

Introduction

SERVING INDUSTRY WORLDWIDE

Thermody™ offer a brief description of our non-asbestos packings. Our commitment is to manufacture products that are safe, reliable, long lasting and easy to install.

Thermody™ Compression Packings are produced using the most modern braiding equipment and the highest quality materials available. These packings have many unique and outstanding characteristics to ensure a broader range of sealing acceptance and to meet your most critical requirements, applications, and environments.

In addition to the styles and materials shown, new styles are constantly being considered. Research and development of new materials and unique, high performance fibers are constantly being tested and evaluated to perform effectively in rigorous end-use.



Introduction

Thermodynamics Asia Pacific Manufactures and supplies high quality compression packing, gaskets, gasket materials and sealing devices.

The Company was established specifically to serve the unique demands of the Oil, Gas, and Petrochemical Plant Industry.

Our impressive ability to meet deadlines and design and manufacture special packing and gaskets quickly established a widespread reputation for quality and service.

Today, we are a major manufacturer of gaskets and compression packing. Our modern facility is fully equipped with the most up-to-date and innovative production machinery available, much of it, custom made by our own technicians.

We currently supply products to every facet of Industry globally.

A great deal of our growth and success is a direct result of our expertise relative to Compression packing. Our early involvement developing specialized Styles for tough marine and industrial service reflects clearly in our products today.



We presently manufacture a comprehensive range of standard packing in varied constructions and material including the latest asbestos replacement and new technology synthetics. Our thorough selection of premium products is realized through aggressive production research and development coupled with the finest production equipment available.

Our entire staff is highly qualified and takes pride in the dynamic growth and progressiveness at Thermodynamics Asia Pacific. The principles of our early success, quality, integrity and service are as important to us as always and provide a strong foundation for our future growth.

Introduction

New material and production techniques demonstrate the continuous development and progress of the compression packing industry. We are fully committed, now and in the future, to providing the very best quality, and service.



This, combined with a competitive pricing schedule affords our customers a meaningful advantage – one that will always be there.

Caution as to Recommendations

Every Effort has been made to ensure maximum accuracy in the compilation of application recommendations, cross-reference guides and product data. However, all values are typical, based upon our experience and knowledge of typical applications and are subject to normal manufacturing variances.



Actual application and environment may result in values different from those shown; our technical staff should be consulted for critical application recommendations.

The application recommendations, cross-reference guides and product data in this catalogue are for information only and do not constitute or imply any warranty other than that given herein.

Warranty

Thermodynamics Asia Pacific warrants that its products will be free of defects in workmanship and materials as would render such products unsatisfactory for normal use. If any products fails to conform to this Warranty and if Thermodynamics Asia Pacific is notified of the nonconformity within Sixty (60) days after the date of receipt of the product, Thermodynamics Asia Pacific will repair or replace the product at its expense including transportation charges, but not the cost of installation.



THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WRITTEN OR ORAL, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.



The repair or replacement by Thermodynamics Asia Pacific of any nonconforming products is expressly agreed to be the buyer's exclusive remedy for any nonconforming products.

Installation & Trouble Shooting

How to Install Packing

Packing the pump correctly

The important of packing the pump correctly cannot be overemphasized. Many packing failures are due to incorrect installation of the packing. The following steps have been devised to ensure effective installation of packing on pumps.

1) REMOVE ALL THE OLD PACKING FROM THE STUFFING BOX.

Clean box and shaft thoroughly and examine shaft or sleeve for wear or scoring. Replace shaft or sleeve if wear is excessive.

2) USE THE CORRECT CROSS-SECTION OF PACKING OR DIE-FORMED RINGS.

To determine the correct packing size, measure the diameter of the shaft (inside the stuffing box area if possible) and then measure the diameter of the stuffing box (to give the O.D. of the ring). Subtract the I.D. measurement from the O.D. measurement and divide by two. The result is the required size.

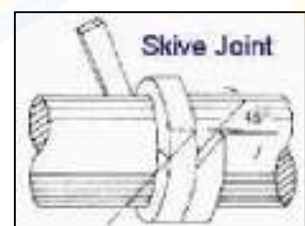
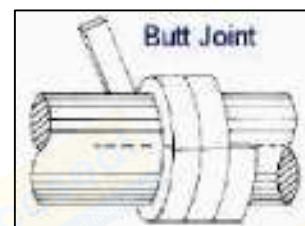
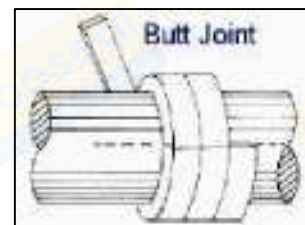
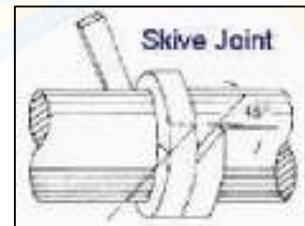
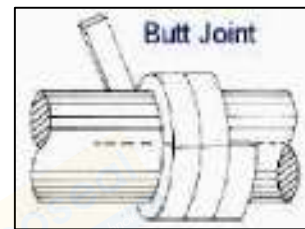
Cut.....Don't Wind

3) WHEN USING COIL OR SPIRAL PACKING, ALWAYS CUT THE PACKING INTO SEPARATE RINGS.

