



## 2000 Braided Packing Flexible Graphite

### CONSTRUCTION

**Style 2000** packing is manufactured from high purity flexible graphite that is expanded and formed into a braided yarn and then braided without binders or wire reinforcement. The finished product retains all the inherent benefits of flexible graphite: heat resistance, chemical inertness, low friction, self lubrication, and ready conformability.

### APPLICATION / SERVICE

The outstanding properties of this style make it a truly multi-service packing capable of a wide variety of uses throughout a plant. This style may be used in valves, pumps, expansion joints, mixers and agitators in the hostile environments of hydrocarbon processing, pulp and paper, power generation, metal-working and other industries where effective sealing is vital.

SERVICE LIMITS		
Type	Description	Value
Temperature Limits:	Minimum	-400°F (-240°C)
	Maximum	840°F (450°C)
	Steam	1200°F (650°C)
Pressure Limits:	Rotating	435 psi (30 bar)
	Reciprocating	1450 psi (100 bar)
	Static	4351 psi (300 bar)
Shaft Speed:		5904 fpm (30 m/s)
pH:		0-14 (except strong oxidizers)



## 2000IC Braided Packing Flexible Graphite, Wire Reinforced

### CONSTRUCTION

**Style 2000IC** packing is manufactured from high purity flexible graphite that is expanded and formed into a weave-able yarn and then braided in a unique construction with wire reinforcement. The finished product retains all the inherent benefits of flexible graphite; while the wire reinforcement provides greater mechanical strength.

### APPLICATION / SERVICE

**Style 2000IC** packing is particularly suited for use in high temperature, high pressure steam service. In addition, it can also handle most chemicals, acids and alkalis. This style is excellent for use in steam turbines, high temperature motor-actuated valves and for high pressure/high temperature valve applications in general.

SERVICE LIMITS		
Type	Description	Value
Temperature	Minimum	-400°F (-240°C)
	Maximum	840°F (450°C)
	Steam	1200°F (650°C)
Pressure	Static	5800 psi (400 bar)
Shaft Speed		200 fpm (1 m/s)
pH		0-14 (except strong oxidizers)



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## 2202 Braided Packing Flexible Graphite, Carbon Corners



### CONSTRUCTION

**Style 2202** packing is diagonally braided from pure, expanded flexible graphite, reinforced at the corners and throughout with high-quality carbon fibers. The carbon fiber reinforcement in the corners and body of the packing make it three times more resistant to extrusion and also increase the pressure handling capabilities compared to non-reinforced flexible graphite packing.

### APPLICATION / SERVICE

**Style 2202** is an extremely versatile packing and can be used in many demanding applications, both dynamic and static. This style packing is particularly suited for high temperature and high pressure service in valves, pumps, expansion joints, mixers and agitators. It can handle most chemicals in the 0-14 pH range with the exception of strong oxidizers.

SERVICE LIMITS		
Type	Description	Value
Temperature	Minimum	-400°F (-240°C)
	Maximum	
	• In air	842°F (450°C)
	• In steam	1200°F (650°C)
Pressure	Rotating	435 psi (30 bar)
	Reciprocating	2900 psi (200 bar)
	Valve	4350 psi (300 bar)
Shaft Speed		4000 fpm (20 m/s)
pH		0-14 (except strong oxidizers)



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## 2001 Braided Packing Graphite Yarn, Graphite Filled



### CONSTRUCTION

**Style 2001** packing is a rugged premium grade, low friction, high strength, proprietary graphite fiber, twisted together and interlock braided. This style contains a special lubricant to provide a bearing film, and protect shafts from scoring. It also acts as a blocking agent to prevent wicking.

### APPLICATION / SERVICE

**Style 2001** packing is ideally suited for use in severe service valves and rotary shaft applications. It handles strong acids and alkali solutions except fuming nitric acid, oleum and fluorine. It can be used to seal steam, water, oil, solvents, alkalis, and acids. It is often used as end rings for packing sets utilizing softer packings that might tend to extrude. This style also handles high temperatures, extremely high shaft speeds (see Service Limits below), most strong chemicals, and reduces shaft wear.

