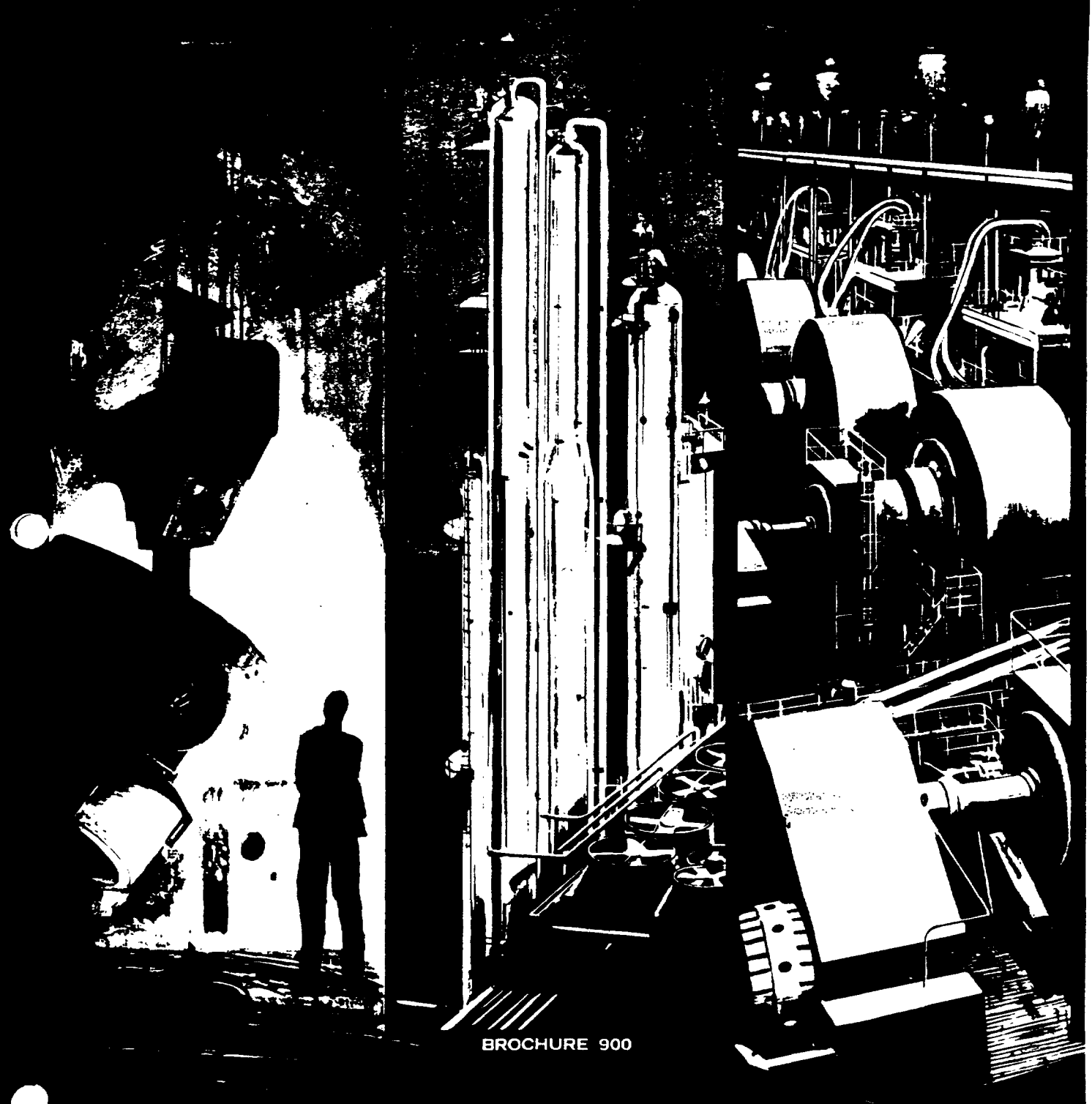
PLAINTIFF'S EXHIBIT

UTX-44

UTEX



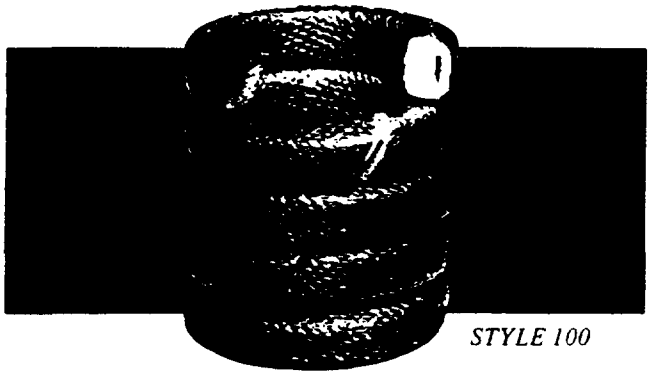
BROCHURE 900

INDUSTRIAL PRODUCTS

UTEX 001102

UTEX COMPRESSION PACKINGS

STYLE 100 HIGH PRESSURE ASBESTOS PACKING



STYLE 100

Manufactured from a closely woven asbestos cloth treated with a heat resisting compound and formed around a rubber cushion back. It has a graphite coating and is lubricated.

Availability: Approximate 12 ft. spirals. Stock sizes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4". Sizes above 3/4" available on special order. Cut ring and die formed sets made to any specification.

Service: Recommended for steam, gas and air service on piston and valve rods of compressors, pumps, steam engines, steam hammers, etc.

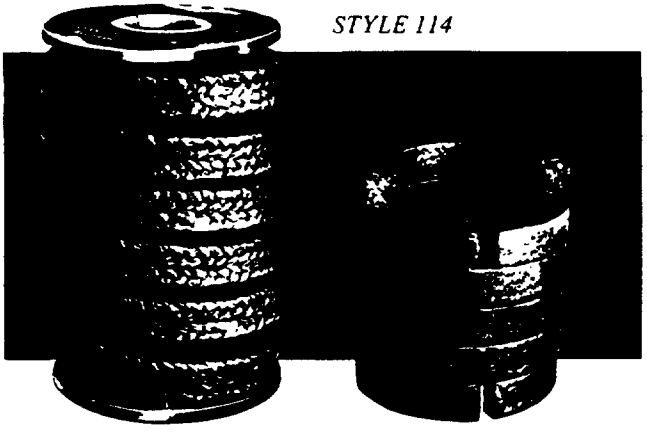
STYLE 105 ASBESTOS HOT OIL PACKING

Made from a high grade asbestos, constructed by the braid over braid method. It is treated with a heat resistant binder and graphited.

Availability: 1/8", 3/16", 1/4", 5/16", 3/8", and 1/2" on small or large spools; 5/8" and 3/4" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for hot oil pumps, valves and other refinery service.

STYLE 114 INTERLOCKING BRAIDED ASBESTOS



STYLE 114

An interlocking braided asbestos manufactured from a long fibre yarn thoroughly lubricated and graphited.

Also, available without graphite.

Availability: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4", 7/8", and 1".

Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.

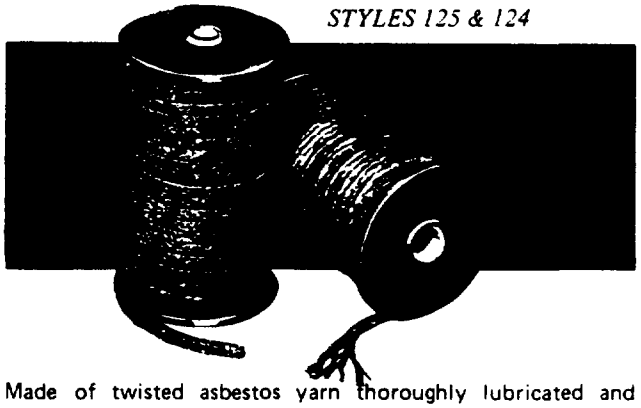
Service: Recommended for brass or steel rods, plungers and centrifugal shafts handling oil, water, air, steam, mild chemicals and acids.

STYLE 115 SQUARE BRAIDED ASBESTOS

Same as Style 114 only square braided.

