NIHON POLYMER Co.,Ltd.

COMPANY PROFILE

Company Outline

Name: Nihon Polymer Co., Ltd.
Established: September 4, 1969
Capital: 20 million yen
Representative: Kazuya Takeda, President

Location

Headquarters
2-69 Hosoki-cho, Kasugai City, Aichi. 486-0937 Japan
TEL 81-568-33-2551　FAX 81-568-32-5444

Tsuishin Plant
3-129 Tsuishin-cho, Kasugai City, Aichi. 486-0952 Japan
TEL 81-568-33-6575　FAX 81-568-31-9993

China
NIHON POLYMER (SUZHOU) Co., Ltd.
No.169, YIZHONG RD.WUZHONG DEVELOPMENT AREA,
SUZHOU-CITY, JIANGSU 215124 CHINA
TEL 86-512-65975789　FAX 86-512-65975779

Korea
KOREA POLYMER Co., Ltd.
1-233, OIDOCHULKANGDANJI,2211, JEONGWANG-DONG,
SIHEUNG-SI, GYEONGGI-DO, 429-450 KOREA
TEL 82-31-8041-9233　FAX 82-31-8041-9986

■Headquarters

■NIHON POLYMER (SUZHOU) Co., Ltd.

■KOREA POLYMER Co., Ltd.

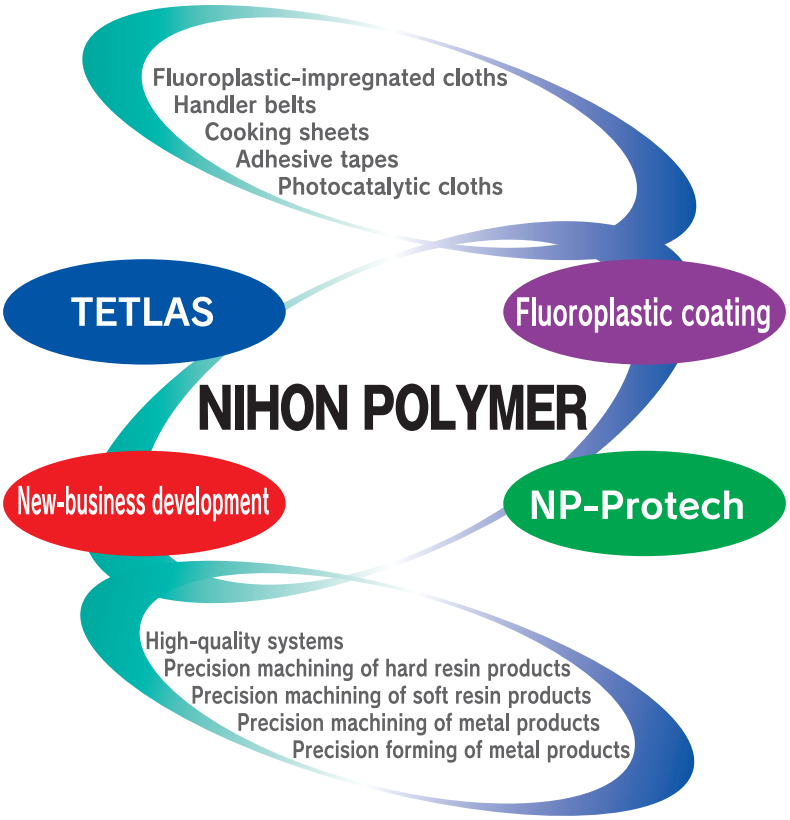
Business Lineups

(1) Product sales of fluoroplastic cutting and processing products and various engineering resin products.
(Parts for semiconductor/liquid crystal manufacturing equipment, electric/electronic parts, parts for food manufacturing equipment, parts for medical equipment)
(2) Sales of fluoroplastic coated products and various surface-treated products.
(Manufacturing process components for food processing and auto parts etc., components for food packaging)
(3) Manufacturing and sales of fluoroplastic-impregna cloths
(Manufacturing process components for food processing, semiconductors, liquid crystal products, interior materials, construction materials, etc. heat-resistant components and piping materials for ironworks, electric power plants, industrial waste disposal facilities. environment-related products.)

Line Banks

Kasugai Branch, Bank of Tokyo-Mitsubishi UFJ, Ltd.
Kasugai Branch, Bank of Nagoya Ltd.
Ajiyoshi Branch, Seto Credit Bank
Juroku Bank, Chukyo Bank, Ogaki Kyoritsu Bank

http://www.nihon-polymer.co.jp
polymer@nihon-polymer.co.jp



What we live for is to resolve anything our customers ask.

Can you make such things...?

