

#### The Packing Solution for Diverse Sealing Needs









# **Rite Pak**<sup>®</sup> Packing **Quick Select** Guide

#### **General Service:**

Non-abrasives, water, oil, mild acids & alkalies. Mid-range pH. Operating Temperature: up to 500°F / 260°C Style Selections: 1335, 1340



### **Abrasive Service:**

Abrasives (wet or dry), waste water, salt water, acids, mid-range caustics. Operating Temperature: up to 500°F / 260°C Style Selections: 1345, C1064, K1730

### **Chemical Service:**

PTFE based packings, dry or lubricated. pH 0 to 14. Operating Temperature: up to 550°F / 288°C Style Selections: C1045, C1050, C1065, C1070

# **Food Service:**

FDA compliant PTFE. pH 0 to 14. Operating Temperature: up to 500°F / 260°C Style Selections: C1056

# **High Temperature Chemical Service:**

Chemical resistant carbon and graphite packings. pH 0 to 14. Operating Temperature: up to 1200°F / 650°C Style Selections: 1625G, 1627, G57, G58





#### **High Temperature & Pressure Service:**

Babbitt and aluminum foil packings for high pressure. pH 4 to 10. **Operating Temperature:** up to 1000°F / 538°C **Style Selections:** 100AL, 100M

#### Valve Service:

Steam, high pressure, emission control or general service. **Operating Temperature:** from ambient to 5432°F / 2970°C **Style Selections:** 387I, G58I, Crane-foil<sup>™</sup>, C1051VS

#### **Lubrication Components:**

Virgin PTFE lantern ring strip stock, various cross sections, 4 ft. lengths. pH 0 to 14. **Operating Temperature:** up to 500°F / 260°C **Style Selections:** TFE Lantern Ring Strip

#### **Universal Gasketing:**

Expanded virgin PTFE multi-purpose gasket tape. pH 0 to 14. Operating Temperature: up to 550°F / 288°C Style Selections: C1051 Joint Sealant

# Rite Packing Standard Packaging (in inch sizes)

Styles: 1335, 1340, 1345, 1627, C1045, C1050, C1056, C1064, C1065, C1070, G57, G58, K1730. Valve Service - 387I, G58I

Size	1/8		3/16		1/4		5/16		3/8		7/16		1/2		9/16	5/8	3/4	7/8	1
Box Type	А	В	А	В	А	В	А	В	Α	В	А	В	А	В	С	С	С	С	С
Ft/Box	100 5	500	45	225	25	125	18	90	12	60	10	50	7	35	50	40	25	20	16

All sizes also available in 25 & 50 pounds reels. Styles 1345, C1064 and G57 are not available in 1/8"

Style 1625G

Size	1/8		3/16		1/4		5/16		3/8		7/16		1/2		9/16	5/8	3/4	7/8	1
Box Type	Α	В	Α	В	А	В	А	В	А	В	А	В	Α	В	С	С	С	С	С
Ft/Box	100	500	45	225	25	125	18	90	12	60	10	50	7	35	25	25	25	20	16

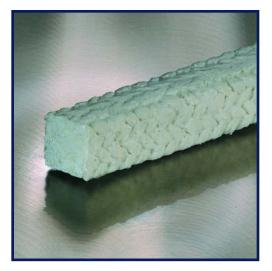
All sizes also available in 25 & 50 pounds reels

Styles: 100M\*, 100AL

Size	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
Box Type	S	S	S	S	S	S	S	S	S	S	S	S
Ft/Box	42	40	40	40	18	18	18	18	18	16	12	12

\*Not available in 1/8, 3/16, 7/8, 1"

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**STYLE 1335** 

**Temperature:** -170°F /-110°C to 500°F / 260°C

**pH Range:** 2 to 12 **Speed:** 2250 fpm / 11m/s

Pressure: Pump: 300 psi / 20 bar Valve: 1000 psi / 68 bar **Material:** synthetic fiber, PTFE, lubricating oil

Construction: lattice braid

**Application Media:** non-abrasives, water, mild acids & caustics, gases, oils, steam, solvents

**Equipment:** rotating & reciprocating equipment, valves, expansion joints

**Industry Served:** General Industry, Agriculture, Marine, Pulp & Paper, Power Generation, Oil & Gas, Municipal / Wastewater



**Temperature:** -170°F / -110°C to 500°F / 260°C

pH Range: 4 to 10 Speed:

2000 fpm / 10 m/s **Pressure:** 

Pump: 300 psi / 20 bar Valve: 1000 psi / 68 bar **Material:** synthetic fiber, petrolatum, graphite

Construction: lattice braid

**Application Media:** non-abrasives, water, mild acids & caustics, gases, oils, steam

**Equipment:** rotating & reciprocating equipment, valves

**Industry Served:** General Industry, Agriculture, Marine, Oil & Gas, Power Generation, Municipal / Wastewater

**STYLE 1340** 



**Temperature:** -170°F / -110°C to 550°F / 288°C

> pH Range: 0 to 12 Speed:

2500 fpm / 13m/s

Pressure: Pump: 500 psi / 34 bar Valve: 4000 psi / 275 bar **Material:** polyimide, PTFE, lubricating oil

Construction: lattice braid

**Application Media:** abrasives, water, acids & medium caustics, gases, oils, steam, solvents, waste water, slurries, paper stock, liquors, asphalt, fly ash, condensate

**Equipment:** rotating & reciprocating equipment, valves

Industry Served: Pulp & Paper, Municipal / Wastewater, Marine, Chemical & Pharmaceutical, Mining & Minerals, Oil & Gas, Steel & Metals, Power Generation

#### **STYLE 1345**



**STYLE C1045** 

**Temperature:** -450°F / -268°C to 500°F / 260°C

**pH Range:** 0 to 14 **Speed:** 1000 fpm / 5 m/s

**Pressure:** Pump: 300 psi / 20 bar Valve: 5000 psi / 245 bar **Material:** PTFE filament, PTFE dispersion

Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor

**Equipment:** rotating & reciprocating equipment, valves, expansion joints

**Industry Served:** Chemical & Pharmaceutical, Pulp & Paper, General Industry



**Temperature:** -450°F / -268°C to 500°F / 260°C

**pH Range:** 0 to 14 **Speed:** 2000 fpm /10 m/s

Pressure: Pump: 300 psi / 20 bar Valve: 4000 psi / 275 bar **Material:** PTFE filament, PTFE dispersion, lubricating oil

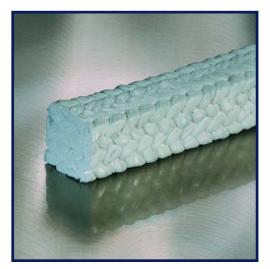
Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor

**Equipment:** rotating & reciprocating equipment, valves, expansion joints

**Industry Served:** Chemical & Pharmaceutical, Pulp & Paper, General Industry

#### **STYLE C1050**



**Temperature:** -450°F / -268°C to 500°F / 260°C

> pH Range: 0 to 14 Speed:

2000 fpm / 10 m/s

**Pressure:** Pump: 300 psi / 20 bar Valve: 2500 psi / 170 bar **Material:** FDA compliant PTFE filament, lubricating oil

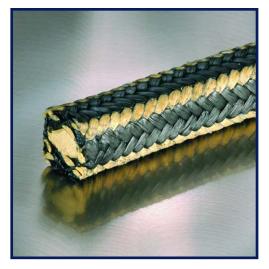
Construction: lattice braid

**Application Media:** food, chemicals, solvents, corrosives, gases, water, steam, oils

**Equipment:** rotating & reciprocating equipment, valves

**Industry Served:** Food & Beverage, Chemical & Pharmaceutical

#### **STYLE C1056**



**STYLE C1064** 

**Temperature:** -350°F / -212°C to 550°F / 288°C

pH Range: 2 to 12 Speed: 2500 fpm / 12.5 m/s Pressure: Pump: 500 psi / 34 bar **Material:** expanded PTFE w/graphite, Aramid, lubricating oil

Construction: lattice braid

**Application Media:** abrasives, water, medium acids & medium caustics, oils, steam, solvents, waste water, slurries, paper stock, liquors, asphalt, fly ash, condensate

**Equipment:** rotating & reciprocating equipment

Industry Served: Pulp & Paper, Municipal / Wastewater, Oil & Gas, Chemical & Pharmaceutical, Mining & Minerals, Steel & Metals, Power Generation

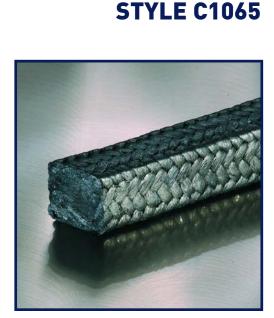
**Material:** expanded PTFE w/graphite, lubricating oil