STYLE 124 TWISTED ASBESTOS VALVE STEM PACKING

STYLES 125 & 124



Made of twisted asbestos yarn thoroughly lubricated and graphited.

Availability: Sizes 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only.

Service: Recommended for small valve stems and pump rods handling water, air, oil, ammonia, and steam.

STYLE 125 BRAIDED ASBESTOS VALVE STEM PACKING

Made of asbestos yarn, braided round, lubricated and graphited throughout.

Availability: Sizes 1/8", 3/16", 1/4", 5/16", 3/8", and 1/2". Sizes through 1/2" on small or large spools.

Service: Recommended for small valve stems and pump rods handling air, water, oil, ammonia, and steam.

STYLE 130 GRAPHITE FILAMENT PACKING



STYLE 130

Manufactured from interlocking braided graphite filament yarn, and lightly impregnated with TFE dispersion. Inert in practically all chemical environments with the exception of those displaying the characteristics of excessive oxidizing agents such

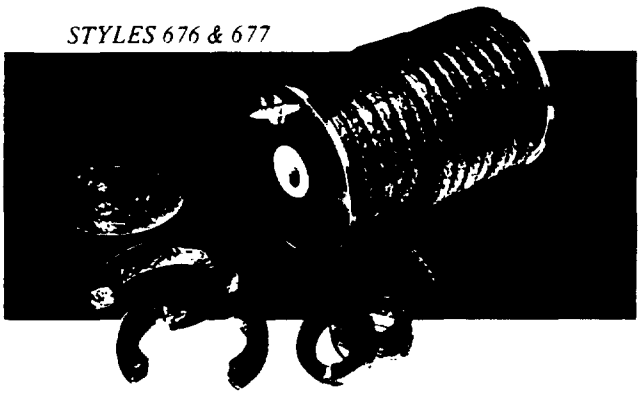
as sodium chlorate, dichromates, and hot, fuming nitric acid. Excessive heat buildup from friction is carried away through the packing itself, making lubrication unnecessary. Once the packing set has seated, the packing changes volume only as the metal in the equipment expands or contracts.

Availability: Sizes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8", and 1". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for use in hot uranium salts, abrasive colloidal silicate suspensions in water, hot oil, steam exchange fluids, chlorinated hydrocarbons, syrups, plastics, resins, ink, tars, fatty acids, and steam carried slurries.

STYLE 676 HI-TEMPERATURE VALVE STEM PACKING

STYLES 676 & 677



Developed especially for extreme service conditions. Manufactured from high quality, long fibre asbestos and flake graphite core, jacketed with inconel wire-reinforced asbestos yarn. All surfaces are completely treated with anti-frictional graphite. Has the ability to withstand high operating pressures and temperatures. Reduces friction to a minimum for satisfactory performance under the most extreme conditions.

Availability: Sizes 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4". 1/8" through 1/2" on small or large spools. Sizes over 1/2" through 1-1/4" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for service on valve stems and rods in hot air, super-heated steam, and hot oils. Also recommended for service on expansion joints, gauge glass fittings, and other similar applications.

STYLE 677 HI-TEMPERATURE VALVE STEM PACKING

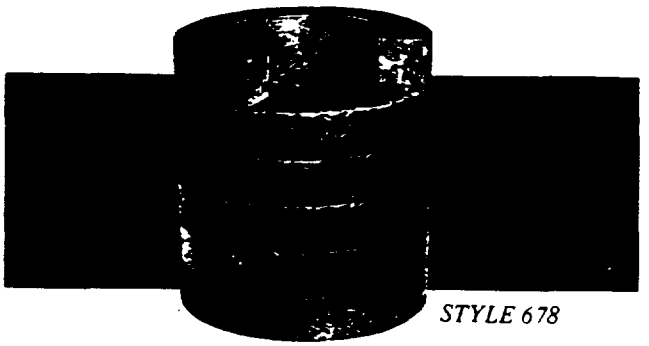
Same as Style 676 with the addition of special corrosion inhibitors.

Availability: Sizes 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4". 1/8" through 1/2" on small or large spools. Sizes over 1/2" through 1-1/4" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for service on valve stems and rods in hot air, super-heated steam, and hot oil where corrosion from hydrostatic testing may be a problem. Also, recommended for service on expansion joints, gauge glass fittings, and other similar applications.

STYLE 678 HIGH PRESSURE PLASTIC PACKING

Composed of a braided wire inserted jacket over a pliable plastic core consisting of asbestos fibres, graphite, high temperature anti-frictional metal chips, and a special oil-resistant binder. The manufacturing process produces a dry graphitized treatment of each fibre and metal particle and results in a dense, yet pliable packing. Its homogeneous core gives a highly non-frictional wearing surface throughout, assuring long packing service and minimum equipment wear. Additional rings may be added to the stuffing box without removing the old packing.



STYLE 678

Availability: Sizes 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4". 1/8" through 1/2" on small or large spools. Sizes over 1/2" through 1-1/4" on large spools only. Cut rings and die formed sets made to any specification.

Service: Recommended for use on centrifugal shafts, reciprocating rods, valve stems, and expansion joints handling low pressure and super-heated steam, water, mild chemicals and acids, gasoline, propane, butane, cold and hot oil, and other petroleum products.

STYLE 610 FLEXIBLE FULL METALLIC PACKING



STYLE 610

Manufactured from soft ribbons of special alloy foil. It has a twisted and crimped construction, with each layer of the foil thoroughly lubricated and graphited.

Availability: Approximately 14' spirals. Stock sizes from 1/8" to 1". Cut ring and die formed sets made to any specification.

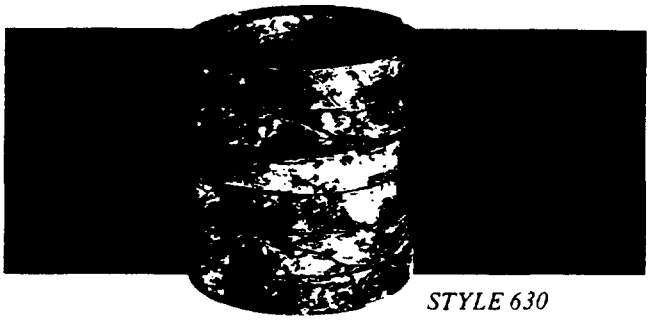
Service: Recommended for use on centrifugal and reciprocating pump rods, plungers, and valve stems handling steam, light and heavy oils, gasoline, air, ammonia, hot and cold water. Not recommended for use on brass or bronze rods or plungers.

STYLE 630 FLEXIBLE ALUMINUM FOIL PACKING

Manufactured from soft aluminum foil, twisted and crimped about a high grade, non-lubricated asbestos core and squared to the desired size. The aluminum foil is treated throughout with a high temperature lubricant and graphite compound. The asbestos core gives the necessary resiliency and flexibility to

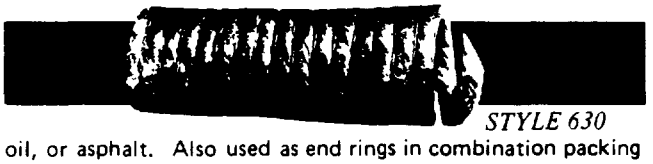
adapt the packing to various size stuffing boxes.

Availability: Approximately 14' spirals in sizes 1/8" square and up. Cut ring and die formed sets made to any specification.



STYLE 630

Service: Recommended for use in expansion joints, valves, rams and plungers in high temperature service handling hot



STYLE 630

oil, or asphalt. Also used as end rings in combination packing sets to prevent extrusion. Not recommended for use on brass or bronze rods or shafts.

STYLE 640 FLEXIBLE COPPER FOIL PACKING

Manufactured from a soft, annealed copper foil, twisted and crimped about a non-lubricated high quality asbestos core. Each layer of the foil is lubricated with a high temperature lubricant, and graphited.

Availability: Approximately 14' spirals in sizes 1/8" square and up. Cut ring and die formed sets made to any specification.

Service: Recommended for use on hot oil pumps, expansion joints, and valve stems. Also used as end rings of combination sets. Not recommended for use on brass or bronze rods or shafts.