Can you produce such forms...?

Can you do such things...?

We love challenging.

Resolving this thing and that in a casual manner.

We enjoy seeing customers being surprised.

Customers' smiles make us happy.

NIHON POLYMER is a group of such employees.

Creator of far better values, NIHON POLYMER Co., Ltd.

NP·PROTECH

The processing technology of recent years has made great progress in precision and processing capability due to performance improvement of machine tools.
As for this field, we have laid out the framework through in-house processing along with assistance provided by subcontract factories.
NP-Protech can perform precision machining and precision forming of various materials including engineering plastics and metals, as well as processing of fluoroplastics.
The company can also respond to delivering not only as parts but also as finished products. In addition, prototyping of a single piece is possible as the company responds to low-volume manufacturing.

TETLAS®

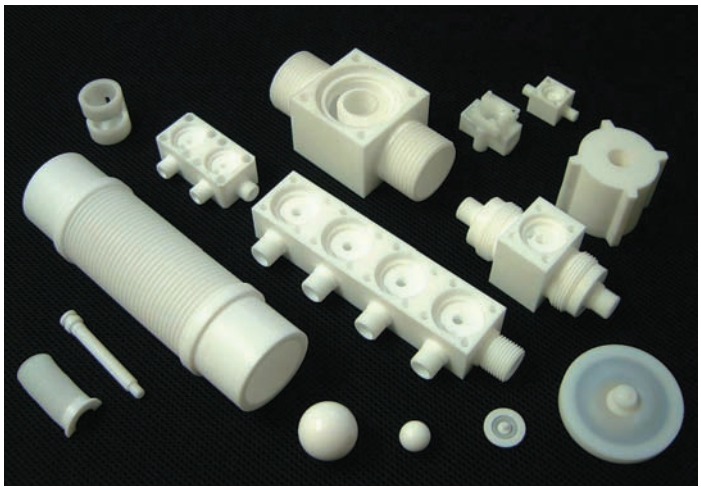
TETLAS is a registered trade mark for materials made by fluoroplastic-impregnated coating on fabrics such as glass fibers manufactured by Nihon Polymer. Secondary processing is also a strong point in addition to material sales.
Drawing on the mechanical strength of glass cloths and the chemical resistance, heat resistance,non-cohesiveness of fluoroplastics, these products are widely used for industrial materials such as handler belts, cooking sheets, adhesive tapes, and piping joints, etc.

NP·COAT

Satisfies requests for various types of surface treatment starting with fruoroplastic coating on a wide variety of substrates thorough to PTFE impregnated non-electrolytic plating.

Precision Processed Products

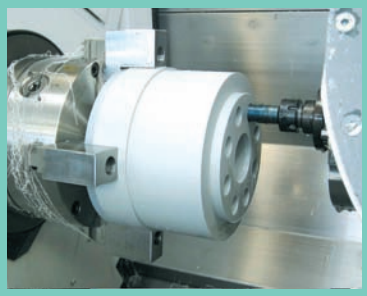
NP·PROTECH

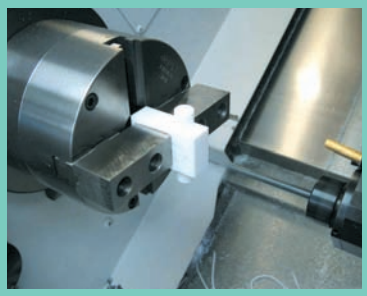


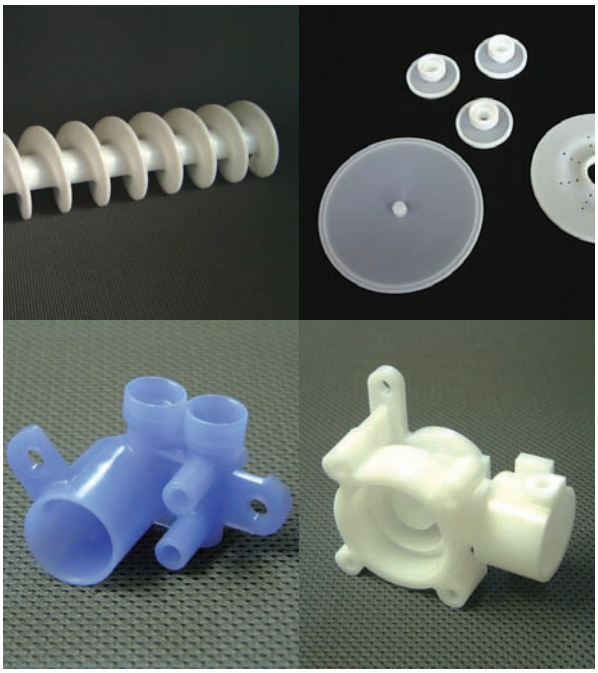
Highly sensitive artisans operate high-precision machine tools, providing their super techniques, which give the urge to express them as art, in a casual manner. We respond to various precision needs from multi-functional fruoroplastics, rigid stainless steels, to soft sponges.

