

#### Premium

#### Grade

### **Packings**

## Enviropak® 1342

Temperature limit: 1,200 °F (650 °C) pH range: 0-14 Shaft speeds to: 5,000 fpm Braid construction: Translok



Enviropak 1342 is constructed of 99% graphite yarn impregnated with a micronized graphite lubricant. Superior performance can be expected in severe chemical conditions. It is an excellent choice for boiler feed, condensate or other high-speed rotary applications. The best heat dissipating qualities of any packing currently available.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
ft./lb.	64.9	64.9	28.4	23.9	17.5	12.5	9.0	6.4	4.5	3.4	2.9
	3.18										
m./kg.	43.63	43.63	19.09	16.04	11.76	8.40	6.05	4.30	3.02	2.28	1.95

® Enviropak is a registered trademark of Robco Inc.

## Enviropak® 3400

Temperature limit: 600 °F (315 °C) pH range: 1-14 Shaft speeds to: 4,000 fpm Braid construction: Translok



This is an exceptional 95% carbon yarn packing impregnated with sub-micronized graphite particles and coated with a special break-in lubricant. Excellent results are obtained in boiler feed pumps, on agitators, in valves, on reciprocating equipment, oil drilling and downhole tools.

in.	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8
ft./lb.	56.8	26.7	16.8	14.3	12.3	10.2	6.7	6.4	3.3	2.8
mm.	4.76	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23
m./kg.	38.18	17.92	11.29	9.61	8.26	6.85	4.50	4.30	2.22	1.88

## Carpak® 3425

Temperature limit: 600 °F (315 °C)

pH range: 1-14 Shaft speeds to: 3,000 fpm Braid construction: Translok



Braided from the best carbon yarn and completely lubricated with PTFE, Carpak is unaffected by strong caustic acids, or slurries. A standard packing for use in pulp and paper agitators, reactors, mixers and stock pumps.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8
ft./lb.	100.0	51.8	40.0	13.9	11.9	9.7	6.4	3.8	2.9	2.6
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	16.88	19.05	22.23
m./kg.	67.19	34.80	26.88	9.34	8.00	6.52	4.30	2.55	1.95	1.75

#### Carbon

#### Yarn

#### **Packings**

### **Enviropak**<sup>®</sup>

900

Temperature limit: 600 °F (315 °C) pH range: 1-13 Shaft speeds to: 2,600 fpm

Braid construction: Translok



Enviropak 900 carbon yarn packing with PBI® corners provides the mechanical strength required for most industrial applications. PBI will not hydrolyse in steam or boiling water. Enviropak 900 is effective in all chemical and mechanical processes in the pulp and paper industry.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	23.9	15.3	10.6	8.4	6.1	5.2	4.3	2.9	2.2	1.6
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	16.02	10.25	7.12	5.62	4.13	3.51	2.90	1.94	1.49	1.04

® PBI is a registered trademark of Celanese Corp.

## Enviropak® 1000

Temperature limit: 500 °F (260 °C) pH range: 1.5-12.5

Shaft speeds to: 2,750 fpm Braid construction: Translok



The carbon fiber in Enviropak 1000 is saturated with a PTFE suspensoid before and after braiding. It is a cost-effective substitute for pure PTFE, graphite and the higher grade carbon fiber packings. Enviropak 1000 is ideal for use in bleaching agents and cooking liquors in the pulp and paper industry.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	24.8	15.2	11.4	9.5	6.2	4.9	4.0	2.9	2.0	1.5
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	16.66	10.21	7.66	6.38	4.17	3.29	2.69	1.95	1.34	1.01

# Enviropak® 2000

Temperature limit: 550 °F (288 °C) pH range: 1-13 Shaft speeds to: 3,000 fpm Braid construction: Translok



Enviropak 2000 is a thermally stable, high performance carbon yarn packing that is lubricated throughout with a combination of colloidal PTFE and graphite. Enviropak 2000 will not extrude, carbonize or soften as a Teflon® packing may. It is coated with a high quality breakin lubricant, offering outstanding resistance to steam and numerous chemicals such as aromatic alcohols, ketones, naphthenic hydrocarbons and solvents.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	27.0	17.3	12.0	8.8	6.8	5.3	4.3	3.0	2.2	1.7
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	18.14	11.62	8.06	5.91	4.57	3.56	2.89	2.02	1.48	1.14

® Teflon is a registered trademark of Dupont de Nemours.

#### Valve

#### Stem

#### **Packings**

### Enviropak® 1121

Temperature limit: 500 °F (260 °C) pH range: 0-14 Pressure limit: up to 1,000 psi at 400° F\* up to 4,000 psi at 73 °F\* Braid construction: Translok



Enviropak 1121 is a thermally stable, chemically resistant, dry white PTFE fiber packing that will not harden or shrink in size in any valve service meeting Valve Manufacturer's Association specifications.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	77.0	34.5	19.6	11.1	8.5	6.0	5.6	4.4	3.4	2.3	1.5	1.3
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	51.74	23.18	13.17	7.46	5.71	4.03	3.76	2.96	2.28	1.55	1.01	0.87

<sup>\*</sup>Dependent upon the number of rings, tolerances, etc.