Never wind a coil of packing into a stuffing box. Rings can be cut with butt (square), skive (or diagonal) joints, depending on the construction.

It is recommended that Centerlock packing be cut only by butt (square) method. The following illustration show these methods of preparing bulk packing. The best to cut packing rings is to cut them on a mandrel with the same diameter as the shaft in the stuffing box area. If there is no shaft wear, rings can be cut on the shaft outside the stuffing box.

Hold the packing tightly on the mandrel, but do not stretch excessively. Cut the ring and insert it into the stuffing box, making certain it fits the packing space properly. Each additional ring can be cut in the same manner, or the first ring can be used as a master from which the balance of the rings are cut.

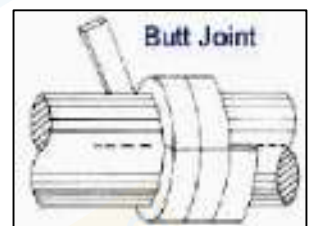
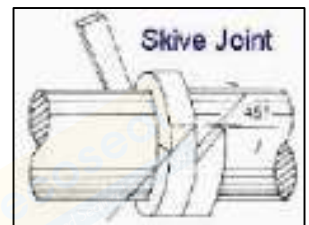
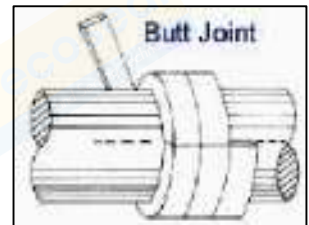
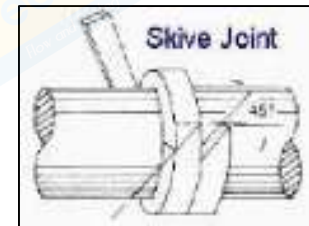
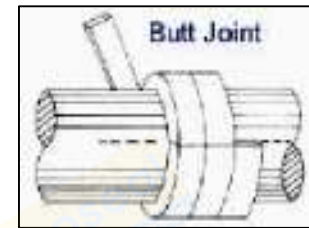


Installation & Trouble Shooting

If the butt cut rings are cut on a flat surface, be certain that the side of the master rings, and not the O.D. or I.D. surface, is laid on the rings to be cut. This is necessary so that the end of the rings can be reproduced.

When cutting skive (diagonal joints), use a maple mitre board so that each successive ring can be cut at the correct angle.

It is necessary that the rings be cut to the correct size. Otherwise, service life is reduced. This is where die-cut rings are of great advantage, as they give you the exact ring size for the I.D. of the shaft and the O.D. of the Stuffing box. There is no waste due to incorrectly cut rings.



4) INSTALL ONE RING AT A TIME.

Make sure it is clean, and has not picked up any dirt in handling. If desired, lubricate the shaft inside of the stuffing box.

Seat rings firmly (except PTFE filament and Graphite yarn packing, which should be snugged up very gently, then tightened gradually after the pumps is on stream).

Joints of successive rings should be staggered and kept at least 90° apart. Each

individual ring should be firmly seated with a tamping tool. When enough rings have been individually seated so that the nose of the gland will reach them, individual tamping should be supplemented by the gland.

5) AFTER THE LAST RING IS INSTALLED,

take up bolts finger tight or slightly snugged up. Do not jam the packing into place by excessive gland loading. Start pump, and take up bolts until leakage is decreased to a tolerable minimum. Make sure gland bolts are taken up evenly. **STOPPING LEAKAGE ENTIRELY AT THIS POINT WILL CAUSE THE PACKING TO BURN UP.**

6) ALLOW PACKING TO LEAK FREELY WHEN STARTING UP A NEWLY PACKED PUMP.