### SERVICE LIMITS

Type	Description	Value
Temperature Limits:	Minimum	-400°F (-240°C)
	Maximum	840°F (450°C)
	Steam	1200°F (650°C)
Pressure Limits:	Rotating	435 psi (30 bar)
	Reciprocating	1450 psi (100 bar)
	Static	4350 psi (300 bar)
Shaft Speed:		4000 fpm (20 m/s)
pH:		0-14 (except strong oxidizers)



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## 2002 Braided Packing Carbon Yarn, Graphite Filled



### CONSTRUCTION

**Style 2002** packing is manufactured from pure carbon yarn, which is interlock braided and impregnated with proprietary lubricants and graphite particles which fill voids, block leakage, and act as a break-in lubricant. The end product has a low coefficient of friction and tends to wear more evenly than most braided packings.

### APPLICATION / SERVICE

**Style 2002** handles water, steam, boiler feed, and aqueous solutions of acids and alkalis. In service, it seats quickly and does not require extensive break-in adjustments. This style is commonly used for high speed pumps, blowers, dryers, high temperature valves, and furnace gasketing.

SERVICE LIMITS		
Type	Description	Value
Temperature	Minimum	-400°F (-240°C)
	Maximum	
	• In air	840°F (450°C)
	• In steam	1200°F (650°C)
Pressure	Rotating	365 psi (25 bar)
	Reciprocating	1450 psi (100 bar)
Pressure	Static	4350 psi (300 bar)
Shaft Speed		4000 fpm (20 m/s)
pH		0-14 (except strong oxidizers)



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## 2214 High Temperature Non-Asbestos Valve Stem Packing

### CONSTRUCTION

**Style 2214** is a proprietary braid-over-core construction, using a special high temperature, Inconel reinforced fiber and a non-hardening core. The packing is impregnated with a high temperature resistant compound, and coated with fine particles of graphite to act as a surface lubricant. This style is also treated with a sacrificial material to alleviate electrolytic action.

### APPLICATION / SERVICE

**Style 2214** is a firm, high density, non-asbestos packing. It can handle steam, most chemicals, mild acids, and alkalis. It is excellent for use in steam turbines, high temperature motor-actuated slide valves, and in high pressure/high temperature valving in general.

### SERVICE LIMITS

Type	Description	Value
Temperature	Minimum	-
	Maximum	1200°F (650°C)
Pressure	Rotating	-
	Reciprocating	-
	Static	2500 psi (170 bar)
Shaft Speed		2500 fpm
pH		2-12

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## 2550/2551 Crinkled Flexible Graphite Tape

### CONSTRUCTION

**Styles 2550 and 2551** crinkled flexible graphite tape are made from high purity graphite with no fibers, binders or other additives. Style 2550 crinkled tape is typically used as a stuffing box packing for pumps and valves. Style 2551 is the same as 2550 except that it is furnished with a self-adhesive backing strip to facilitate installation as a form-in-place gasket, thread sealant, or for facing jacketed and other difficult-to-seal gaskets.

### APPLICATION / SERVICE

**Styles 2550 and 2551** Flexible graphite covers a broad range of sealing applications. It handles most chemicals in the 0 - 14 pH range at cryogenic and elevated temperatures, and from vacuum to extreme pressures. It is used extensively in the chemical, automotive and pump and valve industries.

SERVICE LIMITS		
Type	Description	Value
Temperature	Minimum	-320°F (-200°C)
	Maximum	
	• In air	840°F (450°C)
	• In steam	1200°F (650°C)
Pressure	• In reducing or inert media	5400°F (3000°C)
	Static	2000 psi (137 bar)
pH		0-14
Typical Properties	Carbon Content	98% minimum
	Leachable Chlorides	50 ppm maximum
	Total sulfur	100 ppm maximum

STANDARD PACKAGING*		
Tape Thickness	Tape Width	Spool Length
.015	1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/8" 1-3/4", 2" *other thicknesses, widths, and spool lengths are available on special order	1/4" thru 1-1/8"...50'