# Thermograf™ 1200

Temperature limit: -400 °F (-204 °C) to 1200 °F (650 °C) pH range: 1-14 Pressure limit: 2,500 psi Braid construction: Braid over Braid



Thermograf is a resilient, compressible, self-lubricating, chemically inert, thermally conductive, braided flexible graphite packing . Once compressed, Thermograf 1200 becomes a totally homogenous ring that remains responsive to gland and system pressure changes. Thermograf offers optimum sealability from a braided packing for valves or pumps.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	113.0	52.0	23.0	18.0	13.0	10.0	8.0	7.0	4.0	3.5	2.7	2.0
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	75.92	34.94	15.45	12.09	8.73	6.72	5.38	4.70	2.69	2.35	1.81	1.34

<sup>™</sup> Thermograf is a trademark of Robco Inc.

## Enviropak® 3450

Temperature limit: 1,200 °F (650 °C) pH range: 1-13
Pressure limit: up to 2,500 psi in valves at 1,200° F\* up to 4,000 psi at 500 °F\*
Braid construction: Braid over Braid



Enviropak 3450 is produced from a highest quality carbon core over which a double Inconel® wire inserted carbon yarn jacket is braided. The result is a stiff construction able to withstand high pressure. It will provide excellent performance in super heated steam. Enviropak 3450 is the perfect packing for air or motor activated valves when constant cycling demands the best.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	34.3	21.9	15.2	11.2	8.6	6.8	5.5	3.8	2.8	2.1
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	23.05	14.71	10.21	7.53	5.78	4.57	3.70	2.55	1.88	1.41

<sup>\*</sup>Dependent upon the number of rings, tolerances, etc.

<sup>®</sup> Inconel is a registered trademark of International Nickel Corporation.

#### Universal

### **Packings**

### Enviropak® 1123

Temperature limit: 500 °F (260 °C) pH range: 0-14 Shaft speeds to: 1,500 fpm

Braid construction: Translok



Each white, pure PTFE fiber is saturated with a colloidal Teflon® suspension before braiding. Then a high quality break-in lubricant is added to ensure thermal stability during start-up. Enviropak 1123 is an excellent choice on most chemical processes.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	53.2	38.0	18.9	13.4	7.8	6.1	4.9	4.0	3.3	2.4	1.9	1.3
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	35.75	25.53	12.70	9.00	5.24	4.10	3.29	2.69	2.22	1.61	1.28	0.87

® Teflon is a registered trademark of Dupont de Nemours..

## Enviropak® 1140

Temperature limit: 500 °F (260 °C) pH range: 0-14 Shaft speeds to: 4,000 fpm Braid construction: Translok



Enviropak 1140 is manufactured from 100% genuine GFO® yarn. It has excellent thermal conductivity and abrasion resistance. Enviropak 1140 is a great general purpose packing that will not hydrolyse and is unaffected by almost all chemicals.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	18.6	12.5	8.7	6.7	5.0	4.2	3.6	2.5	2.0	1.6
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	12.50	8.40	5.85	4.50	3.36	2.82	2.42	1.68	1.34	1.08

® GFO is a registered trademark of W.L. Gore & Associates.

## Enviropak® 5079

Temperature limit: 500 °F (260 °C)

pH range: 3-12

Shaft speeds to: 3,200 fpm

Braid construction: Translok



Enviropak 5079 is a GFO® fiber packing with Kevlar® corners. This combination gives you the heat dissipation of graphite filled PTFE with the high tensile strength of an aramid fiber that prevents roll and extrusion. Enviropak 5079 is the ideal choice on all equipment regardless of condition.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	21.5	13.8	9.6	7.0	5.4	4.3	4.0	2.7	2.1	1.8
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	14.45	9.27	6.45	4.70	3.63	2.89	2.69	1.81	1.41	1.21

® Kevlar is a registered trademark of Dupont de Nemours.

### Synthetic

### **Packings**

## Enviropak® 4029

Temperature limit: 500 °F (260 °C)

pH range: 3-12

Shaft speeds to: 2,500 fpm

Braid construction: Translok



Enviropak 4029 is a high tensile strength extruded aramid fiber yarn packing for all abrasive applications. It is not recommended in steam or boiling water.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	90.9	37.9	24.7	16.3	11.0	7.7	6.6	5.2	4.1	2.9	2.0	1.6
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	61.08	25.47	16.60	10.95	7.39	5.17	4.43	3.49	2.75	1.95	1.34	1.08

# Enviropak® 5019

Temperature limit: 500 °F (260 °C) pH range: 4-9 Shaft speeds to: 2,000 fpm Braid construction: Translok