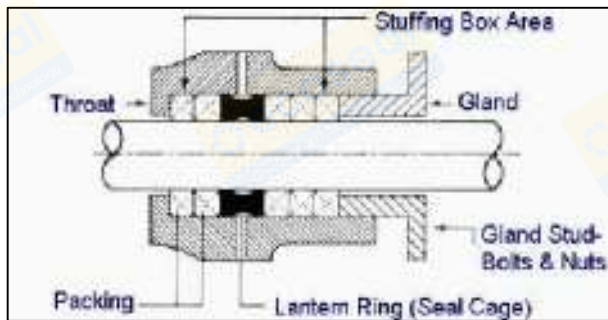
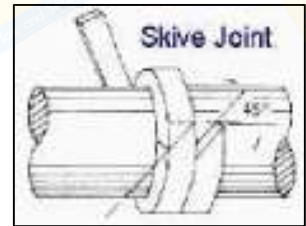
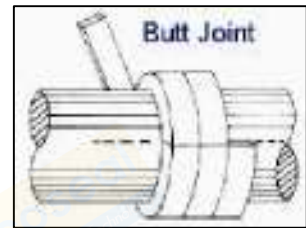
Excessive leakage during the first hour of operation will result in a better packing job over a longer period of time. Take up gradually on the gland as the packing seats, until leakage is reduced to a tolerable level.

Installation & Trouble Shooting

NEVER TRY TO STOP LEAKAGE ENTIRELY, UNLESS WE INDICATE IT IS SAFE TO DO SO

7) WHEN SPECIFIED BY THE PUMP MANUFACTURER, PROVIDE MEANS OF LUBRICATING THE SHAFT AND PACKING THROUGH THE LANTERN RING BY SUPPLYING WATER, OIL, GREASE OR LIQUID HANDLED IN THE PUMP.

Fittings for this purpose are standard on many pumps. □ Flush pressure should be minimum 15 PSI above stuffing box pressure.

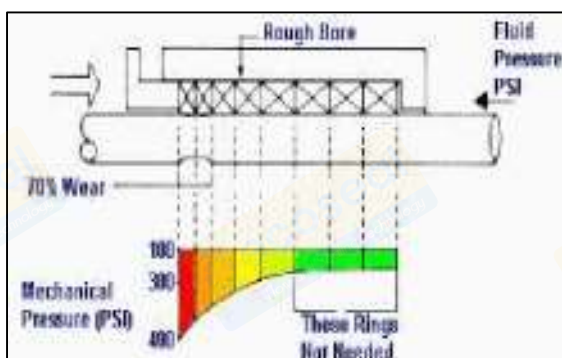


8) IF THE STUFFING BOX HAS A LANTERN RING (See illustration left), make sure that the lantern ring, as installed, is slightly behind the fluid inlet so that it will move under the inlet as follower pressure is applied.

9) REPLACE PACKING WHEN LEAKAGE CANNOT BE CONTROLLED BY FURTHER TAKEUP ON THE FOLLOWER GLAND.

10) ON CENTRIFUGAL, ROTARY AND RECIPROCATING PUMPS,

about 70% of wear is on the outer two packing rings nearest the gland. However, each additional ring does throttle some fluid pressure. On most machines, there must be enough rings so if one fails, another does the sealing, and the machine need not be shut down.



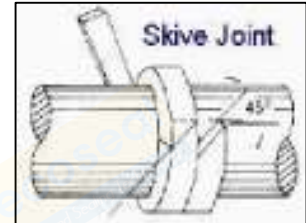
Wear / pressure load curve

The mechanical pressure curve above shows eight packing rings. The first five rings do the majority of the sealing. The bottom three do little sealing, but are needed to fill the available space. The advantage of using fewer rings is less rod wear. Also, the stuffing box design is simpler and takes less material. But, wear isn't the only problem. With high temperatures, high pressures, corrosive chemicals, or abrasive particles in the fluid, more rings may be the only solution for some services. In such cases, the bottom ring contacting the fluid may have the most wear from these severe service conditions.

Installation & Trouble Shooting

PACKING VALVES CORRECTLY

As with pump packing, the first step in getting the most out of a valve packing is correct installation. Here is the correct way to pack valves.

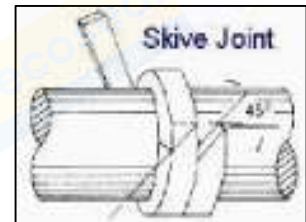


1) CAREFULLY PERFORM ALL OPERATIONS LISTED UNDER PUMP PACKING, STEPS 1-5.

Rings used on valves and expansion joints are generally cut with a diagonal joint (illustrated below). In preparing diagonal cut (45°) rings, be sure that the first ring is cut carefully, and then tested on the stem.

2) BRING THE FOLLOWER DOWN ON THE PACKING TO THE POINT WHERE HEAVY RESISTANCE TO WRENCHING IS FELT.

During this time, turn valve stem back and forth to determine ease of turning. Do not torque down to the point where the stem won't turn.



3) AFTER THE VALVE HAS BEEN ON THE LINE A DAY OR SO, EVEN IF NO LEAKAGE EXISTS, THE FOLLOWER SHOULD BE TIGHTENED SLIGHTLY.

