	540 (+12-5)%	75(8)	7-12
K11C6 1150 T	6±1	1150 (+12-5)%	90(9)	7-12

Silica fiber

Fiber type	Nominal diameter of filament, microns	Fiber length, mm	Mass fraction of Na ₂ O, % not more	Loss on ignition, %	Moisture, %, not more
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(SiO₂ content not less than 94%)

KV-11(6), KV-11(9)	6±1, 9±1	50-100	0,8	7-12	3,5
KV-11-κ	6±1	50-100	0,8	7-12	3,5
KV-11-BA	6±1	50-150	0,8	not more than 5	10
KV-11(6/9) kr	5-10	20-120	1,0	7-12	3,5
KV-11(6/9) km	5-10	25-100	1,0	7-12	3,5

(SiO₂ content not less than 98%)

PS-23(9)	9±1	50-100 150-200	0,8	7-12	3,5
PS-23(6/9) kr	5-10	20-120	1,0	7-12	3,5
PS-23(6/9) km	5-10	25-100	1,0	7-12	3,5

Chopped silica fiber (SiO₂ content not less than 98%)

Fiber type	Nominal diameter of filament, microns	Fiber length, mm	Uncut fiber, %	Mass fraction of Na ₂ O, %, not more	Loss on ignition, %	Moisture, %, not more
PS-23(9)	9±1	(4-24)±1	2	0,8	7-12	3,5

Fire protective blankets

Blanket type	Application	Blanket size (length and width), m	extinction of fire grade 13B	Fire isolation grade 1A	Time of container opening and complete blanket pulling out
PP-300 PP-600 PP-1000	For isolation of fire at the initial fire stage, extinguishing of burning clothes on the injured, protection of combustible structures and equipment while conducting firing and welding works	(1,5x1,5 ; 1,5x2,0 ; 2,0x2,0) ±0,02	within 1 minute	within 5 minutes	not more than 4 seconds
SB-1000-V, CV, CH	For high temperature thermal insulation, fire isolation at the initial fire stage, protection of combustible structures and equipment while conducting firing and welding works	length 45.7-0+0,5 width 93.5±0,02 length 50-0+0,5 width 93.5±0,02	—	—	—

Basalt fiber and products on its basis

The company produces basalt fiber, rovings, yarns, fabrics and meshes which have a number of advantages in comparison with E-glass such as:

- higher mechanical strength, resistance to application in aggressive media including alkaline and higher operating temperature up to 800°C. These properties in combination with low price make basalt an attractive reinforcing and thermal insulation material.

Thanks to its enhanced characteristics basalt fiber is in the intermediary position between E-glass and special fibers (silica, high modulus and others).

The products of basalt group manufactured by Joint stock company "Polotsk-Steklovolokno" are used:

- for production of different composite materials (pipes for oil and gas and chemical industry, basalt reinforced plastic armature, brake pads and other basalt reinforced plastics);

- as a filler for fiber reinforced concrete;

- as raw material for production of thermal insulation felts, tapes, cords, fabrics, road and lining building meshes.

Basalt fabrics are mainly used for manufacturing of thermal insulation articles (as a cover), replacing asbestos, silica and other technical fabrics. Basalt fibers can be also used as a thermal barrier in the process of welding, as thermal and heat insulation of industrial equipment, furnaces, pipework and other hot surfaces.



Basalt yarns

Yarn type	Nominal diameter of filament, microns	Number of complex yarn plies	Total linear density of yarn, tex	Twisting direction: S – left Z – right	Twist value per 1 m	Specific tensile strength, mN/tex (gf/tex), not less	Loss on ignition, %	Sizing type
BC12 110	12	1	110±5% -7%	Z	20±20%	460(47)	0,6	silane

Basalt rovings

Roving type	Nominal diameter of filament, microns	Total linear density of yarn, tex	Number of complex yarns in roving	Loss on ignition, %, not less	Moisture, % not more	Specific tensile strength, mN/tex (gf/tex), not less	Unwinding method	Sizing type
BC16 1200H 76 (200)	16	6	1200±5%	0,6	0,2	396 (40)	from inside	silane
BC16 2400H 76 (200)	16	12	2400±5%	0,6	0,2	396 (40)	from inside	silane

Basalt direct rovings

BC14 300	14	1	300±5%	0,6	0,2	396 (40)	from inside	starch-silane
BC14 300	14	1	300±5%	0,4	0,2	520 (53)	from inside	silane
BC16 400	16	1	400±5%	0,4	0,2	450 (46)	from inside	starch-silane
BC16 200	16	1	200±5%	0,4	0,2	450 (46)	from inside	starch-silane
BC20 600	20	1	600±5%	0,4	0,2	450 (46)	from inside	starch-silane
BC20 600	20	1	600±5%	0,6	0,2	450 (46)	from inside	silane

Chopped basalt fiber

Fiber type	Fiber diameter in microns	Nominal fiber length, mm	Tolerance in length, mm	Uncut fibers, %	Moisture, %, not more	Loss on ignition, %, not less	Sizing type
BC16 6 76 BC16 12 76 BC16 24 76	16	6, 12, 14	6±1,0 (12, 24)±2,0	2,0	1,0	0,6	silane