Enviropak 5019 is a low cost packing that performs well in a wide range of applications. It is made from synthetic yarn impregnated with graphite flake and, once braided, it is coated with a high temperature, break-in lubricant. Enviropak 5019 is effective on medium-speed rotary shafts.

in.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
ft./lb.	29.1	18.3	13.7	10.9	7.6	6.3	5.0	3.4	2.7	2.1
mm.	6.35	7.94	9.53	11.11	12.70	14.29	15.88	19.05	22.23	25.40
m./kg.	19.55	12.30	9.21	7.32	5.11	4.23	3.36	2.28	1.81	1.41

# Enviropak® 5050

Temperature limit: 500 °F (260 °C) pH range: 2-12 Shaft speeds to: 2,250 fpm Braid construction: Translok



Enviropak 5050 is a cost-effective replacement for Teflon® impregnated Asbestos packing. The synthetic fiber is lubricated with a PTFE suspensoid before braiding. Our high quality break-in lubricant makes 5050 an effective packing for high-speed, rotary or reciprocating applications.

in.	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1
ft./lb.	93.2	41.4	23.3	14.9	10.3	7.6	5.8	3.7	2.6	1.5
mm.	3.18	4.76	6.35	7.94	9.53	11.11	12.70	15.88	19.05	25.40
m./kg.	62.62	27.82	15.66	10.01	6.92	5.11	3.90	2.49	1.75	1.01

### Other Robco Packings

Style	Description	Temperature Limit
Enviropak® 750	Inconel® wire reinforced synthetic fiber valve stem packing.	900 °F/480 °C
Enviropak® 4039	PTFE impregnated Kelvar® packing (aramid fibre).	500 °F/260 °C
Enviropak® 5017	Graphited synthetic fiber packing (square braid).	500 °F/260 °C
Enviropak® 5059	PTFE impregnated synthetic fiber packing (translok braid).	500 °F/260 °C
Enviropak® 5089	PTFE impregnated synthetic fiber packing with Kelvar corners.	500 °F/260 °C

### Vegetable Fiber Packing

Style	Description	Temperature Limit
Enviropak® 380	Tallow and wax lubricated flax fiber packing (square braid).	220 °F/105 °C
Enviropak® 380G	Graphite flake and oil lubricated flax fiber packing (square braid).	220 °F/105 °C
Enviropak® 382	Ramie fiber packing lubricated throughout with vegetable oil (square braid).	270 °F/130 °C
Enviropak® 383	A white petroleum lubricated jute fiber packing (square braid).	270 °F/130 °C
Enviropak® 4040	PTFE impregnated long flax fiber packing (square braid).	275 °F/135 °C

### Specialty Packing

Style	Description	Temperature Limit
Enviropak® 399	100% copper wire packing (no lubricant).	1,000 °F/540 °C
Enviropak <sup>®</sup> 811	Petroleum and graphite lubricated crimped lead foil packing.	450 °F/235 °C
Enviropak® 1120	FDA grade dry PTFE packing (no lubricant).	500 °F/260 °C
Enviropak® 1130	Solid PTFE cord packing for small valves.	500 °F/260 °C
Enviropak® 1171	PTFE lubricated woven Teflon® gasket packing.	500 °F/260 °C
Enviropak® 1550	Spun fibreglass packing (square braid).	1,000 °F/540 °C
Graf-tape® 1250	Flexible graphite available in tape, sheet and die-formed rings.	3,000 °F/650 °C

### **Packing Tools**

- Tool Sets A-B-Deluxe ...... Flexible Packing Extractors F 00 to F 6
- Guillotine Packing Cutter..... Interchangeable tips
- Gasket Punch Sets

Disclaimer: The temperature limits, pH ranges, pressure ratings, feet per box and shaft speeds shown throughout this pamphlet are representative; the service life and performance of these products can be affected by elevated temperatures and other operating conditions such as chemical resistance, shaft speeds, pressure and equipment that the product is being installed in. These ratings supplied are suggested as a guideline and should only be used for evaluating your specific application. When in doubt, contact Robco or your ENVIROPAK distributor. The information contained in this pamphlet should not be considered to be a warranty, either expressed or implied, including, but not limited to, a warranty of merchantability or fitness for a particular purpose. In no event shall Robco be liable for any incidental or consequential damages resulting from the use, misuse or inability to use the products. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.

#### Other Robco Products

- Mechanical Seals..... full line
- · Mechanical Seal Repair ..... all major brands
- Gaskets...... sheet and custom die-cutting.
- Metallic Gaskets ..... ThermoLok™
- Flange Spreaders ..... RotoWedge™
- Expanded PTFE joint sealant .... Jointex®
- Non-asbestos Textiles ...... Thermofab®
- Engineered Plastics ...... Moly-dur®
- Sealants & Adhesives......Redi-GRIP®
- Anti-Seize Compounds................................... Redi-EZE™ as well as penetrating oil and lubricants.

Please ask
your local
representative
about other
available styles
in addition to
mechanical
seals, die-cut
gasketing
materials and
a diverse line
of engineered
plastics.

X



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