Obviously, if leakage is occurring, the follower must be tightened.

TROUBLE-SHOOTING PACKING FAILURES

Packing may fail for a variety of reasons.

Besides improper installation, packing failures are often due to worn or faulty equipment, shaft misalignment, uneven take-up on the gland bolts, and other causes.

If you have trouble, carefully remove and examine the old packing set. **DO NOT THROW THE SET AWAY**, because it often gives clues as to the condition of the equipment, and may be the means of solving the problem. The following clues and possible causes were found by examining sets of packing which failed in service.

CUE

Excessive reduction in cross-section of packing directly beneath the rod, shaft or plunger.

POSSIBLE CAUSE

Rod or plunger out of alignment, and in the case of the rod or shaft, the bearings may be badly worn, causing whipping of shaft.

Installation & Trouble Shooting

TROUBLE-SHOOTING PACKING FAILURES

CLUE

Excessive reduction in the thickness of the packing directly over, or on either side of the rod or shaft.

POSSIBLE CAUSE

Rod or plunger out of alignment, and in the case of the rod or shaft, the bearings may be badly worn, causing whipping of shaft.

CLUE

A whole ring, or part of a ring is missing from set.

POSSIBLE CAUSE

Bottom of stuffing box badly worn, with packing being extruded into the system.

CLUE

Wear on the outside of one or more rings.

POSSIBLE CAUSE

Rings rotating with shaft, or loose in the box. Packing too small.

CLUE

Axial bulge in one or more rings.

POSSIBLE CAUSE

Adjacent rings cut too short or too long, depending on the style of material used, causing packing under pressure to be deformed.

CUE

Packing shows tendency to extrude between rod or shaft, and the gland follower.

POSSIBLE CAUSE

Excessive gland bolt pressure and/or too much clearance between the rod or shaft and the gland follower.

CLUE

Rings next to gland follower badly damaged with bottom rings in fair condition.

POSSIBLE CAUSE

Improper installation of packing and excessive gland bolt pressure used.

CLUE

Wearing surface of rings dried and charred with rest of packing in good condition.

POSSIBLE CAUSE

High temperatures and lack of adequate lubrication.

CLUE

Innermost ring deteriorated.

POSSIBLE CAUSE

Packing incompatible with fluid handled.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 300



DuPont's continuous filament Kevlar® is impregnated with a PTFE suspensoid. A polydimethyl siloxane break-in lube is added.

Interlock braided. (118" and 3116" plaited)

Temperature to 260°C maximum

pH range from 2-12

Shaft speed to 2500 feet/minute (12m/s) Pump and valve packing for moderate conditions.

The high tensile strength of Kevlar® makes this packing ideally suited for slurry and abrasive service.

STYLE 300



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 320



Kynol, a new type of aramid fiber, is impregnated with PTFE suspensoid. A special non-silicone break-in lube added.

Interlock braided. (118" and 3116" plaited)

Temperature to 260°C maximum

pH range from 0-13

Shaft speed to 1500 feet/minute (7.6m/s)

Moderate pump and valve services. Not for sulphuric or nitric acids, or strong bases.

STYLE 320



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 230



STYLE 230

Pure PTFE fiber is impregnated with PTFE suspenoid. Meets Military Specification MIL-P-24396 Type B; also Type C when cleaned for oxygen service. Interlock braided. (118" and 3116" plaited)
Temperature to 260°C maximum
pH range from 0-14
Shaft Speed up to 600 ft/min (3m/s)
Pressure to 3000PSI (200 bar)
Extreme chemical valve service. This dense packing has a very low coefficient of friction, which reduces the need for adjustment after installation.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 231



STYLE 231

Pure PTFE fiber is impregnated with PTFE suspenoid and an inert silicone break-in lube. Meets Military Specification MIL-P-24396 Type A. Interlock braided. (118" and 3116" plaited)
Temperature to 260°C maximum
pH range from 0-14
Shaft speed to 1800 feet/minute (9 m/s) A soft but dense packing for use on extreme chemical pump services. Not for use with molten alkalies.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 210



Original 100% W.R.Gore's PTFE/Graphite patented GFO® fiber yarn is braided by a special technique into a dense but conformable packing.

Interlock braided. (1/8" and 3/16" plaited)

Temperature to 290°C maximum

pH range from 0-14

Shaft speed to 4000 feet/minute (20 m/s) Excellent multi-purpose packing for acids, alkalies, solvents, and steam.

STYLE 210



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 208



A universal carbonized PTFE/Graphite fiber is impregnated with a proprietary lubricant. A special start-up lubricant is added.

