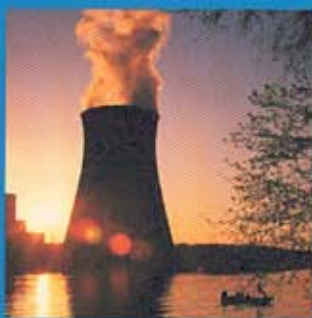


FILTRATION FABRICS

ENGINEERED FILTRATION FABRIC
SUPPORTING A HEALTHY ENVIRONMENT



BGF Industries, Inc.
a PORCHER INDUSTRIES company



Reverse Air or Shake/Deflate Cleaning

BGF offers a line of fiberglass filter media specifically designed and finished for Reverse Air or Shake/Deflate cleaning that offers superior performance in fossil fuel burning power plants, asphalt production, cement production, carbon black production, and refineries.

STYLE	UNIT OF MEASURE	STYLE 427				STYLE 457				STYLE 421		
Warp Yarn	US Glass System Tex System	ECDE 75 1/0 EC 6 66 tex				ECDE 150 1/2 EC 6 33 tex				ECDE 75 1/0 EC 6 66 tex		
Fill Yarn	US Glass System Tex System	50 1/0 textured+150 1/0 ET 6 99 tex + EC 6 33 tex				ECDE 150 1/4 textured ET 6 33 tex x4				ECDE 75 1/0 EC 6 66 tex		
Fabric Count (wxf)	yarns per inch yarns per cm	54 x 30 21 x 12				54 x 30 21 x 12				54 x 52 21 x 20		
Weave Pattern		1 x 3 RH Twill				1 x 3 RH Twill				4 Harness Satin		
FINISH		373	580	615	625	373	580	615	625	580	615	625
Loss on Ignition	percent minimum	7.0	1.4	9.0	3.7	7.0	1.4	9.0	3.7	0.9	8.0	2.2
Air Permeability	cfm/sq ft cm3/cm2/s	25-50 13-25	40-65 20-33	35-60 18-31	35-60 18-31	25-50 13-25	40-65 20-33	35-60 18-31	35-60 18-31	5-15 2-8	5-15 2-8	5-15 2-8
Tensile Strength:												
Warp	lbs./inch N/cm	225 390	240 420	290 505	290 505	225 390	240 420	290 505	290 505	240 420	250 435	290 505
Fill	lbs./inch N/cm	130 225	130 225	160 280	160 280	130 225	130 225	160 280	160 280	220 385	230 400	270 470
Mullen Burst	psi kPa	450 3100	500 3445	500 3445	500 3445	450 3100	500 3445	500 3445	500 3445	575 3960	575 3960	575 3960
Weight	oz./sq. yd. g/m ²	9.3-10.5 315-356	8.7-9.9 295-336	9.4-10.6 319-359	8.9-10.0 302-339	9.5-10.7 322-363	8.9-10.1 302-343	9.5-10.7 322-363	9.2-10.3 312-349	7.7-8.7 261-295	8.8-9.9 298-336	8.3-9.3 281-315

STYLE	UNIT OF MEASURE	STYLE 454				STYLE 484				STYLE 426	
Warp Yarn	US Glass System Tex System	ECDE 37 1/0 EC 6 134 tex				ECDE 75 1/2 EC 6 66 tex x2				ECDE 75 1/0 EC 6 66 tex	
Fill Yarn	US Glass System Tex System	ECDE 75 1/3 textured ET 6 66 tex x3				ECDE 75 1/3 textured ET 6 66 tex x3				ECDE 75 1/0 EC 6 66 tex	
Fabric Count (wxf)	yarns per inch yarns per cm	44 x 24 17 x 9				44 x 24 17 x 9				54 x 52 21 x 20	
Weave Pattern		1 x 3 RH Twill				1 x 3 RH Twill				1 x 3 RH Twill	
FINISH		373	580	615	625	373	580	615	625	580	625
Loss on Ignition	percent minimum	7.0	1.4	9.0	3.7	7.0	1.4	9.0	3.7	0.9	2.2
Air Permeability	cfm/sq ft cm3/cm2/s	25-50 13-25	40-65 20-33	25-50 13-25	35-60 18-31	25-50 13-25	40-65 20-33	25-50 13-25	35-60 18-31	35-60 18-31	30-55 15-28
Tensile Strength:											
Warp	lbs./inch N/cm	450 785	450 785	500 875	500 875	450 785	450 785	500 875	500 875	240 420	290 505
Fill	lbs./inch N/cm	200 350	200 350	250 435	250 435	200 350	200 350	250 435	250 435	220 385	270 470
Mullen Burst	psi kPa	500 3445	600 4135	600 4135	600 4135	500 3445	600 4135	600 4135	600 4135	500 3445	500 3445
Weight	oz./sq. yd. g/m ²	13.4-15.0 454-508	12.6-14.1 427-478	13.7-15.3 464-519	12.9-14.4 437-488	13.4-15.0 454-508	12.6-14.1 427-478	13.7-15.3 464-519	12.9-14.4 437-488	7.7-8.7 261-295	8.3-9.3 281-315