**Construction:** lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate

**Equipment:** rotating & reciprocating equipment, valves, expansion joints

Industry Served: Chemical & Pharmaceutical, Pulp & Paper, Oil & Gas, General Industry, Agriculture, Steel & Metals, Marine, Power Generation, Municipal / Wastewater



**Temperature:** -350°F / -212°C to 550°F / 288°C

> pH Range: 0 to 14 Speed:

3000 fpm / 15 m/s **Pressure:** 

Pressure: Pump: 300 psi / 20 bar Valve: 4000 psi / 275 bar **Material:** PTFE filament w/graphite, lubricating oil

Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate

**Equipment:** rotating & reciprocating equipment, valves, expansion joints

Industry Served: Chemical & Pharmaceutical, Pulp & Paper, Oil & Gas, General Industry, Agriculture, Steel & Metals, Marine, Power Generation, Municipal / Wastewater

#### STYLE C1070

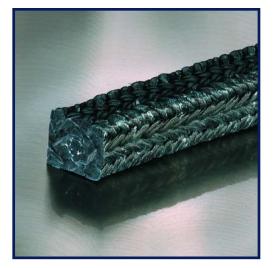
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**Temperature:** -350°F / -212°C to 550°F / 288°C

> pH Range: 0 to 14 Speed:

4300 fpm / 22 m/s

Pressure: Pump: 300 psi / 20 bar Valve: 4000 psi / 275 bar



#### **STYLE 1625G**

**STYLE 1627** 

#### Temperature:

Temperature:

In Atmosphere:

850°F / 455°C

In Steam: up to

1200°F / 650°C

4000 fpm / 20 m/s

Pump: 500 psi / 34 bar

Valve: 2500 psi / 170 bar

pH Range:

Pressure:

0 to 14

Speed:

-300°F / -185°C to

In Atmosphere: -300°F / -185° to 850°F / 455°C In Steam: up to 1200°F / 650°C

> **pH Range:** 0 to 14

**Speed:** 4000 fpm / 20 m/s

**Pressure:** Pump: 500 psi / 34 bar Valve: 2500 psi / 170 bar **Material:** graphite filament, light PTFE

Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves, soot blowers, expansion joints

Industry Served: Chemical & Pharmaceutical, Power Generation, Oil & Gas, Pulp & Paper, Municipal / Wastewater, Mining & Minerals, Steel & Metals

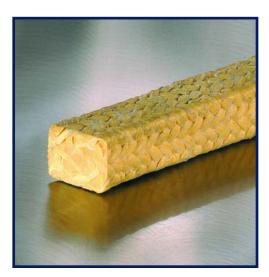
**Material:** carbon filament, colloidal graphite

**Construction:** lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paperstock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves, soot blowers, expansion joints

Industry Served: Chemical & Pharmaceutical, Power Generation, Oil & Gas, Pulp & Paper, Municipal / Wastewater, Mining & Minerals, Steel & Metals



**Temperature:** -400°F / -240°C to 500°F / 260°C

> pH Range: 2 to 12

**Speed:** 2000 fpm / 10m/s w/excursions to 2500 fpm / 13m/s

Pressure: Pump: 500 psi / 34 bar Material: Aramid, PTFE, lubricating oil Construction: lattice braid

Application Media: abrasives, water, medium acids & medium caustics, oils, steam, solvents, waste water, slurries, paper stock, liquors, asphalt, fly ash, condensate

**Equipment:** rotating & reciprocating equipment

Industry Served: Pulp & Paper, Municipal / Wastewater, Oil & Gas, Chemical & Pharmaceutical, Mining & Minerals, Steel & Metals, Power Generation





**STYLE G57** 

#### Temperature:

In Atmosphere: -400°F / -240°C to 850°F / 455°C In Steam: up to 1200°F / 650°C

> **pH Range:** 0 to 14

**Speed:** 4500 fpm / 23 m/s

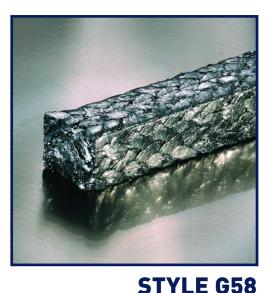
Pressure: Pump: 500 psi / 34 bar Valve: 4300 psi / 296 bar **Material:** flexible graphite, carbon filament, colloidal graphite

**Construction:** lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves, soot blowers, expansion joints

Industry Served: Chemical & Pharmaceutical, Power Generation, Oil & Gas, Pulp & Paper, Municipal / Wastewater, Mining & Minerals, Steel & Metals, General Industry