Interlock braided. (1/8" and 3/16" plaited)

Temperature to 280°C maximum

pH range from 0-14

Shaft speed to 2000 feet/minute (10 m/s)

Excellent multi-purpose pump packing for acids, alkalies, solvents, and steam.

STYLE 208



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 237 and 238



**STYLE 237
and 238**

A special polyacrylonitrile homopolymer (acrylic) yarn blend is impregnated with PTFE suspensoid. Style 238 incorporates an additional inert lubricant for ease of start-up and resiliency. Interlock braided. (118" and 3116" plaited) Temperature to 260°C maximum pH range from 2-12 Shaft speed to 2200 feet/minute (11 mis) A general purpose pump packing as a direct replacement to Asbestos fiber. Style 237 is a dry valve packing.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 345



STYLE 345

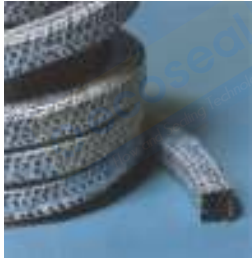
High quality flax or ramie fibers are impregnated with special lubricants and square braided. The final packing is generously impregnated with PTFE suspensoid for a smooth white finish. Temperature to 130°C maximum pH range from 5-11 Shaft speed to 1800 feet/minute (9 m/s) Used in marine and paper mill applications such as stern tubes, rudder posts, jordans, and stock pumps.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 400



STYLE 400

Carbon yarns are impregnated with PTFE as a blocking agent to prevent carbon migration and provide excellent break-in qualities with non-silicone lubricant. Interlock braided. (1/8" and 3/16" plaited) Temperature to 350°C maximum (oxidizing atm.) pH range from 0-14 Shaft speed to 2600 feet/minute (13 m/s) General service pump and valve packing used in paper and pulp, hydrocarbons, water and most chemical services.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 430



STYLE 430

Carbon yarns are impregnated with a blocking agent. A high temperature oil and pure graphite particles are added as a break-in lubricant. Interlock braided. (1/8" and 3/16" plaited) Temperature to 350°C maximum (oxidizing atm.) pH range from 0-14 Shaft speed to 2600 feet/minute (13 m/s) General service pump and valve packing for solvents, petrochemicals, and mild acids and alkalis.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 800



Pure nuclear grade graphite filament fiber with graphite coating. Low density. Meets DOD-P-24583 class 2 Interlock braided. (1/8" and 3/16" plaited) Temperature to 1910°C maximum in non-oxidizing pH range from 0-14, except for concentrated acids. Shaft speed to 5000 feet/minute (25 m/s) Extreme valve service, Used in conjunction with grafoil rings.

STYLE 800



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 830



Pure graphite filament yarns as impregnated with a proprietary blocking agent. A high quality graphite particle lubricant is added. Meets DOD-P-24583 class 1 & 3. Interlock braided. (1/8" and 3/16" plaited) Temperature to 650°C maximum in steam, 345°C others. pH range from 0-14, except for concentrated acids. Shaft speed to 4000 feet/minute (20 m/s) Pump and valve services involving the most extreme services of media. Does not fray when cut.

STYLE 830



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 450INC Valve



A high temperature Carbon yarn valve stem and expansion joint packing for severe services. An inconel inserted carbon fiber is braided over a flexible plasticised special core. Corrosion inhibitors are added, as is a high temperature particulate graphite finish. Temperature to 650°C maximum in steam. pH range from 2-14 Pressure to 2500 PSI (165 bar) For high temperature steam, gas, and hydrocarbons.

STYLE 450INC VALVE



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 250INC Valve320



A high temperature Fiberglass valve stem and expansion joint packing for severe services. An inconel-inserted heat stabilized fiberglass yarn is braided over a flexible plasticised special core. Corrosion inhibitors are added, as is a high temperature particulate graphite finish. Temperature to 540°C maximum in steam. pH range from 3-11 Pressure to 1500 PSI (100 bar) High temperature steam, gas, and hydrocarbons.

STYLE 250INC VALVE



Category: Compression Braided Packings

Group: Asbestos Fibre Packing

Model: Style 3030INC Valve



**STYLE 3030INC
VALVE**

A high-temperature valve stem and expansion joint packing for severe services. Meets Military Specs MIL-P-17303C Class 2 Type E.

An-inconel-inserted AAA grade asbestos yarn is braided over a flexible plasticised special core.

Corrosion inhibitors are added, as is a high-temperature particulate graphite finish.

Temperature to 650°C maximum

pH range from 3-11

Pressure : 2500 psi (165 bar)



Category: Compression Braided Packings

Group: Asbestos Fibre Packing

Model: Style 340BIL



STYLE 340BIL

Commercial grade chrysotile asbestos yarns are thoroughly impregnated with PTFE suspensoid. The final packing is again saturated with PTFE. A USP petrolatum lube is added for ease of start-up.