Basalt fabrics for reinforced plastics

Fabric type	Weave type	Fabric count, yarns per 1 cm		Weight per unit area, g/m ²	Loss on ignition, %, not less	Tensile strength, not less		Width, cm	Thickness, mm	Sizing type
		warp	weft			warp	weft			
TBK-100(100)	plain	10±1	9±1	210±20	0,6	784 N/2,5 cm	784 N/2,5 cm	100±1	0,19±0,025	silane
TGB-430-76(100) *	4-H satin	20+1	10±1	430±30	0,6	3500 N/50 mm	2500 N/50 mm	100 +2-1	0,38±0,03	silane
TGB-330-76(100) *	4-H satin	20+1	10±1	330±30	0,6	3500 N/50 mm	2000 N/50 mm	100 +2-1	0,28±0,03	silane

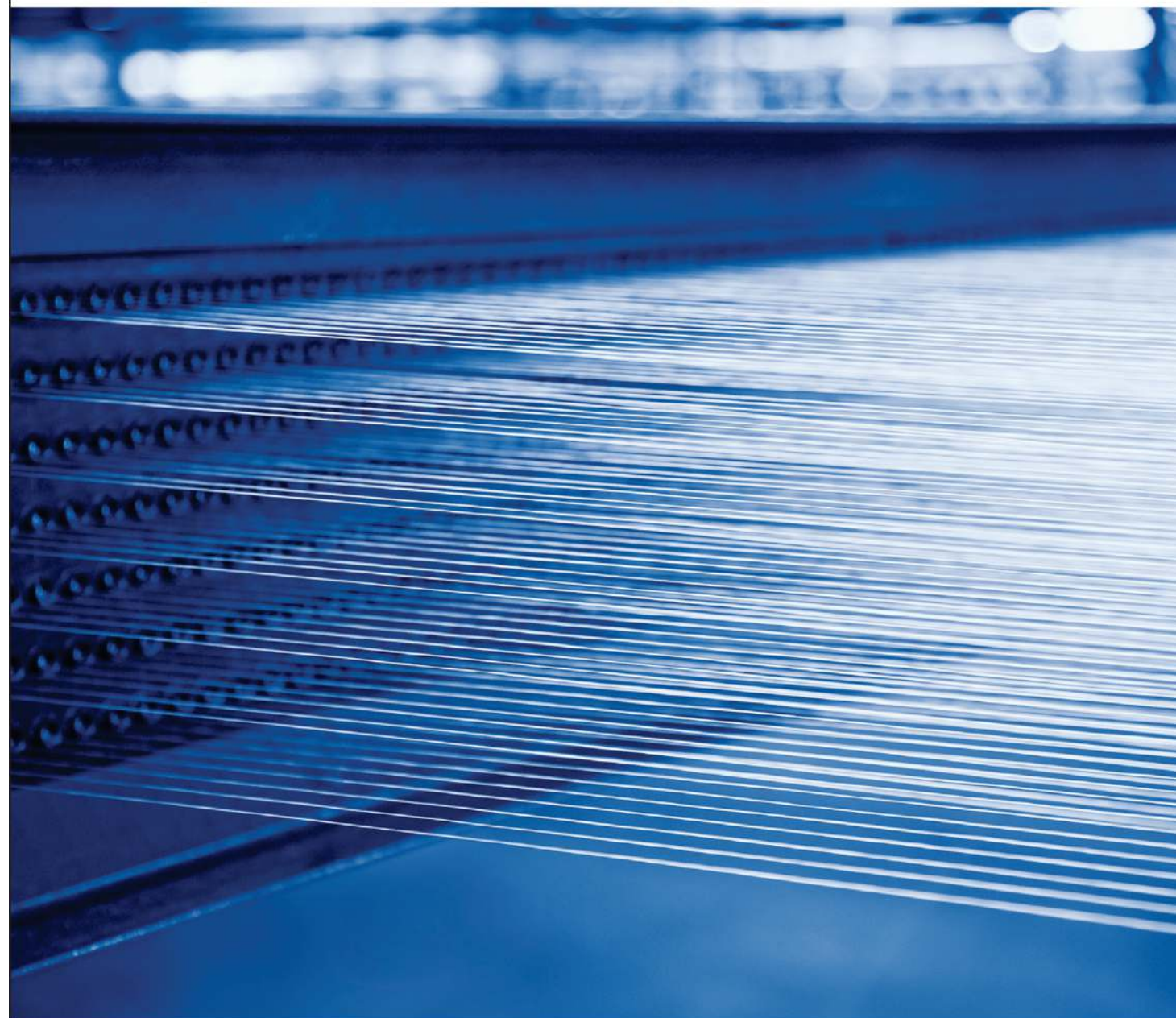
* the type under development, physical-mechanical characteristics are specified after statistic data are collected

Date _____

Contact person _____

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