- Precision machining of super engineering plastics including fruoroplastics, polyimide, PEEK, PPS, high polymer polyethylene, etc.
- Precision machining of soft materials such as sponge, rubber, urethane, and silicone.
- Precision machining of metals such as stainless steel, titan, and aluminum.

These materials are suited to small quantity, large variety products such as precision parts for multiple industry sectors. Please consult NP Protech for any types of difficult forms.



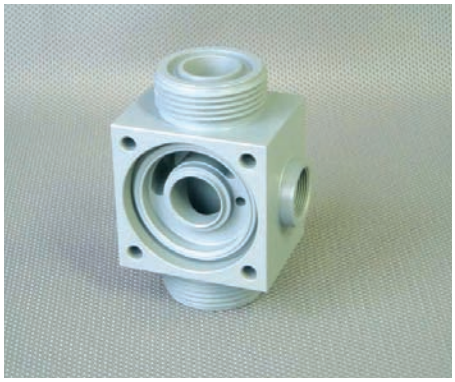




Resin Cutting and processing products

NP·PROTECH

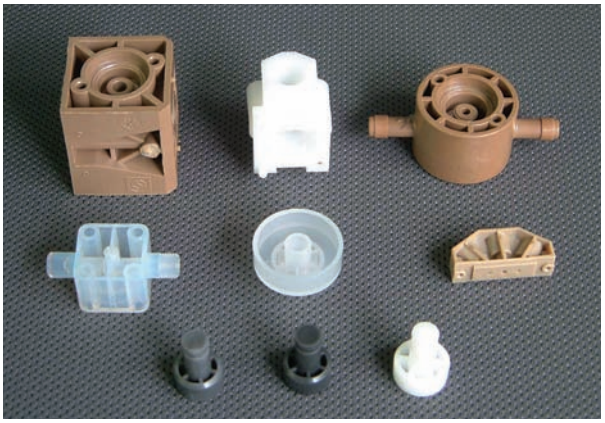
Precision cutting and processing of super engineering plastics including fruoroplastics, MC nylon, high-polymer polyethylene, PPS, polyimide, PEEK, and Vespel, as well as prototype processing for responding to customer needs (powder shaping, various types of bending depending on the intended use, processing by means of wooden form or resin form, etc.).



Resin mold products

NP·PROTECH

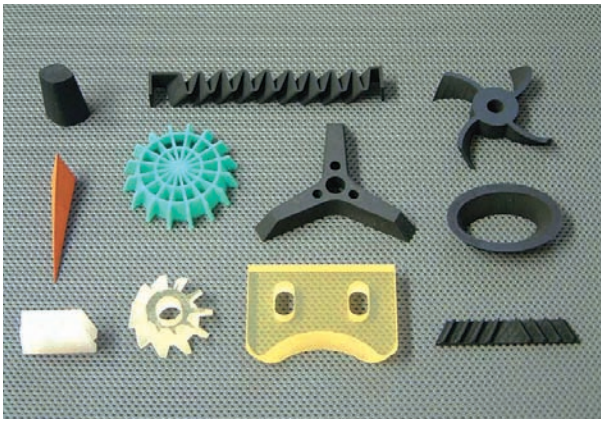
The know-how of special precision processing technology is also poured into mold products. Demand for dimensional accuracy in micron order is growing in medical fields that have people's lives in their hands. We can respond to insert molding methods such as precision injection molding, precision extrusion molding, compression molding, as well as high-precision molding such as double molding of different materials.



Rubber/elastomer
Precision processing products

NP·PROTECH

Precision cutting and processing of soft materials such as sponge, rubber, urethane, silicone, elastomer, etc. on precision NC combined lathe and MC center. Sponge processing by means of water jet and mold processing for responding to mass production.



Metals
Precision processing products

NP·PROTECH

Precision metal processing of stainless steel, titan, and aluminum, etc.
These materials are suited to small lot, large variety products such as precision parts for **machine tools, automated machinery, pneumatic devices, semiconductor manufacturing equipment, and automobile components.**

High quality system

NP·PROTECH

The high quality system guarantees the high quality processing performed by NP Protech.
NP Protech has laid out the framework for processing to provide high-quality products all the way from order acceptance, manufacturing, inspection through to delivery.