Values contained herein are based on typical fabric data and should be used as a guide, not a specification. Values subject to change.



Reverse Air or Shake/Deflate Cleaning

STYLE	UNIT OF MEASURE	STYLE 456				STYLE 486			
Warp Yarn	US Glass System Tex System	ECDE 37 1/0 EC 6 134 tex				ECDE 75 1/2 EC 6 66 tex x2			
Fill Yarn	US Glass System Tex System	ECDE 75 1/4 textured ET 6 66 tex x4				ECDE 75 1/4 textured ET 6 66 tex x4			
Fabric Count (wxf)	yarns per inch yarns per cm	44 x 22 17 x 9				44 x 22 17 x 9			
Weave Pattern	2 x 2 Broken Twill	2 x 2 Broken Twill				2 x 2 Broken Twill			
FINISH		373	580	615	625	373	580	615	625
Loss on Ignition	percent minimum	7.0	1.4	9.0	3.7	7.0	1.4	9.0	3.7
Air Permeability	cfm/sq ft	20-45	25-50	25-50	25-50	30-55	40-65	35-60	35-60
	cm ³ /cm ² /s	10-23	13-25	13-25	13-25	15-28	20-33	18-31	18-31
Tensile Strength:									
Warp	lbs./inch	450	450	500	500	450	450	500	500
	N/cm	785	785	875	875	785	785	875	875
Fill	lbs./inch	225	250	270	275	225	250	270	275
	N/cm	390	435	470	480	390	435	470	480
Mullen Burst	psi	550	625	625	625	550	625	625	625
	kPa	3790	4305	4305	4305	3790	4305	4305	4305
Weight	oz./sq. yd.	14.7-16.4	13.8-15.4	15.0-16.8	14.1-15.8	14.7-16.4	13.8-15.4	15.0-16.8	14.1-15.8
	g/m ²	498-556	468-522	508-569	478-536	498-556	468-522	508-569	478-536

Finishes for Reverse Air or Pulse Jet Cleaning

Selecting the right finish ensures fabric performance and durability. Without a protective coating, the glass filaments in filtration fabrics can be broken through abrasion caused by dust particles or chemical attack from the gas stream composition or cage contact. BGF has developed four finishes to protect the filtration fabric:

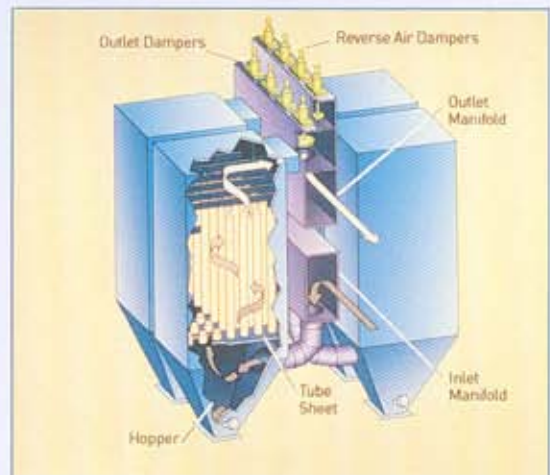
373 Chemical Resistance — uniquely formulated proprietary finish composed of a polymer to prevent chemical attack of the glass filaments and PTFE (polytetrafluorethylene) to provide superior abrasion resistance. The finish is resistant to both acid and alkali attack. Recommended for any fabric filtration application.

580 Triple Finish — consists of a blend of silicone oils, graphite, and Teflon®, which combine to protect the glass fabric from abrasion, but only limited protection from chemical attack. Recommended in cement production and metal foundry applications.