#### Temperature:

In Atmosphere: -400°F / -240°C to 850°F / 455°C In Steam: up to 1200°F / 650°C

> **pH Range:** 0 to 14

**Speed:** 4000 fpm / 20 m/s

**Pressure:** Pump: 400 psi / 27.5 bar Valve: 4300 psi / 296 bar Material: flexible graphite

Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves, soot blowers, expansion joints

Industry Served: Chemical & Pharmaceutical, Power Generation, Oil & Gas, Pulp & Paper, Municipal / Wastewater, Mining & Minerals, Steel & Metals, General Industry



**Temperature:** In Atmosphere: -400°F/ -240°C to 850°F / 455°C

> In Steam: up to 1200°F / 650°C

> > **pH Range:** 0 to 14

Speed: not recommended for rotary service

**Pressure:** Valve: 4300 psi / 296 bar **Material:** flexible graphite, Inconel wire

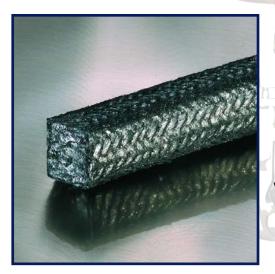
Construction: lattice braid

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils

Equipment: valves

Industry Served: Power Generation, Steel & Metals, Pulp & Paper, General Industry, Marine, Mining & Minerals, Oil & Gas, Chemical & Pharmaceutical

#### **STYLE G58**I



**Temperature:** In Steam: up to 1200°F / 650°C

> pH Range: 2 to 12

Speed: not recommended for rotary service Pressure: Valve: 4300 psi / 296 bar **Material:** fiberglass, Inconel wire, colloidal graphite

**Construction:** round braid over extruded core

Application Media: steam

Equipment: valves

**Industry Served:** Power Generation, Steel & Metals, Pulp & Paper, General Industry, Marine, Mining & Minerals, Oil & Gas, Chemical & Pharmaceutical

#### **STYLE 387**I

Temperature: up to 1000°F / 538°C pH Range:

4 to 10 **Speed:** 1800 fpm\* / 9 m/s \*Recommended shaft/sleeve hardness 500 Brinnel/60 Rockwell "C"

**Pressure:** Pump: 1000 psi / 68 bar Valve: 2500 psi / 170 bar **Material:** aluminum foil, fiberglass, graphite, oil

**Construction:** spiral wrapped

**Application Media:** water, steam, mild acids & caustics, gases, oils (for HF acid service use Style 124 all aluminum packing. Contact local John Crane representative.)

**Equipment:** rotating & reciprocating equipment

**Industry Served:** Power Generation, Oil & Gas, Chemical & Pharmaceutical



# STYLE 100AL

**Temperature:** up to 450°F / 233°C

pH Range: 4 to 10 Speed: 3600 fpm / 18 m/s Pressure:

Pump: 1000 psi / 68 bar

**Material:** Babbitt foil, Neoprene, graphite, oil

Construction: spiral wrapped

**Application Media:** water, steam, boiler feed water, mild acids & caustics, gases, oils

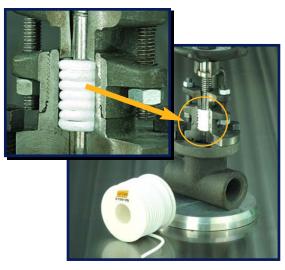
**Equipment:** rotating & reciprocating equipment, expansion joints, still necks

**Industry Served:** Power Generation, Oil & Gas





**STYLE C1051** 



#### STYLE C1051VS

**Temperature:** -400°F / -240°C to 550°F / 288°C

pH Range: 0 to 14 Speed: not applicable

> Pressure: vacuum to 3000 psi / 206 bar

Available Cross Sections: in inches - 1/8, 3/16, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1 Various Lengths

> **Temperature:** -400°F / -240°C to 550°F / 288°C

> > pH Range: 0 to 14 Speed:

150 fpm / 0.75 m/s

**Pressure:** Valve: 500 psi / 34 bar

Available Diameters: in inches - 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 1/2 Material: 100% expanded virgin PTFE

**Construction:** extruded w/adhesive tape back strip

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** metal, plastic & glass lined flanges, pump casings, gear boxes, containers & lids, vessels & traps, hydraulics & pneumatic systems, water supply systems, handholes / manholes, ducts, heat exchangers, irregular services, etc.