■High Quality System Processes

(1) Confirmation of specifications

(2) Design technique

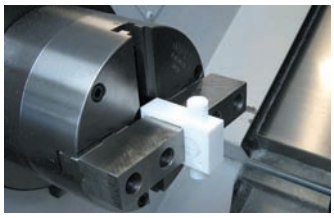
Considering the most appropriate processing method.
Drawing on the know-how of professionals.

(3) Mold baking

Manufacturing from materials according to the specifications in a proper and lean manner.

(4) Cutting and processing

Products of high precision are manufactured in an environment that is controlled exclusively for ultra-precision machining.



(5) Inspection

Inspection of precision parts is performed with extra attention.

(6) Shipment

Management of inspection data and inventory control are all done by computers using relevant data.

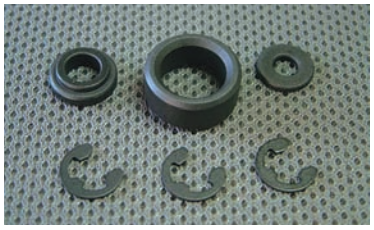
■Clean Room

The quality of product is not determined by machines but by humans.
Human eyes often find fault even when no problems have been detected by machine inspection.
Quality is largely dependent on elements of sensibilities that cannot be expressed by numerical numbers.
Nihon Polymer sticks to quality. We have built a clean room exclusively for inspection tasks at our headquarters not to miss final checks by human eyes, just because we want to maintain the highest quality. Experienced inspectors perform meticulous inspection not to miss any single stain before shipment.

NP Coat

NP·COAT

We respond to various requests for surface treatment from fruoroplastic coating on a variety of substrates to plating on metals.
Fruoroplastic coating: properties such as abrasion resistance, weather resistance, mold release ability, insulation, anti-corrosion, and dew condensation prevention can be added by coating on rubber, plastic, metal, and ceramic materials.



Fruoroplastic Coating

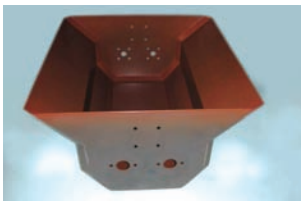
NP·COAT

■PTFE (polytetrafluoroethylene)

[Features] ■Superior in heat resistance. ■Continuous use temperature: 260℃.
■Superior in mold release (non-adhesive)
[Usage] Baking pans for fish-shaped pancake filled with bean jam and octopus dumpling, top plates, rice kettle, and heat sealer, etc.

■PFA (tetrafluoroethylene perfluoro alkyl vinyl ether copolymer)

[Features] ■Smooth coated layer with fewer pinholes can be obtained.
■Corrosion resistant. ■Continuous use temperature: 260℃.
■Superior in non-adhesiveness.
[Usage] Metal mold for tofu (soybean curd), hopper on automatic packaging machine, rice-cake pounding machine, and rice kettle, etc.



Fruoroplastic rotational molding lining processing

NP·COAT

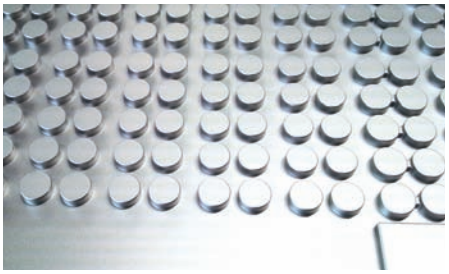
Apply lining inside hollow substrates such as tanks and piping joints. As metal mold is not required, less expensive lining can be done in a shorter delivery time.

PTFE-containing electroless plating

NP·COAT

This coating is superior in slippage and water repellency, and offers the following properties in addition to PTFE properties.

(1) Superior in abrasion resistance and slippage.
(2) Add electrical conductivity and antistatic property to the coating.
(3) High hardness is achieved by combining with metals.
(4) Plating can be done on various materials such as metals, ceramics, and resins.
(5) Superior in adhesiveness to substrates.