UTEX TFE PACKINGS

STYLE 117 TFE TREATED ASBESTOS

A square braided, long fibre asbestos yarn, treated with TFE, resulting in a packing that is soft, pliable, and anti-frictional.

Availability: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", and 7/8". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for mild chemicals and acids, water, oil, gasoline, propane, butane, ammonia, and steam.

STYLE 118 TFE IMPREGNATED BLUE AFRICAN ASBESTOS

A square braided blue African crocidolite yarn lubricated with TFE, an acid and caustic resistant synthetic resin lubricant.

Availability: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended for general use in plants handling strong acids or caustics on centrifugal or rotary pumps.

STYLE 119 INTERLOCKING BRAIDED TFE IMPREGNATED ASBESTOS

Made from commercial grade white asbestos yarn impregnated with 35% TFE suspensoid and further lubricated with a light oil.

Availability: 1/8", 3/16", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.

Service: Recommended as an all purpose packing for high speed rotating shafts, valve stems, agitators, expansion joints, etc., particularly where good chemical resistance is required.



STYLE 119

STYLE 128 INTERLOCKING BRAIDED PURE TFE SOFT FILAMENT PACKING

Made from 100% TFE filament yarn, lubricated with a dispersion of TFE, an inert high temperature lubricant. This soft and flexible packing seals with minimum gland pressure.

Availability: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4". Sizes through 1/2" on small or large spools. Sizes over 1/2" on large spools only. Cut ring and die formed sets made to any specification.



STYLE 128

Service: The physical properties of Style 128 makes it an ideal packing for practically all rugged services, especially where a softer, more pliable packing is required. It offers complete chemical inertness, high strength to minimize cold flow or extrusion, lowest coefficient of friction (0.01) of any known fibre. Because it is carbon-free, it is less sensitive to heat, permits higher pump speeds, and easier gland adjustment. Service experience has indicated that Style 128 will give outstanding performance on concentrated acids and caustics, aromatic high gravity crude oils, and severely corrosive fluids such as hot glycols, amines and hot salt water with heavy concentrations of oxides and sulfides. Recommended for steam, gas and air service on piston and valve rods of compressors, pumps, steam engines, steam hammers, etc. Sets are packaged individually for each pump shaft, rod or plunger, with instructions for installation and adjustment.

STYLE 129 INTERLOCKING BRAIDED PURE TFE FILAMENT PACKING

Constructed of pure TFE filament, which is preshrunk and thoroughly impregnated with TFE dispersion. After impregnation, the fibres are braided square using an interlocking braid. The TFE dispersion serves as a sealant between the individual fibres, preventing leakage through the interlocking structure. There are no inorganic fibres to alter the "slipperiness" of the TFE. Style 129 is stronger than resin in compressional strength, making it a strong, tough packing for extremely high pressures.

Availability: Same as Style 128.

Service: Same as Style 128, for practically all rugged services.

UTEX 001105

UTEX MOLDED PACKINGS

UTEX "J" DESIGN NON-ADJUSTABLE PACKINGS (Patented)



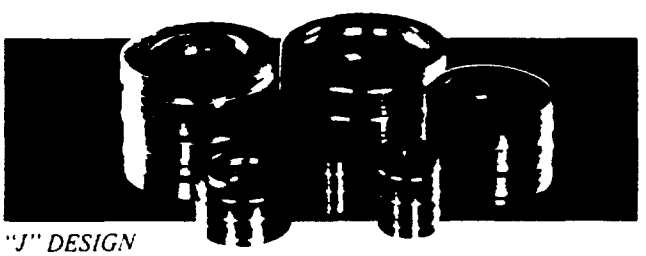
"J" DESIGN

Utex "J" Design Non-Adjustable Packings are the result of extensive engineering and testing programs. Flattened support surfaces molded into each ring prevent the usual nesting and crushing that results from excessive gland or fluid pressure. Each ring is so constructed and supported that once installed and thoroughly tightened, no further adjustment is required.

Utex "J" Design incorporates sealing rings with tough flexible lips together with hard thermosetting composition adapters. This combination of features and the flattened support surfaces provides a packing which cannot be over tightened.

Each set of "J" Design Packing consists of two or more units of packing. Each unit contains one top adapter, one bottom adapter, and one seal ring. One set of packing is enough to pack one plunger. Designed for use on reciprocating equipment, there is a "J" Design packing for your application. Lubrication is recommended where materials pumped do not give the necessary lubrication.

Engineering data and drawings for specific application are available on request. Please direct your inquiry with as many details as possible to Utex Industries or your local Utex distributor.



"J" DESIGN
Patented

Style	Description	Service
838	Nitrile, Duck & Phenolic Resins	Fresh & Salt Water, Propane, Butane, Gasoline, Light & Heavy Oils, Mild Chemicals & Acids, Most Hydraulic Fluids
842	Nitrile, Duck, Phenolic, Rubber	Abrasive Slurries, Mud, Cement, Acids, Oils, Hydrocarbons, Acidizing, Sand Fracing
845	Nitrile, TFE, Synthetic Cloth, Phenolic Resins	Harsh Chemicals & Acids, Low Temperatures

UTEX "V" PACKINGS

UTEX "V" PACKING



"V" PACKING

Utex "V" Packing is an automatic sealing packing with a hinge-like construction. Seal ring mating surfaces are designed to permit a void between each ring which acts as a lubrication reservoir throughout the length of the packing set. This feature:

- Retards nesting;
- Allows each ring to relax between cycles;
- Facilitates adjustment;
- Shortens run-in periods;
- Allows lubrication to reach each ring.

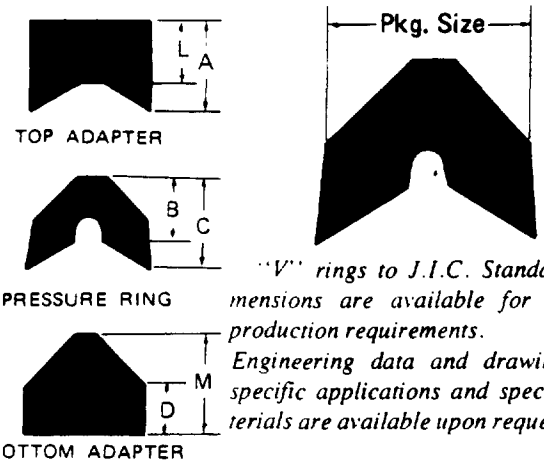
All of these features combine to provide an excellent packing for rods, valve stems, rams, plungers, pistons, hydraulics, steam hammers and various other applications.

Style		Description	Uses
Solid	Split		
701	701-2	Nitrile & Duck	General Service
708	708-2	Nitrile & Asbestos	General Service, High Temperatures
715	715-2	Neoprene & Asbestos	General Service, High Temperatures
805 (Pat)	805-2	Nitrile, TFE, Duck & Synthetic Cloth	High Pressure And Special Applications, Nuclear Services
827	827-2	Viton & Asbestos	High Temperature Fluids, Hydraulic Fluids
829 (Pat)	829-2	Butyl, Duck & Synthetic Cloth	Phosphate-Ester Hydraulic Fluids
830	830-2	Nitrile & Duck	Meets FDA Requirements
719	719-2	Homogeneous Nitrile	Cold & Warm Oils, Abrasive Resistant
831	831-2	Homogeneous Nitrile	Meets FDA Requirements
832	832-2	Homogeneous Butyl	Phosphate-Ester Hydraulic Fluids, Abrasive Resistant
828	828-2	Homogeneous Viton	High Temperature And Chemical Resistance
4510	4510-2	Virgin TFE	All Services Except Molten Alkali Metals & Hot Fluorine
4511	4511-2	Glass & Moly Filled TFE	Same As Above

For further fluid compatibility information, see Brochure 1300.

Footnote: Adapters can be furnished from listed compositions, reinforced phenolic and a variety of metals.

UTEX "V" PACKING DIMENSIONS



"V" rings to J.I.C. Standard Dimensions are available for volume production requirements. Engineering data and drawings for specific applications and special materials are available upon request.