615 — a ten percent add-on of DuPont's Teflon® B PTFE particles encapsulates the glass fibers to prevent abrasion. Since PTFE does not bond to the glass filaments, strong acidic or alkaline environments could attack the fabric. Recommended for use with utility base load boilers operating under mild pH conditions.

625 Acid Resistant — consists of acid resistant polymers, PTFE, graphite, and silicone oils. Forms a covalent bond with molecules on the surface of the glass to shield it from chemical attack. Recommended for filtration of flue gases in industrial utility boilers and acid environments such as carbon black and fossil fuel burning power generation.

Reverse Air



The Reverse Air or Shake/Deflate method of cleaning utilizes low pressure reverse air flow to dislodge filtered particulate from the inside of the filter tube at operating environments of up to 500°F. The cleaning process cycles through compartments in the baghouse requiring each one to be stopped for the cleaning cycle to take place. Air is reversed back through the bag causing it to collapse and the dust collected on the outside of the bags falls downward into a hopper. Typically, this method of cleaning utilizes lighter weight filter media since the processing is not as stressful on the media.



Teflon® is a DuPont registered trademark.



Fabric for Pulse Jet Cleaning

BGF's fiberglass fabrics for Pulse Jet cleaning are engineered to increase the effective surface area of the bag. This provides a higher overall coverage factor to improve filtration efficiency in the harsh environments created within a pulse jet system.

STYLE	UNIT OF MEASURE	STYLE 448			STYLE 477		
Warp Yarn	US Glass System Tex System	37 1/0 & 37 1/0 textured (alternate ends) EC 6 134 tex & ET 6 134 tex			ECDE 75 1/2 EC 6 66 tex x2		
Fill Yarn	US Glass System Tex System	ECDE 75 1/3 textured ET 6 66 tex x3			ECDE 75 1/4 textured ET 6 66 tex x4		
Fabric Count [wxt]	yarns per inch yarns per cm	48 x 30 19 x 12			48 x 40 19 x 16		
Weave Pattern		Double Face Crowfoot Satin			Double Filling Face		
FINISH		373	615	625	373	615	625
Loss on Ignition	percent minimum	7.0	9.0	3.7	7.0	9.0	3.7
Air Permeability	cfm/sq ft cm3/cm2/s	20-50 10-25	20-50 10-25	20-50 10-25	20-50 10-25	20-50 10-25	20-50 10-25
Tensile Strength:							
Warp	lbs./inch N/cm	275 480	300 525	300 525	450 785	500 875	500 875
Fill	lbs./inch N/cm	200 350	250 435	250 435	300 525	350 610	350 610
Mullen Burst	psi kPa	500 3445	600 4135	600 4135	900 6205	900 6205	900 6205
Weight	oz./sq.yd. g/m ²	16.0-17.9 542-607	16.2-18.1 549-613	15.4-17.2 522-583	20.5-23.1 695-783	22.3-24.5 756-830	19.9-23.8 674-807

Notes

- Fabric count variation is no greater than +/-2 in either Warp or Filling direction.
- Water repellency is a minimum of 20 minutes for all fabrics.
- Loss On Ignition = % of weight lost after ignition and heating at 1150° F [621° C] for 20 minutes.

Units of Measure

U.S. SYSTEM

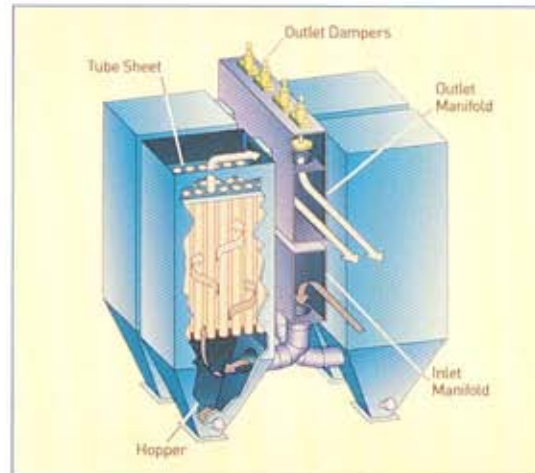
Yarn Description = US Glass System
 Fabric Count = Ends/Inch
 Air Permeability = CFM/FT² at ½ inch Water Gauge
 Tensile Strength = pounds/inch
 Mullen Burst = pounds/square inch
 Weight = Oz/Sq. Yd.