TETLAS®

TETLAS
PTFE coated fabrics

TETLAS®

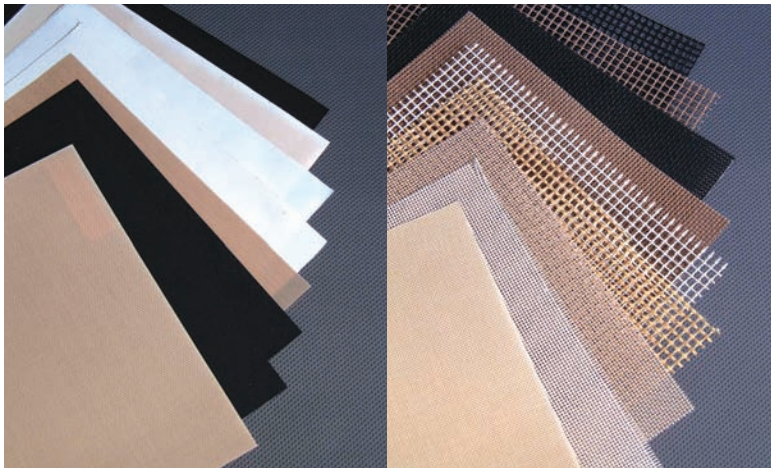
TETLAS is a product made by baking glass-cloth fabric materials after impregnating the material with polytetrafluoroethylene, and is a unique product that combines the superior heat resistance, chemical resistance, non-adhesiveness, and electrical insulation properties with the flexibility and mechanical property of glass cloths.
Note: In addition to glass-cloth mesh, products using aramid as a substrate are also available.

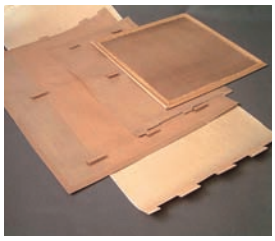
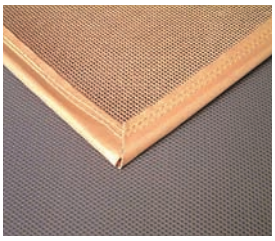
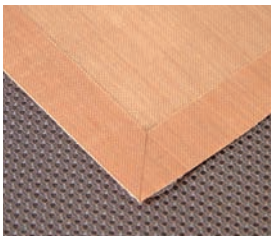
[Features]

■Wide range of use temperature
Can be used in a range from -100℃ to +260℃ (in case of glass cloths).

■Superior electric and dielectric properties are displayed in wide ranges of frequencies and temperatures.

■Superb chemical stability
These materials are chemically stable. Although they are slightly affected by alkaline metals in molten state and fluorine under high temperature and high pressure, they are not affected by most chemicals and solvents.



Handler Belts

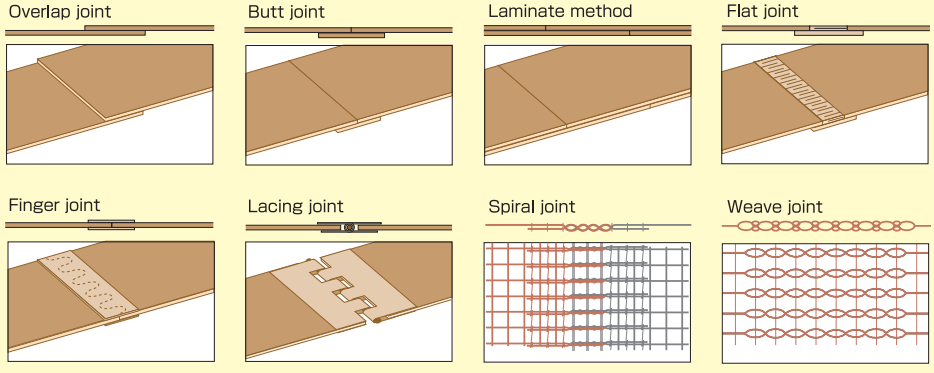
TETLAS®

These are products manufactured by processing fruoroplactic-impregnated cloths to belts, which can withstand continuous use at a wide range of temperatures, and are lightweight and superior in dimensional stability.

[Usage]

■Conveyor belts for heat seals.
■Conveyor belts for plastic films, rubbers, and form products, etc.
■Conveyor belts for adhesive foods and confectionery.
■Conveyor belts for drying such as in the confectionery industry, paper industry,

■Belt joint processing



Cooking Sheets
TETLAS®

These products can be used in the temperature range from -100℃ to +260℃, and comply with the food container packaging standard (ministerial announcement of 1969 by the Ministry of Health and Welfare, No. 370, Section 3, Apparatus and Container Packaging).
Usage example: Baking of bread, cookie, etc., freezing and thawing of foods.

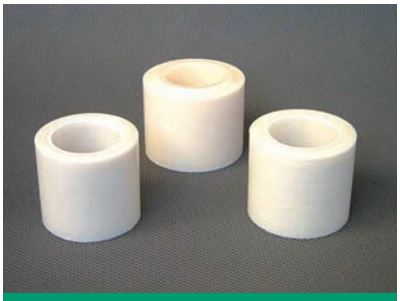
■Please use the sheet by laying it on a top plate of oven etc.
Bread and cookie can be baked cleanly and fish and meat can be grilled neatly without using oils. Caring after use is simple. The sheet can be cleaned by lightly wiping of with a cloth to be ready for repeated use.