Industry Served: General Industry, Agriculture, Marine, Pulp & Paper, Power Generation, Oil & Gas, Municipal / Wastewater, Chemical & Pharmaceutical, Food & Beverage, Mining & Minerals, Steel & Metals

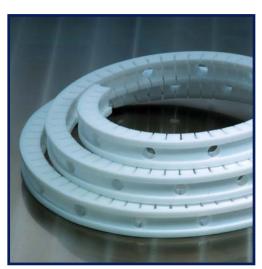
Material: 100% virgin PTFE

Construction: extruded round

Application Media: chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** faucet stems & valves

**Industry Served:** General Industry, Agriculture, Marine, Pulp & Paper, Power Generation, Oil & Gas, Municipal / Wastewater, Chemical & Pharmaceutical, Food & Beverage, Mining & Minerals, Steel & Metals



Lantern Rings

**Temperature:** -400°F / -240°C to 500°F / 260°C

> pH Range: 0 to 14 Speed:

not applicable

**Pressure:** Pump: 1000 psi / 68 bar

> Available Cross Sections: in inches - 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1 Various Widths

Material: 100% virgin PTFE

Construction: 4 foot strip

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves

**Industry Served:** General Industry, Agriculture, Marine, Pulp & Paper, Power Generation, Oil & Gas, Municipal / Wastewater, Chemical & Pharmaceutical, Food & Beverage, Mining & Minerals, Steel & Metals



**Crane-foil**<sup>™</sup>

#### Temperature:

In Atmosphere: -400°F / -240°C to 850°F / 455°C In Non-Oxidizing Atmosphere: up to 5432°F / 2970°C In Steam: up to 1200°F / 650°C

pH Range: 0 to 14

Speed and Pressure: dependent upon application

Available Sizes: die-formed rings available in wide range of sizes and various densities. **Material:** 100% flexible graphite, commercial and nuclear grades

**Construction:** die-formed rings & tape

**Application Media:** chemicals, solvents, corrosives, gases, water, steam, ammonia, air, oils, paper stock, liquor, condensate, boiler feed water

**Equipment:** rotating & reciprocating equipment, valves, soot blowers, expansion joints

Industry Served: General Industry, Agriculture, Marine, Pulp & Paper, Power Generation, Oil & Gas, Municipal / Wastewater, Chemical & Pharmaceutical, Food & Beverage, Mining & Minerals, Steel & Metals

Tapes:

 Thickness: .005", .010", .015", .025"

 Widths:
 .25", .50", .75", 1"

 Lengths:
 .25', .50', 100' ft.

 Type:
 plain or crinkled, with or without adhesive back.

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**Guillotine Type:** For precision butt or diagonal cut joint cuts. Max. Cross Section: butt cut up to 1", diagonal cut up to 3/4". Various size cutters for inside ring diameters: small to 4", medium to 10", large to 15".

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Spare component parts also available.

**Hand Type:** Easily carried in your tool kit. Joint Type: butt and diagonal cuts. Max. Cross Section: butt cut up to 3/4", diagonal cut up to 5/8".

Spare cutting blades available.

**Installation Bushings & Cutting Mandrels:** Ideal compliment for use with your John Crane packing tool kit. Avoid the risk of scoring the shaft or sleeve by using it as a cutting mandrel. Properly seat rings individually with John Crane installation bushings.

Available in a wide variety of diameters and lengths.

**Tool Kits:** Make your job easier by using the proper tools. Available Kits: Deluxe - 36 piece (as shown) Medium - 17 piece (hooks, picks, tips, wrench, case only) Small - 11 piece (hook, picks, tips, wrench, case only)

Also available as individual components.



#### **Packing Cutters**



#### **Installation Tools**



**Tool Kits** 



The products contained in this bulletin represent a select range of materials that will handle the vast majority of sealing solutions in today's marketplace. In addition to these standard products John Crane manufactures a wide range of specialty items, servicing specific markets and applications. Our dedicated engineering staff is here to assist from the simplest to the most complex applications.

John Crane is continually researching new materials to meet your increasing service demands, and is dedicated to maintaining the high-quality standard of performance the world has come to know and expect from a world leader in the sealing industry. Please visit us on the web at www.johncrane.com

If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use.



**Customer Service:** John Crane Packing and PTFE Products 6400 West Oakton Street Morton Grove, Illinois 60053

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For your nearest John Crane facility, please contact the location above.

If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use. In the interest of continuous development, John Crane Companies reserve the right to alter designs and specifications without prior notice. It is dangerous to smoke while handling products made from PTFE. Old and new PTFE products must not be incinerated.

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