INTERNATIONAL SYSTEM (SI)

Yarn Description = tex
 Fabric Count = Yarns/cm
 Air Permeability = cm³/cm²/s
 Tensile Strength = N/cm
 Mullen Burst = kPa
 Weight = g/m²

Metric values based on a conversion factor from US Measurement.

Pulse Jet



In the pulse jet cleaning process, a pulse of high pressure air is forced downward through the bag causing the dust layer formed on the outside of the filter media to release and fall into the hopper. The advantage of pulse jet cleaning is that the filtration process does not have to stop in order for cleaning to take place and higher air to cloth ratios are possible.



TECHNICAL FABRICS FOR GLOBAL INDUSTRY

A Legacy of Innovation

BGF Industries, a Porcher Industries company, has been manufacturing fiber glass and other high performance fabrics for an ever-growing range of applications since 1941. Our heritage as an innovator and developer of quality fabrics extends back even further to 1885, when Porcher Industries was renowned for its fine woven silk goods. Since then, Porcher Industries and its related group companies has grown to become a global leader in the manufacture of woven and nonwoven technical textiles made from fiber glass, carbon, aramid and other high performance fibers for many industries including Filtration, Automotive, Construction, Composites, Electronics, and Marine. Today, the diverse capabilities of the Porcher Groupe continue to expand in order to provide our partners in the world-wide marketplace the latest in innovation, technology and service.

Over these past 100+ years, we've earned a reputation as a company of firsts:

- ▶ the first weaver of broad glass fabrics
- ▶ the first company to develop a patented process for heat-cleaning fabrics that improves the physical properties of composites
- ▶ the first company to develop warp sizes that allow for weaving with low twist single yarns
- ▶ the first finisher with in-house techniques that improve interfacial bonding of resins to glass
- ▶ the first weaver to develop unidirectional fabrics
- ▶ the first company to develop a product using "DE" filaments to improve composite arrangements
- ▶ the first in the industry to launch an internet presence — www.bgf.com
- ▶ the first to offer an integrated business-to-business program (B2BGF) providing customers improved business communications

Filtration Fabrics

As government environmental regulations become increasingly restrictive, the efficiency of particulate collection becomes an even more important consideration for utilities, asphalt and carbon black producers, and refineries. Filtration fabrics are the mechanisms for meeting these regulations. The filtration fabric collects an initial cake of dust, which becomes the filter media, then releases the bulk of the dust collected during cleaning. Glass filtration fabrics are the optimum solution for environments with operating temperatures between 300° and 500°F (150° - 260° C).

BGF Industries is the leading supplier of fabrics for high temperature dust filtration. Each BGF filtration fabric is engineered for a specific application, including Reverse Air, Shake/Deflate, and Pulse Jet cleaning methods. BGF combines yarn selection, weave pattern, and construction density to produce fabrics with the appropriate combination of physical properties for the designated end-use.

With BGF's filtration fabrics, environmental concerns are easily satisfied...for decades to come.

Applications

- ▶ Refineries
- ▶ Basic power generation
- ▶ Large utilities: Pennsylvania Power & Light, Tennessee Valley Authority, Houston Lighting & Power, Public Service of Colorado, Ohio Edison, Arizona Public Service, Baltimore Gas & Electric, Plains Electric, Intermountain Power
- ▶ Asphalt production
- ▶ Carbon black production
- ▶ Cement production

Quality & Service

Our commitment to quality continues throughout the process with our extensive, modern distribution system. In fact, BGF has successfully upgraded its ISO registration to 9001:2000, which requires us to plan and manage the processes necessary for the continual improvement of our quality management system. And, BGF offers customers B2BGF, an integrated business-to-business communications program providing customers with easy, online access to their order status, shipment details, invoices, certifications, sales history and more.



Quick Response for Smooth Operations

BGF understands the importance of on-time deliveries. Our manufacturing and customer service teams have the flexibility to react quickly to your critical requirements and will follow your order through every step in the process. We have backup systems in place to ensure accurate and timely deliveries so that your operation continues to run smoothly.

Call us at 800-476-4845 to discuss your filtration fabric needs. We'll use our experience, innovation and commitment to quality to help you preserve the environment.

BGF Industries, Inc.
a PORCHER INDUSTRIES company 

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