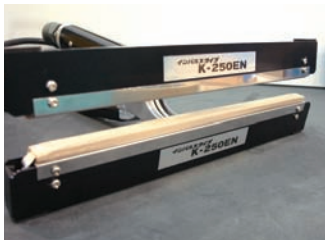


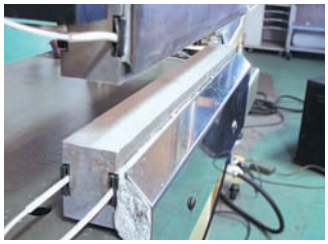
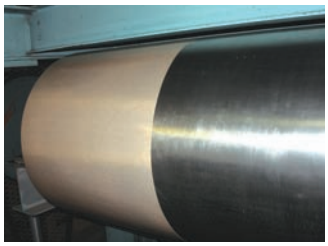
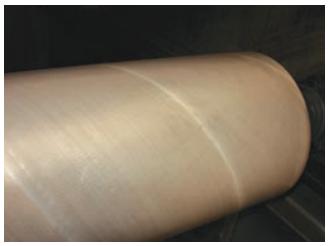
Adhesive Tapes (GTT, XT)
TETLAS®

These are products manufactured by applying silicone-based pressure-sensitive adhesive agent on one side of PTFE-impregnated glass cloth, and can be used at temperatures up to 240℃. Products using PTFE skive films as substrates are also available.


GTT (substrate: PTFE-impregnated glass cloth)


XT (substrate: PTFE film)



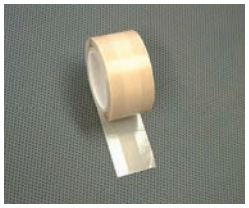
〔Usage〕

■Surface coating on the pressure bonding section of hot pressing machine and heat sealer, etc.
■Surface processing on the sliding surface of chute, hopper, and guide rail, etc.
■Surface coating on driers for papermaking.
■Insulating coating on electric wire and cable etc., and binding for wires.
■Coating on heat rollers in the dyeing industry, resin processing industry, etc.

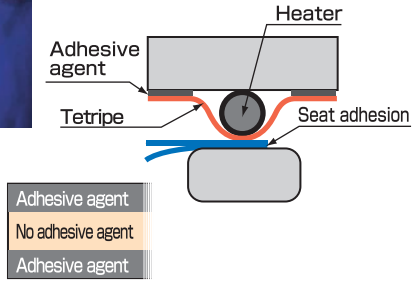
Zone Tapes (Tetripe)
TETLAS®

Stripe-type adhesive tapes using PTFE-impregnated glass cloths as substrates with acrylic-based adhesive agents applied only to both ends of tapes.


Tetripe (substrate: PTFE-impregnated glass cloth)




Structure of Tetripe



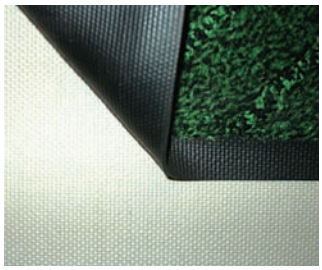
〔Features〕

The middle section to which adhesive agent is not applied comes in contact with the heater and fixed at both ends of the tape.
A neat seal is obtained as the stretching property of the heater is improved by not fixing the heater directly with adhesive agent.
The tape will not wrinkle up and the heater will not fracture.

Release sheet

TETLAS®

This product is superior in heat resistance and non-adhesiveness. By using it for the purpose of mold releasing in rubber or plastic molding processes or food manufacturing processes, loss of raw materials during product manufacturing is reduced and product quality and work efficiency can be improved.



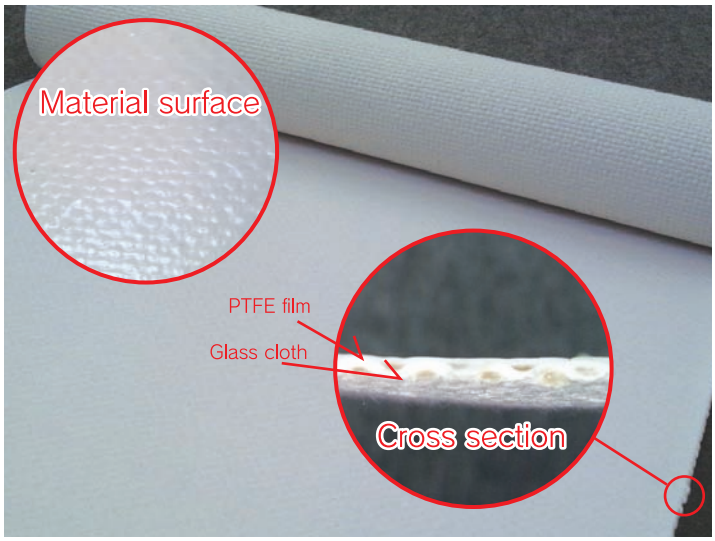
〔Usage〕

■Rubber/plastic manufacturing and processing, surface coating on pressure bonding section of heat sealer, automobile interior material molding processes, architectural plywood forming processes.