PKG. SIZE	A	B	C	D	L	M
1/8"	.125	.093	.140	.067	.087	.132
3/16"	.125	.125	.169	.067	.087	.132
1/4"	.187	.171	.236	.093	.134	.184
5/16"	.218	.203	.281	.109	.151	.223
3/8"	.250	.234	.325	.125	.170	.265
7/16"	.281	.265	.375	.140	.184	.306
1/2"	.375	.281	.403	.187	.265	.378
9/16"	.406	.296	.435	.203	.284	.420
5/8"	.437	.328	.468	.218	.298	.461
11/16"	.468	.359	.525	.234	.314	.504
3/4"	.531	.390	.568	.267	.362	.560
13/16"	.593	.421	.619	.296	.410	.615
7/8"	.656	.453	.665	.328	.456	.671
15/16"	.680	.484	.712	.340	.465	.709
1"	.718	.515	.756	.359	.490	.750
1-1/16"	.750	.546	.806	.375	.507	.796
1-1/8"	.781	.578	.853	.390	.523	.836
1-3/16"	.812	.609	.900	.406	.542	.875
1-1/4"	.843	.640	.945	.422	.556	.917

Footnote: "V" rings to J.I.C. Standard Dimensions are available for volume production requirements.

UTEX SPRING LOADED PACKINGS

Engineering data and drawings for specific applications and special materials are available upon request. Please direct your inquiry with as many details and conditions possible to Utex Industries, or your local Utex distributor.

UTEX STYLE 805-4 Patented

UTEX STYLE 805-4 – Spring Loaded Packing is constructed of a special rubber compound which is reinforced with a combination of fabrics for additional strength. Its unique construction adds superior low friction properties to the resilience of rubber to make Style 805-4 a strong packing capable of reducing your maintenance problems.

Style 805-4 has been field tested in applications in all pressures up to 30,000 psi.

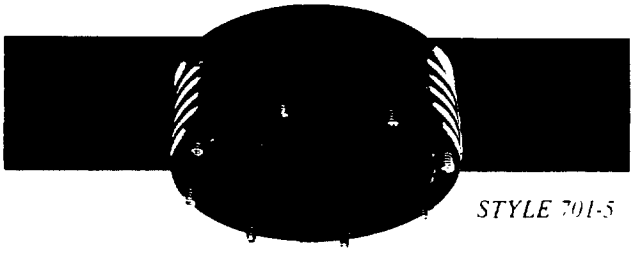
It is recommended for service in pumps handling water, acids, oils, and other high pressure fluids, including nuclear service. Metal parts are reusable.



STYLE 805-4

UTEX STYLE 701-5

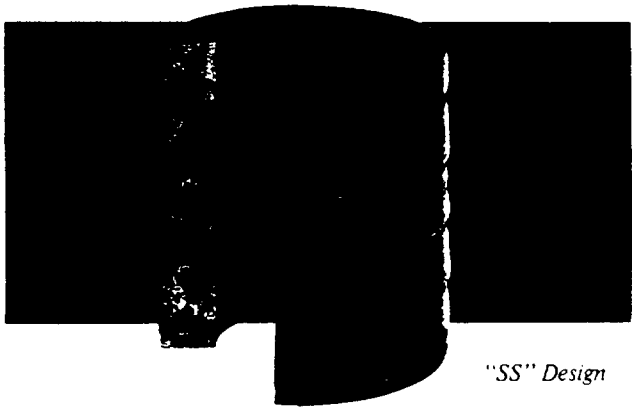
Utex Style 701-5 Multiple Spring Loaded Packing incorporates the proven "S" design "V" packing and multiple stainless steel springs for a non-adjustable packing. The use of spring loaded bottom adapters provides for automatic wear compensation and allows equipment to be designed with fixed stuffing box depths. The spring loaded feature eliminates the human error of over adjustment and extends packing life.



STYLE 701-5

Utex Style 701-5 Spring Loaded Packing can be furnished in all sizes from a 1/4" cross-section minimum on up. For engineering information and drawings for your application, consult Utex Industries, or your local Utex distributor.

UTEX "SS" DESIGN HEAVY DUTY HYDRAULIC PACKINGS



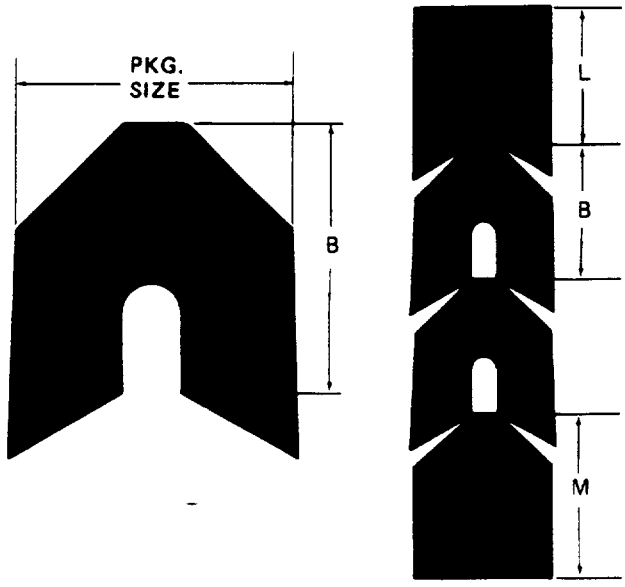
"SS" Design

Utex "SS" Design Heavy Duty Hydraulic Packings are produced from special oil resistant polymers and incorporate a heavy cross-section for use in large hydraulic equipment. Normally supplied in complete sets comprised of a number of "V" rings with top and bottom adapters. Utex Style 1050 is produced from a high quality oil resistant nitrile reinforced with duck; Style 1055 is produced from the same oil resistant nitrile but reinforced with asbestos. The unique design of both Style 1050 and Style 1055 provides a sealing ring that is sensitive to fluid

pressures and responds to gland adjustments to reduce leakage when required.

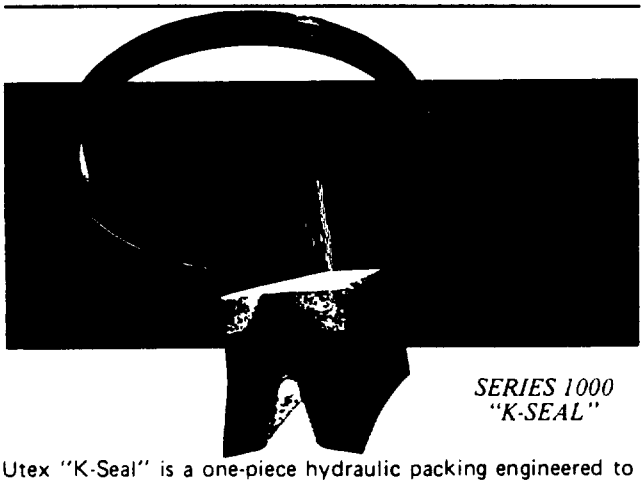
Utex "SS" Heavy Duty Hydraulic Packings are recommended for use where large diameter rams are encountered, such as forging presses where shock loads are present. Also, for use on horizontal rams, such as extrusion rams where lateral thrust may be a problem.

UTEX "SS" DESIGN HEAVY DUTY HYDRAULIC PACKING DIMENSIONS



PKG.SIZE	L	M	B
1/2"	1/2	1/2	.500
5/8"	5/8	5/8	.625
3/4"	3/4	3/4	.750
7/8"	3/4	3/4	.750
1"	3/4	3/4	.750

UTEX SERIES 1000 "K-Seal" (Patented)



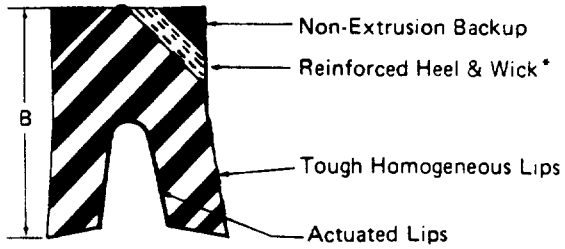
Utex "K-Seal" is a one-piece hydraulic packing engineered to provide excellent service. Unique construction allows the "K-Seal" to float in stuffing boxes without the need for metal pedestals or useless filler rings. This seal is designed to fit into existing stuffing boxes so there is no need for reworking or redesigning equipment.