Meets Military Specification MIL-P-24377A.

Interlock braided. (118" and 3116" plaited)

Temperature to 260°C maximum

pH range from 2-12

Shaft speed to 1500 feet/minute (7.5 m/s) A general purpose tough economical packing for pump and valve service.



Category: Compression Braided Packings

Group: Asbestos Fibre Packing

Model: Style 802



STYLE 802

Chrysotile asbestos yarns are impregnated with a hightemperature petroleum lubricant, then coated yarn-by-yarn with particulate graphite. Meets Military Specification HH-P-3413 Type 1. Interlock braided. (118" and 3/16" plaited) Temperature to 260°C maximum pH range from 4-10 Shaft speed to 1000 feet/minute (5 m/s) A general purpose economical packing for moderate pump and valve services.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 239



STYLE 239

A special polyacrylonitrile homopolymer (acrylic) yarn blend is braided and individually treated with PTFE and graphite. Surface coated with special break-in lubricant to seal all voids. Interlock braided. (118" and 3/16" plaited) Temperature to 280°C maximum pH range from 2-12 Shaft speed to 2300 feet/minute (12 m/s) General purpose pump and valve packing as a direct replacement with the Asbestos Graphited Packing



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: **Style 1288**

Packing for Rotating and Oscillating Equipment



STYLE 1288

Pure Expanded PTFE Braided Packing Impregnated with PTFE suspensoid

A square interlock braided packing using 100% white Expanded PTFE yarns, Thermody™ Style 1288 is impregnated with a PTFE suspensoid; then treated with an inert oil.

Thermody™ starts with the advantages of PTFE - good dimensional stability, a wide temperature range, flexibility with toughness and combines them with the superior interlock construction to form adaptable, effective packings.

High in quality and consistently uniform, they are extensively used in the food processing, chemical, agricultural, and petroleum processing industries.

Style 1288 is FDA Approved and USDA Approved.

It is designed to be used in extremely corrosive conditions.

Packing for Rotating and Oscillating Equipment



STYLE 1288

Pure Expanded PTFE Braided Packing Impregnated with PTFE suspensoid

It is highly conformable and requires only moderate gland pressure for a tight seal.

Thermody™ Style 1288 is used primarily in centrifugal pump applications; however, it is also an excellent choice for use in agitators and other equipment.

Temperature Limit 550°F (280°C)

pH Range 0 to 14

Shaft Speed 1800 FPM

Pump Pressure 500 PSI

PV Limit * 275,000

Packing for Rotating and Oscillating Equipment



STYLE 1288

Pure Expanded PTFE Braided Packing Impregnated with PTFE suspensoid

Style 1288

Cross Section sizes and Approximate length per kg

Sizes	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
mm	3.2	4.8	6.4	7.9	9.5	12.7	15.9	19.1	22.2	25.4
Mtr/kg	74	37	19	13	9	5	3.1	2.2	1.8	1.4

WARNING:

Properties applications shown here are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Thermodynamics.

Failure to select the proper sealing products could result in property damage and/or serious personal injury.

This performance data has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this information, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues.

Subject to change without notice.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 1289

Packing for Valves and Static Service



STYLE 1289

Pure Expanded PTFE Braided Packing

Contains no impregnant, has no lubricant, and has no finish treatment

Style 1289 is the super packing guaranteed for the life of the valve

Thermody™ Style 1289 is made of 100% white Expanded PTFE yarns, braided square and firm using the interlocked construction. It contains no impregnant, has no lubricant, and has no finish treatment. Style 1289 is designed for use in valves, but can be used in other low speed services. This dimensionally stable, firm, high-density continuous Expanded PTFE yarn packing is most useful in slower shaft speed applications. Its PTFE dispersion provides a low friction finish and prevents leakage through the braid.

Packing for Valves and Static Service



STYLE 1289

Pure Expanded PTFE Braided Packing

Contains no impregnant, has no lubricant, and has no finish treatment

Style 1289 is the super packing guaranteed for the life of the valve

Style 1289 is resistant to all chemicals but molten uranium salts. Completely asbestos-free, with very little water absorption, this packing is often used in check and needle valve stems, reciprocating rods, rams, and plungers, and safety injection system valves. High in quality and consistently uniform, they are extensively used in the food processing, chemical, agricultural, and petroleum processing industries.

If Style 1289 does not outlast the valve it's in, we'll replace the packing FREE. No other packing is similarly guaranteed. Style 1289 is FDA Approved and USDA Approved.