Non-metallic expansion joints

TETLAS®

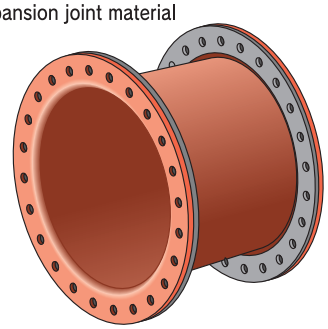
TETLAS is a composite of PTFE (polytetrafluoroethylene) and glass cloth.
It is used as non-metallic expansion joints by combining it with other materials for the purpose of absorbing expansion and contraction caused by thermal expansion of piping joints, vibration, and wind pressure at ironworks, electric power plants, and incinerator plants.
PTFE is superior in chemical resistance and can also be applied to corrosive gases such as exhaust gas.



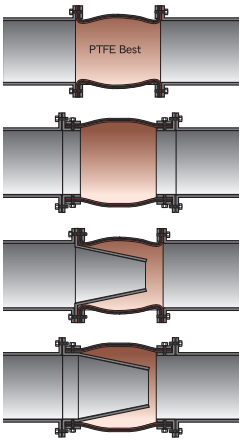
〔Usage〕

■Equipment, piping, and duct etc. used in thermal/nuclear power generation, iron/steel industry, petroleum refinery, chemical industry, paper/pulp factories, cement industry, and industrial waste disposal plants.

Expansion joint material



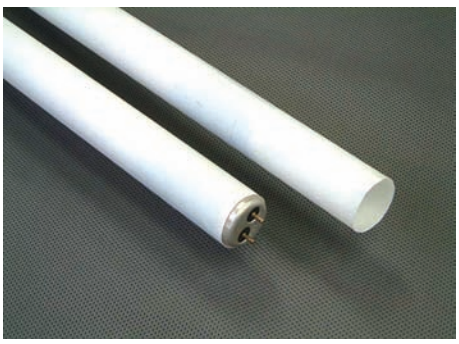
Expansion joint Connection example



Photocatalyst Cloth

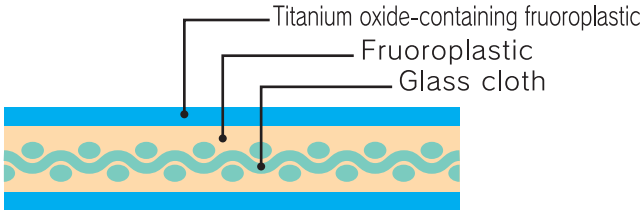
TETLAS®

This material is manufactured by coating fruoroplastic and titanium oxide on glass cloths so as to display photocatalytic effect. With a light shined on, hazardous organics, which gradually adhere to the sheet surface, are decomposed.



〔Usage〕

■Fluorescent lamp cover, roll curtain, blind, air filter.



Silicone Rubber

TETLAS

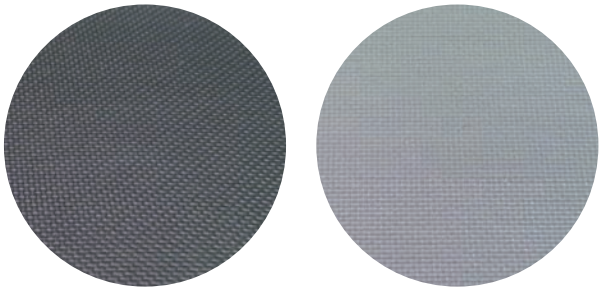
Can be used as cushion materials in various hot pressing processes including diaphragms for solar cell module manufacturing processes.

〔Features〕

Superior in heat resistance
Can be manufactured in the following sizes:
Thickness: 2 mm to 10 mm
Width: 2,000 mm to 3,000 mm
Length: 3,500 mm to 5,500 mm

We constantly make efforts to improve the materials. Please consult us about the specifications such as hardness, durability, thickness, and width, etc.