The Utex "K-Seal" is manufactured from an oil resistant polymer with a cloth reinforced heel and independent non-extrusion backups molded into each corner. The fabric reinforced heel absorbs some hydraulic fluid and acts as a wick to wet the ram or cylinder as the equipment operates. This wetting action lubricates surfaces, so as to reduce friction and wear. Independent thermosetting plastic corners molded into the back of the ring allow the "K-Seal" to flex for additional strength, while preventing extrusion.

With the Utex "K-Seal," one ring is all that is required to pack all stuffing boxes. Designed to float in stuffing boxes with metal-to-metal gland makeup, there is no need for constant adjustment, once installed. No special break-in period or special adjustment is ever required with this seal.

The "K-Seal" has been field tested and will perform from zero to 15,000 psi at -70° to 450°F. The strength of the ring will stand up to the most severe conditions, even to the bumping action of hydraulic presses. There is a "K-Seal" for use with the new fire-retardant phosphate-ester hydraulic fluids. For information concerning a "K-Seal" for your specific application, furnish dimensional data, type of equipment, and type of hydraulic fluid to Utex Industries or your local Utex distributor.

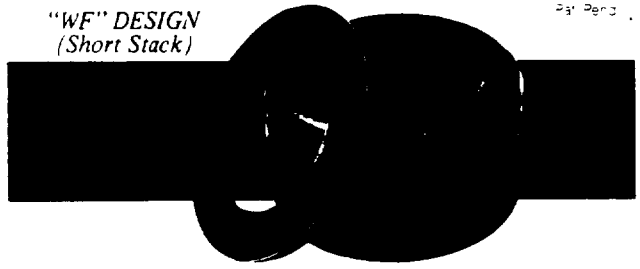
UTEX SERIES 1000 "K-SEAL" DIMENSIONS



PKG. SIZE	B
1/2"	5/8"
5/8"	7/8"
3/4"	1"
7/8	1"
1"	1"
1-1/4"	1"

*Reinforced heel & wick can be molded into I.D. or O.D. heel depending on installation.

UTEX "WF" DESIGN "SHORT STACK" PACKING



Utex "WF" Design "Short Stack" Packing is an automatic sealing packing for use in hydraulic and pump applications where limited packing cavities are encountered. Produced from a variety of polymers, either homogeneous or fabric reinforced, the unique Utex "WF" design offers these important features:

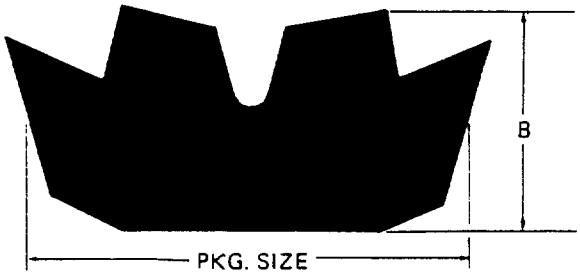
1. The short stack height allows for more compact piston designs, to allow longer strokes in shorter cylinder lengths.
2. With the unique design, no space wasting adapters are required. Each ring is a sealing ring.
3. Automatic sealing feature allows the rings to seal with a minimum of gland pressure and the packing to run cooler and longer.

4. Since no adapters are required, there is no need for stocking "Short Stack" in sets, for greater inventory flexibility.

The following are just some of the available styles:

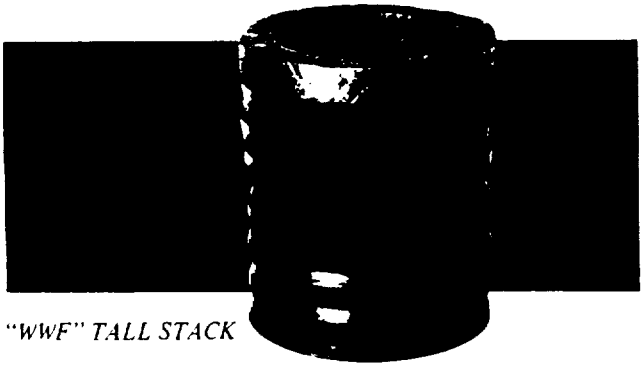
Style	Material	Service
888	Flocked Nitrile	Mineral Base Oils, Gasoline, Kerosene, Hot & Cold Oils, Water Hydraulic Fluids
125M	Viton & Asbestos	High Temp. Fluids
889	Nitrile & Duck	Hot & Cold Oils, Water, Mild Chemicals and Acids, Petroleum Products
8507	Homogeneous Nitrile	Cold and Warm Water, Oils Where Abrasion Resistance is Required
7507	Homogeneous Viton	Phosphate-Ester Hydraulic Fluids
7557	Homogeneous Butyl	Phosphate-Ester Hydraulic Fluids

UTEX "WF" DESIGN "SHORT STACK" PACKING DIMENSIONS



PKG. SIZE	B
1/4"	.125
5/16"	.156
3/8"	.188
7/16"	.219
1/2"	.250
9/16"	.281
5/8"	.313

UTEX "WWF" DESIGN "TALL STACK" PACKINGS (Patent Pending)



"WWF" TALL STACK

Utex New "WWF" Design "TALL STACK" have been engineered to provide excellent service under most conditions. All "WWF" Packings are designed to be self-seating and do not require top and bottom adapters or mating rings.

Utex Style 808 "WWF" sets are designed for use in centrifugal pumps. Style 808 "WWF" sealing rings are manufactured from a tough abrasion and heat resistant nitrile and incorporate a molded lantern ring in the assembled set.

Utex Style 880 fabric reinforced-nitrile rubber and Styles 881 and 882 homogeneous flocked-nitrile rubber "WWF" seal rings are the ideal replacement for the old fashioned "U-Cups." Both 880 and 881 fit the same J.I.C. Standard cavities but do not require the pedestal rings as do the "U-Cups."



UTEX "WWF"

Utex Style 883 "WWF" (Patent pending) seal rings are designed for use where extrusion is a problem between box and gland.

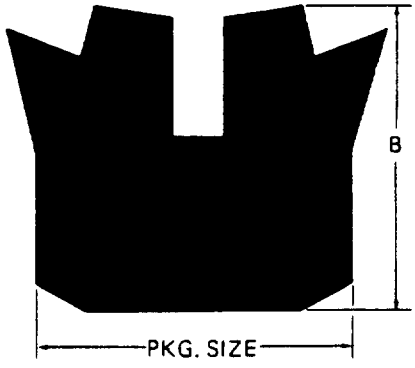


UTEX "WWF"

Style 883 has a 70 durometer homogeneous lip with a fabric reinforced heel to reduce extrusion from excess clearances, thus reducing the primary cause of packing failures in aged equipment.

The unique Utex "WWF" design (Patent pending) is also available in continuous extrusions. Continuous "WWF" extrusions are produced from a flocked reinforced compound and are available in all cross-sections from 1/4" thru 1-1/4". This use of continuous "WWF" allows immediate delivery of packing sets, thus cutting delivery and downtime to the bare minimum.

UTEX "WWF" "TALL STACK" PACKING DIMENSIONS



PKG. SIZE	B
3/16"	.188
1/4"	.250
5/16"	.312
3/8"	.375
7/16"	.437
1/2"	.500
9/16"	.562
5/8"	.625
11/16"	.687
3/4"	.750
13/16"	.812
7/8"	.875
15/16"	.937
1"	1.000
1-1/8"	1.125
1-1/4"	1.250

UTEX 001109

UTEX URON® CUPS

TYPE "CA" URON® CUPS



TYPE "CA"

Utex Type "CA" Uron Cups are manufactured from an oil resistant nitrile polymer reinforced with duck and molded with a 45° beveled bottom.