Packing for Valves and Static Service



STYLE 1289

Pure Expanded PTFE Braided Packing

Contains no impregnant, has no lubricant, and has no finish treatment

Style 1289 is the super packing guaranteed for the life of the valve

When you tighten conventional valve packings, you squeeze the life out of them. Protective lubricants are extruded so the packing hardens and soon leaks again. If chemicals are present, deterioration can be rapid. Conventional valve packings just don't last, so why use them? Control leaks with Thermodyä 1289, a special PTFE packing. You can't squeeze out the lubricants, it can't harden and can't deteriorate on a wide range of services including steam up to 500°F (260°C), severe chemicals or solvents. It is highly conformable and requires only moderate gland pressure for a tight seal.



Category: Compression Braided Packings
Group: Non-Asbestos Fibre Packing
Model: Style 1289

Packing for Valves and Static Service



Temperature Limit 500°F (260°C)
 Shaft Speed 600 FPM
 pH Range 0 to 14
 Pressure 2500 PSI
 PV Limit * 275,000

Style 1289

Cross Section sizes and Approximate length per kg

Sizes	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
mm	3.2	4.8	6.4	7.9	9.5	12.7	15.9	19.1	22.2	25.4
Mtr/kg	74	37	19	13	9	5	3.1	2.2	1.8	1.4

STYLE 1289

WARNING:

Properties applications shown here are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Thermodynamics. Failure to select the proper sealing products could result in property damage and/or serious personal injury. This performance data has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this information, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.



Category: Compression Braided Packings
Group: Non-Asbestos Fibre Packing
Model: Style 1255



Braided Tubing / Joint Sealant for Door Seals and Flanges Static Services

Pure Expanded PTFE Braided Tubing/Sleeve

Contains no impregnant, has no lubricant, and has no finish treatment Available with one side Pressure Sensitive Adhesive Paper

Thermody™ Style 1255 is made of 100% white Expanded PTFE yarns, braided tubing and firm using the interlocked construction . It contains no impregnant, has no lubricant, and has no finish treatment. It is available with one side

STYLE 1255

Pressure Sensitive Adhesive paper for easy installation.

Style 1255 is designed for use in Door Seal for Boiler Doors, Boiler Drums, Manholes, Handholes, Heat Exchanger covers and as a Joint Sealant in Flanges and all static applications.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 1255



STYLE 1255

Braided Tubing / Joint Sealant for Door Seals and Flanges Static Services

Pure Expanded PTFE Braided Tubing/Sleeve

Contains no impregnant, has no lubricant, and has no finish treatment
Available with one side Pressure Sensitive Adhesive Paper

This dimensionally stable, firm, high-density continuous Expanded PTFE yarn tubing is most useful in static applications. Its PTFE dispersion provides a low friction finish and prevents leakage through the braid.

Style 1255 is resistant to all chemicals but molten uranium salts.

Completely asbestos-free, with very little water absorption.

High in quality and consistently uniform, they are extensively used in the food processing, chemical, agricultural, and petroleum processing industries.

Style 1255 is FDA Approved and USDA Approved.



STYLE 1255

Braided Tubing / Joint Sealant for Door Seals and Flanges Static Services

It is highly conformable and requires only moderate gland pressure for a tight seal.

Packaging: In our standard 5.0kg spool

Sizes: Please provide the required thickness and width of your applications.

Temperature Limit 500°F (260°C)

pH Range 0 to 14

Pressure 2500 PSI

PV Limit * 275,000

WARNING:

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Category: Compression Braided Packings
Group: Non-Asbestos Fibre Packing
Model: Style 268W



STYLE 268W

Packing for Rotating and Oscillating Equipment
General service synthetic yarn braided packing impregnated with PTFE suspensoid

Features: Every fiber are coated in PTFE suspensoid. This system of impregnation assures even distribution of the PTFE. The fibers are saturated and sealed with the PTFE particles, protecting the fibers from chemical action.

Surface Treatment: A surface coating of PTFE is applied after braiding. To assure good break-in characteristics, a special high temperature synthetic lubricant is added.

All internal voids are filled, eliminating the dry centers left by other packing treatments



STYLE 268W

Packing for Rotating and Oscillating Equipment
General service synthetic yarn braided packing impregnated with PTFE suspensoid

Style 268-W offers the clean, dependable service that the food processing and papermaking industries demand.

Equipment: General service on rotary and reciprocating pumps, agitators. Recommended for: Caustics, mild acids, difficult chemicals, air, gases, solvents, oils, general chemical plant applications.