〔Material surface〕

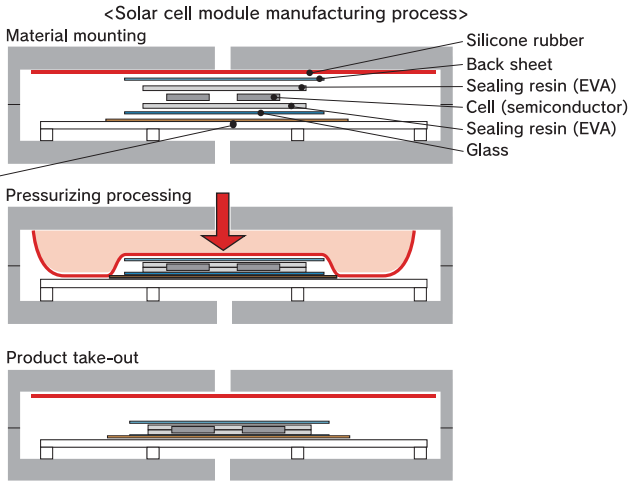


Mirror finish is also available.

＊Mold releasing sheet (TETLAS)
PTFE-impregnated glass cloth (TETLAS) can be used.
Contact us for details.

〔Usage〕

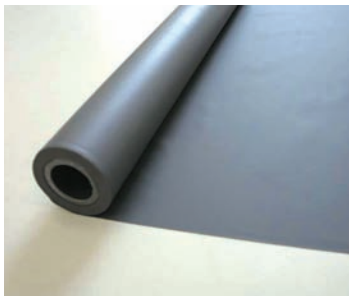
■Solar cell module manufacturing processes, etc.

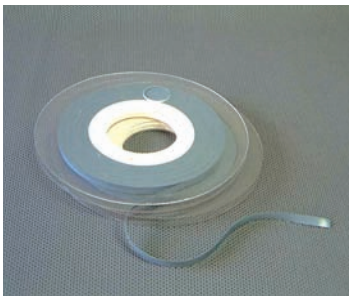


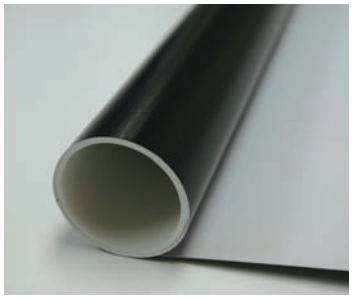
Pressurized Cushion Sheet (Thermally-conductive rubber sheet)

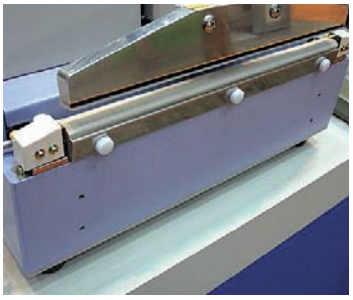
TETLAS

Silicone rubber sheet with superior thermal conductivity, which can be used as a cushion material in LCD module manufacturing process and hot pressing process, enables productivity improvement.









〔Features〕

Use of rubber with high thermal conductivity allows lowering heating temperature setting.
As the sheet can be used repeatedly, maintenance can be lowered and manufacturing cost can be reduced.

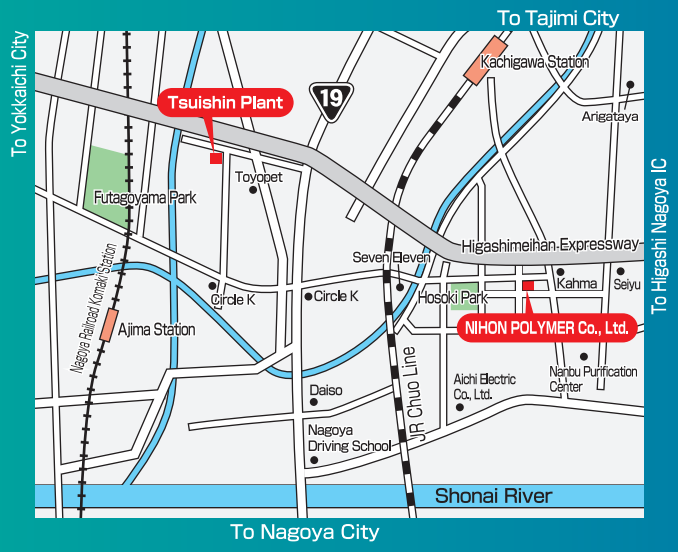
A composite material of PTFE-impregnated cloth and silicone rubber is also available. This material has a higher hardness as compared with the use of silicone rubber alone, and is superior in mold releasability and dimensional stability.

〔Usage〕

■LCD module manufacturing process, heat seal, etc.

■Location Map

■Headquarters



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