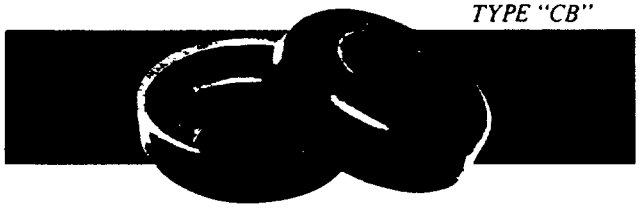
Molded under high temperatures and pressures, Uron cups are tough and abrasive resistant. Type "CA" Uron Cups are recommended for hot and cold oils, water or oil base fluids, mild chemicals and acids, solvents, and many other services.

Availability: Utex Style 855 Type "CA" Uron Cups are hard-cure composition cups. In addition to the above, Style 855 shows good resistance to petroleum hydrocarbons with little or no softening at high temperatures.

Utex Style 856 Type "CA" Uron Cups are medium-cure composition cups.

Both Styles 855 and 856 are available in standard sizes 1" and up. Consult Utex for special sizes or compositions.

TYPE "CB" URON® CUPS



TYPE "CB"

Utex Type "CB" Uron Cups are manufactured from the same high quality materials as the Type "CA", but are molded with rounded bottoms.

Utex Style 860 Type "CB" Uron Cups are produced in the standard hard-cure.

Utex Style 861 Type "CB" Uron Cups are produced in the standard medium-cure.

Both Utex Styles 860 and 861 are available in standard sizes, 1" and up, and can also be furnished in special sizes or compositions on request.

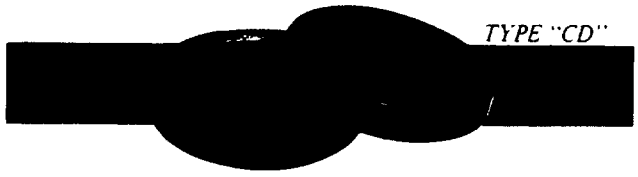
TYPE "CD" URON® CUPS

Utex Type "CD" Uron Cups are manufactured from a special polymer reinforced with cloth and designed to seal at both low and high pressures. Molded under high temperatures and pressures, Type "CD" Uron Cups are produced with flat bottoms.

Utex Style 864 Type "CD" Uron Cups are produced in the standard soft-cure composition.

Type "CD" Cups are used in hydraulic and piston applications in service against hot and cold water, oil, gasoline and other hydraulic mediums.

Utex Type "CD" Uron Cups are furnished in standard diameters

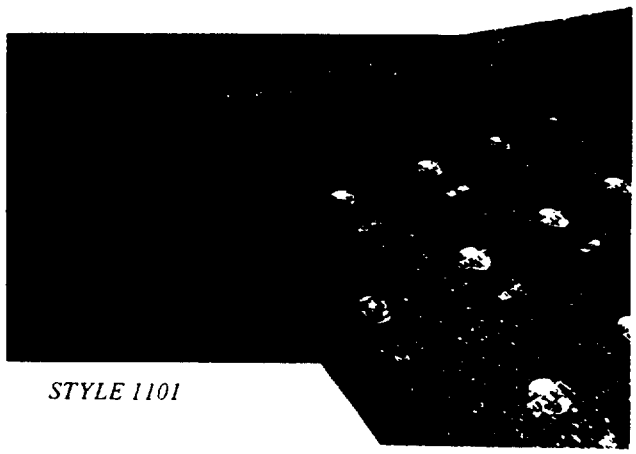


TYPE "CD"

with solid bottoms, unless hole size is specified. Special compositions are available for chemical, acid, and many other services.

UTEX SHEET PACKINGS

STYLE 1101 GENERAL SERVICE



STYLE 1101

Manufactured from selected long fibre asbestos and heat resisting compound, bonded and vulcanized under high pressure, resulting in a tough pliable sheet. A self-contained colorless releasing agent makes graphiting unnecessary. It is grey-black in color.

Meets ASTM D-1170-59T identification number P1161-A and Federal Specifications H-HP-46c.

Availability: Sheet sizes 60" x 60" or 60" x 120" in thicknesses of 1/64", 1/32", 1/16", 3/32", 1/8". Sheet size 60" x 60" only in 3/16" and 1/4" thicknesses.

NOTE: For white asbestos specify Style 1102.

Approximate weight: 60" x 60" x 1/16" - 14 lbs. Other thicknesses in proportion.

Services: High pressure, superheated and saturated steam, water, ammonia, gas, air, oil, and some mild chemicals and acids.

STYLE 1104 OIL RESISTING

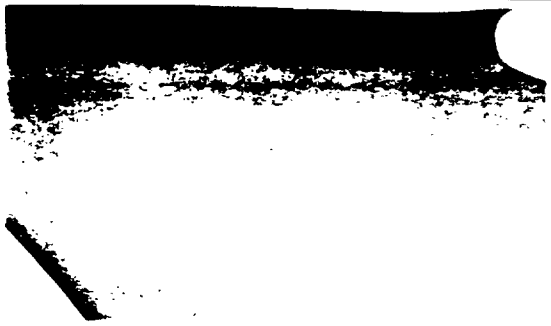
Manufactured from selected long fibre asbestos and a special oil-resisting binder; vulcanized under high pressure. Black in color with a colorless releasing agent making graphiting unnecessary. Meets ASTM D-1170, P1151-A, SAE J90A, MIL-G-12803A, AMS 3232J.

Availability: Sheet sizes 50" x 50" and 50" x 150" in thicknesses of 1/64", 1/32", 1/16", and 1/8".

Approximate weight: 50" x 50" x 1/16" - 10 lbs. Other thicknesses in proportion.

Services: Hot and cold oil and other petroleum liquids, air, water, some acids and chemicals, Freon 12, 22 and 113. It is a sulphur-free sheet, and is widely used in the refrigeration industry on copper and brass flanges where corrosion is a problem.

STYLE 1110 RED RUBBER



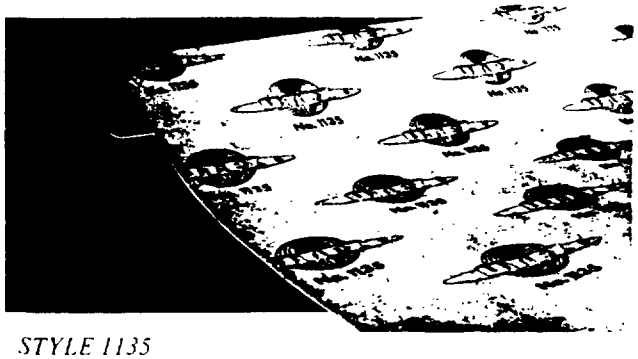
Made of a commercial grade rubber non-oil resistant compound, vulcanized into required thickness with a cloth finish. Approximately 80 durometer hardness. Meets specification ASTM D-1330 Class I.

Availability: In continuous length rolls, 36" wide, in thicknesses of 1/32", 1/16", 3/32", 1/8", 3/16",and 1/4". Other widths on special order.

Approximate weight: 1/16" x 36" wide - 5 lbs. per square yard. Other thicknesses in proportion.

Services: Hot or cold water, low pressure steam, air, ammonia, some mild chemicals and acids. Designed to resist flow compression and generally used for low pressure application.

STYLE 1135 PLANT FIBRE



STYLE 1135

A protein-glycerine treated vegetable fibre sheet which is leather-like in composition. It contains no rubber or other ingredients not resistant to oil and gasoline. It is tan in color. Meets MIL-G-12803A, ASTM D-1170-62T, SAE J90 grades P3313B.

Availability: Standard 36" wide in thicknesses of .006", .010", 1/64", 1/32", 1/16", 3/32", 1/8" and 3/16" in continuous lengths. Supplied in special widths upon request.

Approximate weight: 1/16" x 36" - 2-1/4 lbs. per square yard. Other thicknesses in proportion.

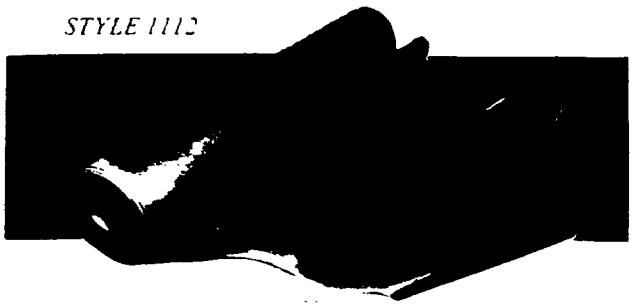
Services: General service gasket material for light and heavy oils, grease, water, gasoline and many petroleum solvents.