Temperature Limit 550°F (280°C)
 pH Range 3 to 11
 Shaft Speed 2500 FPM
 Pump Pressure 500 PSI
 Rotary/Centrifugal (35 Bar)
 PV Limit * 100,000
 Construction: Multi-Lok Braid



STYLE 268W

Packing for Rotating and Oscillating Equipment
General service synthetic yarn braided packing impregnated with PTFE suspensoid

Style 268-W	Cross Section sizes and Approximate length per kg									
Sizes	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
mm	3.2	4.8	6.4	7.9	9.5	12.7	15.9	19.1	22.2	25.4
Ft/Lb	84.07	44.73	21.62	13.84	9.61	5.41	3.46	2.40	1.77	1.35
Mtr/kg	63.30	27.37	16.28	9.12	5.87	4.07	2.29	1.47	1.21	0.93

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Category: Compression Braided Packings
Group: Non-Asbestos Fibre Packing
Model: Style 208SC

Packing for Rotating and Oscillating Equipment
General Service Pump Packing

New



Thermody. Style 208SC is a graphite lubricated PTFE yarn packing with a silicone rubber core.

It combines the chemical resistance of PTFE, the heat conductivity of graphite, and the resilience of rubber to create a packing capable of sealing aggressive chemicals in a variety of demanding applications where conventional PTFE packings fail to perform satisfactorily.

STYLE 208SC

The rubber core provides 'memory' so the packing retains its shape even under sideloading conditions.

Packing for Rotating and Oscillating Equipment
General Service Pump Packing

New



Temperature Limit 450°F (230°C)
 pH Range 2 to 12
 Shaft Speed 3600 FPM (18 m/sec)
 Pump Pressure 500 PSI
 PV Limit * 275,000

STYLE 208SC

- Excellent chemical resistance for plantwide use
- Rubber core provides memory -- packing retains shape, even under side-loading conditions

Packing for Rotating and Oscillating Equipment
General Service Pump Packing

New



Style 208SC	Cross Section sizes and Approximate length per kg									
Sizes	3/8"		7/16"		1/2"	9/16"	5/8"	3/4"	7/8"	1"
mm	9.6	10.0	11.0	12.0	12.7	14.0	16.0	19.0	22.0	25.4
Mtr/kg	9	8	7	6	5	4	3.1	2.2	1.8	1.4

STYLE 208SC

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Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 300SC

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Thermody. 300SC combines a resilient silicone rubber core with the heat resistant, Dupont Kevlar® fiber of Thermody. Style 300.

The elastic rubber core gives the packing better memory, allowing it to withstand radial shaft motion and vibration while maintaining excellent leakage control with minimal gland adjustments.

STYLE 300SC

Rugged, easy to use and break-in, the 300SC is designed for use in abrasive service applications such as agitators, blenders, mixers, washers, pulpers or any other applications that undergo shaft deflection in normal operating conditions.

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Temperature Limit 450°F (230°C)
pH Range 2 to 12
Shaft Speed 2000 FPM (10 m/sec)
Pump Pressure 500 PSI
PV Limit * 275,000

STYLE 300SC

Rugged, easy to use Abrasive service packing
Withstands radial shaft motion and vibration

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Style 300SC	Cross Section sizes and Approximate length per kg									
Sizes	3/8"		7/16"		1/2"	9/16"	5/8"	3/4"	7/8"	1"
Mm	9.5	10.0	11.8	12.0	12.7	14.0	16.0	19.0	22.0	25.4
Mtr/kg	9	8	7	6	5	4	3.1	2.2	1.8	1.4

STYLE 300SC

WARNING:

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Subject to change without notice.



Category: Compression Braided Packings

Group: Non-Asbestos Fibre Packing

Model: Style 1278C

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Thermody. 1278SC combines a resilient silicone rubber core with the heat resistant, thermoset fiber of Thermody. Style 1288.

The elastic rubber core gives the packing better memory, allowing it to withstand radial shaft motion and vibration while maintaining excellent leakage control with minimal gland adjustments.

STYLE 1278SC

Rugged, easy to use and break-in, the 1278SC is designed for use in general service applications such as agitators, blenders, mixers, washers, pulpers or any other applications that undergo shaft deflection in normal operating conditions.

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Temperature Limit 450°F (230°C)
pH Range 2 to 12
Shaft Speed 2000 FPM (10 m/sec)
Pump Pressure 500 PSI
PV Limit * 275,000

STYLE 1278SC

Rugged, easy to use general service packing
Withstands radial shaft motion and vibration

**Packing for Rotating and Oscillating Equipment
Abrasive Service Silicon Rubber Core Packing**

New



Style 1278SC	Cross Section sizes and Approximate length per kg									
	3/8"		7/16"		1/2"	9/16"	5/8"	3/4"	7/8"	1"
Sizes mm	9.5	10.0	11.0	12.0	12.7	14.0	16.0	19.9	22.0	25.4
Mtr/kg	9	8	7	6	5	4	3.1	2.2	1.8	1.4

STYLE 1278SC

WARNING:

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