STYLE 1112 NEOPRENE

A general purpose neoprene sheet with good oil and weather resistance properties. Furnished standard in 70 durometer hardness with microplate finish. Other hardnesses can be supplied upon request.

Availability: In rolls 36" wide in thicknesses from 1/32" to 1".

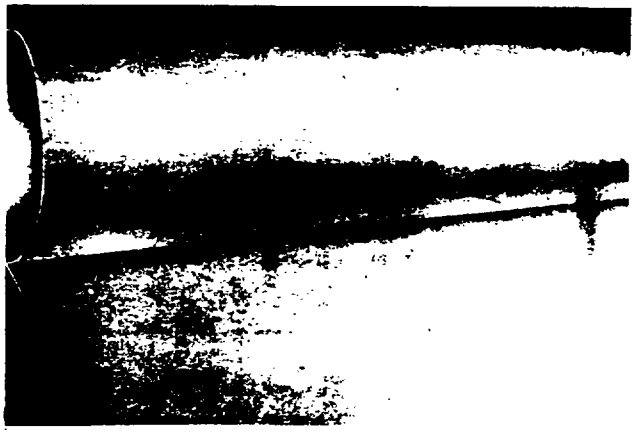
STYLE 1112



Approximate weight: 1/16" x 36" - 5 lbs. per square yard. Other thicknesses in proportion.

Services: Light and heavy oils, hot and cold water, low pressure steam, kerosene, gasoline and other petroleum based liquids. Excellent weather resistance, good physical properties and is flame retardant.

STYLE 1140 TFE SHEET



Made from a TFE resin which is processed and sintered at high temperatures.

Availability: Sheet size 48" x 48" in thicknesses of 1/32", 1/16", 1/8" and 1/4".

Approximate weight: 1/16" x 48" x 48" - 12 lbs. Other thicknesses in proportion.

Services: It is impervious to most corrosive reagents, solvents, acids, alkalies, organic or inorganic industrial materials except molten alkali metals, fluorine gas, and atomic radiation. Has a low coefficient of friction.

UTEX MISCELLANEOUS PRODUCTS

Utex TFE Sealants

UTEX STYLE 1144 TFE THREAD SEALANT

Utex Style 1144 TFE Thread Sealant is a unique idea in sealing threaded joints. The ideal physical properties of TFE combined with the Utex tape dispenser, allows Style 1144 to be used as an "all purpose" thread sealant. Style 1144 has: wide temperature range, -450°F to +500°F.; chemically inert, no product contamination; easy application, no messy joints; no drying out, joints break out easily.

Utex Style 1144 is packaged one roll per box, 12 boxes per carton.

UTEX 001111

Utex/Loctite Style 477 SuperBonder®** Adhesive

World's fastest, strongest adhesive to bond metals, ceramics, glass, plastics, and rubber.

Advantages of Utex/Loctite Style 477 SuperBonder:
Instant fixturing with high performance . Single component . Room temperature cure . Fast setting . Contact bonding . High strength . Automated application systems.

It is economical, simple to use, and develops bonds rapidly. Fast bonds – one to ten seconds – are achieved on most material with exceptional speed and strength on rubber-to-rubber and rubber-to-metal bonds.



SUPERBONDER

Utex/Loctite SuperBonder Cyanoacrylate adhesives are formulated from the highest quality alkyl - 2 - cyanoacrylate containing 95% (min.) cyanoacrylate monomer and 5% thickening agents, plasticizer, stabilizer, and other additives.

The chemical resistance of Utex/Loctite SuperBonder shows immersion in alcohol, benzene or acetone for up to 240 hours does not appreciably affect its strength. Prolonged immersion in water, dilute acid, dilute alkali weakens the bond in varying degrees.

As with most adhesives, Utex/Loctite SuperBonder performs best on clean dry surfaces. A chlorinated solvent wipe will remove loose dirt, grease and foreign matter from the bonding surfaces.

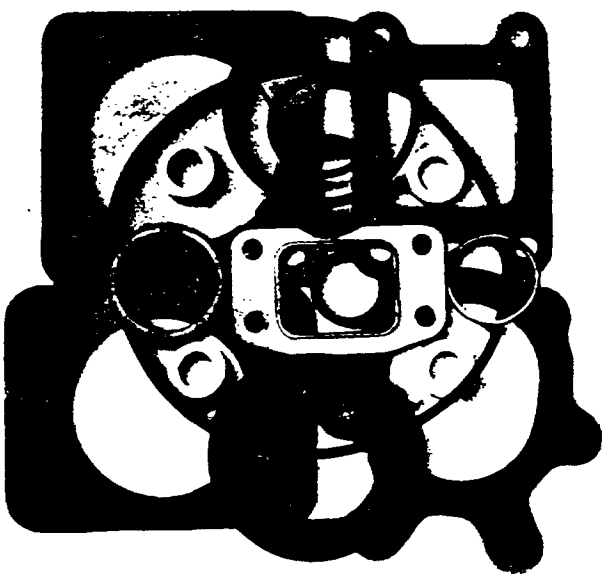
Utex/Loctite SuperBonder offers the optimum in clarity and shelf life warranty. The date marking on all Utex/Loctite SuperBonder packages is in conformance with MIL-A-46050.

UTEX GASKETS

Utex Industries has facilities to die cut, stamp, hand make and otherwise fabricate gaskets for many types of service from various kinds of materials such as asbestos, rubber, plant fibre, cork, and plastics.

Our many years of experience in making various types of dies, tools, and fixtures required to fabricate gaskets enables us to give prompt service on these requirements to meet your every need.





UTEX INDUSTRIES, INC.
Houston, Texas

**SUPERBONDER is a registered Trademark of Loctite Inc

UTEX STYLE 1145

A Complete TFE Fibre Gasketing Capability

Utex Industries offers die cut gaskets for small diameters and irregular shape applications – and tape for easy and convenient installation. Utex Style 1145 has applications for all industries.

Gaskets made from Utex Style 1145 will easily compress to fill irregularities and readily adapt to variations in mating surfaces without the need for shimming.

The high mechanical strength of both construction and the inherent resistance to "cold flow" of pre-shrunk TFE fibre permits applications when other gasket materials may not be suitable. In addition, TFE is unaffected by chemical action across the full pH range.

CUTS MAINTENANCE COSTS – Flange clean-up problems for reuse are eliminated because of TFE "anti-stick" qualities.

COMPLETE SOLID SEAL – Complete sealing of the contained medium can be accomplished with minimal bolt and flange pressures. Plus the concern of gasket material punctures and wrinkles upon installation, which result in medium blow-by or leakage, is eliminated as the TFE fibres readily seal upon themselves.



STYLE 1145

Versatility and convenience are additional advantages:

- A single roll of tape will service many sizes of applications throughout your plant.
- The need for extensive inventories of ring type envelope gaskets is virtually eliminated.
- Both die cut and tape gaskets are installed with a minimum of effort and downtime.

EASY TO APPLY

(1) Roll gasket tape onto flange.

(2) Cut gasket tape with a sharp knife, allow 2" overlap.

(3) Then secure gasket tape to flange with masking tape.

(4) Split 2" overlap and remove top half using scissors, trim bottom half into tongue.

(5) Fit tongue into center of opposite end of gasket and flatten it.

(6) Replace cover and bolt tightly, no adjustment necessary.

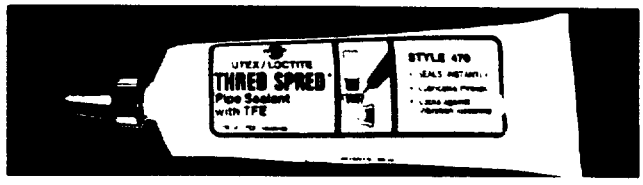
UTEX ADHESIVES

Utex Industries has three specialized usage adhesives: Utex/-Loctite Style 470 Thred Spred™ , Utex/Loctite Style 475 Super Seeze™ , Utex/Loctite Style 477 SuperBonder® Adhesive that are designed for high performance in all sealing jobs.

Utex/Style 470 Thred Spred ™ *

Utex/Loctite Thred Spred with TFE comes in a tube ready to use. It seals threaded fittings instantly; hardens to an insoluble solid seal to exceed the pipe's bursting strength. Positive sealing is assured at all pressures in all pipes at temperatures of -65° to 300°F. Excellent chemical resistance permits application, even in uses involving industrial acids, solvents, chemicals and gases.

THRED SPRED™



Utex/Loctite Thred Spred lubricates threads and prevents galling of threads. Line-up adjustments can be made up to 24 hours later without sealing capability loss. Utex/Loctite Thred Spred makes perfect joints.

Super Seeze ™* Adhesive/Sealant

Utex/Loctite Style 475 is a single component, high strength, mdeium viscosity liquid for plated and surface treated fasteners. It provides controlled locking and prevailing torque on threaded fasteners without priming and without minimum surface preparation.

Product Benefits:

- Provides locking fasteners at reduced costs.
- Prevents vibration loosening.
- Locks and seals over entire engaged area.
- Provides fast cure on most surfaces without priming.
- Seals against leakage and prevents corrosion.
- Reliable cure on all surfaces.
- Locking strength not torque dependent.

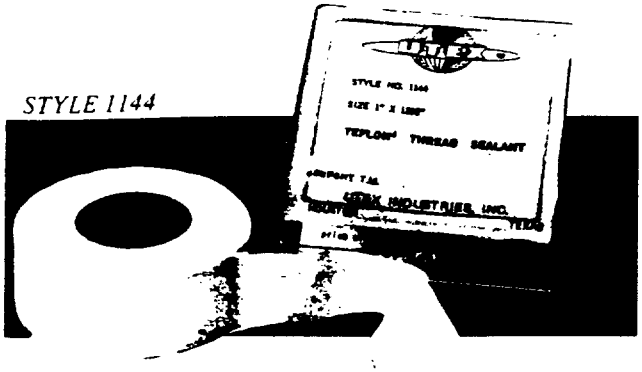


SUPER SEEZE ™

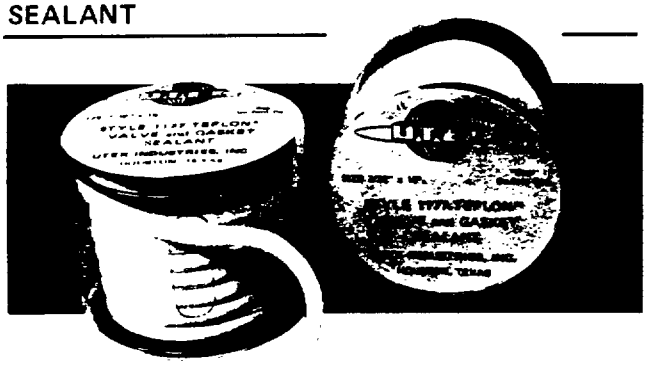
Utex/Loctite Style 475 Super Seeze Adhesive/Sealant hardens in the absence of air on ferrous or non-ferrous metals. Heating to 250°F. for ten minutes will produce full cure in two minutes.

*Super-Seeze and Thred-Spred are trademarks of Utex Industries Inc

UTEX 001113



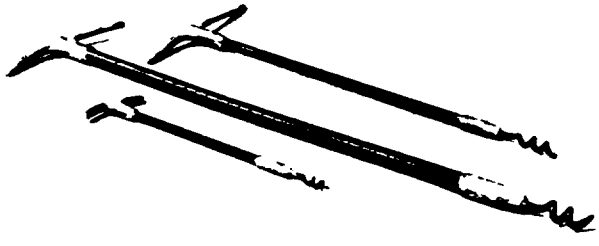
UTEX STYLE 1177 TFE VALVE & GASKET SEALANT

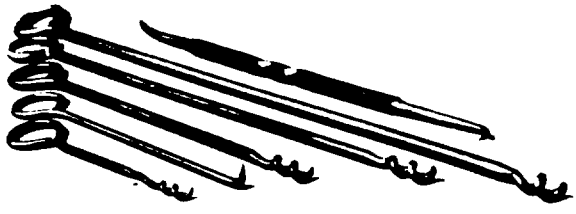


Utex Style 1177 Round TFE Valve and Gasket Sealant is a truly "all purpose" sealant. It can be used for a variety of applications: flanged connections, stuffing boxes, rotary pump shafts, valve and faucet stems. Style 1177, being all TFE, can be used on most chemicals and acids, and a temperature range of -450°F. to +500°F. Style 1177 is a twisted all-TFE Sealant, making a tough and strong sealant.

Utex Style 1177 is packaged one roll per box, 12 boxes per carton.

UTEX FLEXIBLE PACKING HOOKS

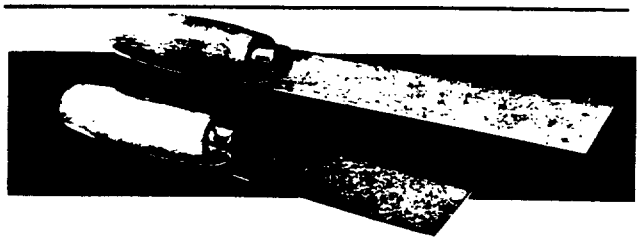




Utex Flexible Hooks may be purchased in complete sets, a set consisting of one each 6-1/4", 10-5/8" and 15" hook and one 8" double end rigid packing tool. Utex Flexible Packing Hooks are available individually as follows:

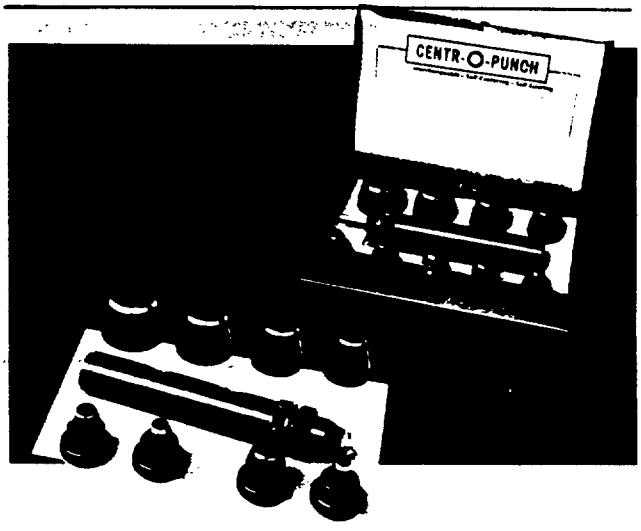
6-1/4" length with 3/16" diameter shaft
10-5/8" length with 1/4" diameter shaft
15" length with 3/8" diameter shaft
18" length with 3/8" diameter shaft
8" length double end rigid packing tool

UTEX PACKING KNIVES



Utex Packing Knives have sturdy wooden handles with either 4" or 6" blades.

UTEX CENTER PUNCH KITS



Utex Center Punch Kits can be used for quick, accurate on-the-job punching of washers and gaskets out of rubber, leather, canvas, felt, soft brass, copper, lead, and other soft materials. The Center Punch Kit is made of special alloy steel, heat treated to exacting standards and ground to precision tolerance. The interchangeable cutters produce any desired combination of inside and outside diameters up to 1". The receding pointing plunger marks the dead center when the first outside cut is made so the second cut-out of the inside diameter is always accurate.

The set consists of a sturdy steel box, handle assembly and nine cutter dies – 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", and 1".

UTEX GASKET CUTTER



Utex Gasket Cutter set is made of special alloy steel and carefully heat treated. The center punch and cutting blade can be adjusted to cut gaskets from 1-1/2" I.D. to 24" O.D.

UTEX 001114



UTEX INDUSTRIES, INC.
Houston, Texas

UTEX 001115

LITHO IN U.S.A.