



Sirs,

Thank you for interest to our company and for the inquiry.

Our company, the UNON-GIKEN, is a small adhesive-tape maker in Japan characterized R&D technique and resourcefulness, based on ethics and trust policy.

Company name	UNON-GIKEN CO., LTD.
President	Takayuki Iizuka
Capital	¥10,000,000-
Foundation	1979
Headquarter	Tokyo, Japan
Business	adhesive tape and precision printing for industrial use
Design and R&D	Unon-Giken Tokyo Office
Precision printing	Unon-Giken Atsugi Plant, certificated ISO 9001, Kanagawa, Japan
Tape manufacturing	fabless; Our products are made at the factory of contract company in Japan, suitably furnished for the product, and certificated ISO 9001 & 14001. Unon-Giken contracts with more than 20 companies now, and the number is increasing.

Most of members of our company are R&D (research and development) engineers or process engineers who have learned chemistry, chemical engineering, or mechanical engineering. Every day, they are investigating and improving products' specifications, chemicals, and materials in vitro in our laboratory. The handmade A4 sized tape samples, which you could get, are created at there.

Since 1979, we have been supplying products to our customer as custom-built ones for industrial use. So we are afraid that our products could be a little more expensive than those of the big makers, if they may have products of the same-level performance and quality with those. Instead, we are able to meet close demand of the customer, and meet to the small size purchase order, such as 1000m production, which means 1000m glue coating on the raw base film of full width (1040mm or 1240mm width), and 3000 ~ 5000m production. Of course, we would much appreciate for the purchase order of further volume, too.

We have confidence toward our technical skills and resourcefulness for customer's satisfaction, but have a slightly weak field. We have had poor experiences and opportunities for exporting our products by ourselves, because our skillful distributors in Japan have brought us the demands of oversea users. So, we hope that you could give us a permission to ask arrangements for the product to our skillful agency or distributor in Japan if the product would be exported to you, or that you could introduce us your proper importer who is able to receive our product in Japan.

We hope you make use of us.
Sincerely yours,

Research and Development Department, Manufacturing Management Department

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Work Flow;

realizing specification for user's demand

1. You **contact** to us. Discussion for; User's demand and ideal specification, Decision important requisites.
 2. After our **investigation and trial to realize the user's requisites**, we appropriately inform you our progress status. Then you and we would discuss about user's evaluation plan.
 3. **New developed handmade sample, or our present product sample:**
If we could expect the user's requisites could be fulfilled by one of our present products, we want to send the product sample, a roll sample of short length would be sent if we have stored then, otherwise several sheets of cut sample. If the user's requisites could require our new research & development, we would try it. After the R&D, we would send you several sheets of handmade A4 (~B4) size adhesive-tape sample.
(Free sample. We will pay for handling and the transportation charge.)
 4. You inform us the **user-test results** and points of further improvement.
Then, go to step 2 or 3 again, till the user satisfies to the handmade sample.
 5. We are able to indicate its **ex-work price*** of 1000m, 3000m, and 5000m production.
Where 1000m means, e.g., 30 rolls of 300mmW x 100mL, 40 rolls of 230mmW x 100mL.
 6. **Machine made roll sample** (several rolls of the required width x 100m or short length):
Fee-charging, because it costs for materials and machine charges even if it is small.
If the user's demand has been fulfilled by the present product of ours, it would be quite easy for us to prepare it, and only to do is waiting our next product manufacturing. You would get the sample by a reasonable price.
On the other hand, if the product was created by the new developments, or if there were no time for waiting our next manufacturing of present product, we hope discussion about the expenses of roll sample manufacturing, between you (and/or your user) and us. The total cost would not be expensive, but the product's unit price would be much more expensive than above production ex-work ones.
Unon-Giken will bear half price of manufacturing expense of the roll sample. Please you bear the remained half price and importing cost (tax and transportation cost). Our half burden means, for our technical confirmation to do about the smooth manufacturing process, or for a discount if the sample was our present product.
We will issue a quotation of remained half price to you, or to our distributor. The machine made roll samples will be sent to the required place in Japan after confirmation of receiving the payment.
 7. **User's line introduction test** (a certain amount of rolls for line use):
We are expecting the user could also finish the line introduction test by above roll samples of step 6.
As we will make the first 1000m manufacturing by 3000m price for you, we hope you make use of the first 1000m. Please ask to the supplier to issue PO (purchase order).
In this period, we will prepare MSDS, RoHS certification, and the SPECIFICATIONS for the product. In addition to above documents, we would prepare for "non-disclosure agreement" or "sale and purchase agreement" if it would be required.
 8. **User's line use:**
We are making product by built-to-order manufacturing. The lead time would be about 1.5 months after our receiving your (or supplier's) purchase order (PO) without a forecast of user's demand. The lead time would be reduced if you (or the supplier) could indicate us a forecast attending with an obligation to issue PO within the period. The date of shipping would be discussed between you (or the supplier) and us after receiving the PO.
- * The machine charge is for the machine occupation time to process for the product, it means that an arrangement (preparation) and a rearrangement (cleaning) are included in the occupation time as well as the machine operation time. As you know, the 1000m unit price is relatively more expensive than those of 3000m and 5000m.
Unit price of manufacturing: 1000m >> 3000m > 5000m ≥ 10000m ≥ (≈) 20000m
Our feeling is that the 3000m ~ 5000m production could have good balance between manufacturing size and the manufacturing cost. We hope you understand that our products are ones for technical use, and made with built-to-order. The products' unit price would be changed with a quantity of your PO.

Our faculties for product;

Item	Variation
General adhesive tape & film	<ul style="list-style-type: none"> • low ~ high adhesive strength variation, of glue no-residuary • back grinding tape for silicon wafer • added functional of high clarity or anti-static property • heat-resistant property by using e.g., Kapton[®] film or metal foil • Anisotropic Conductive Film
UV set adhesive tape	<ul style="list-style-type: none"> • dicing tape for silicon wafer, package, glass, ceramics • back grinding tape for silicon wafer • heat-resistant (e.g. ~130°Cx1h) UV functional tape
Heat-resistant tape & film	<ul style="list-style-type: none"> • Heat-resistant Barcode Label • Stiffener • Bonding Sheet
Precision printing (clean class 1000)	<ul style="list-style-type: none"> • tape or film products combined above function by printing • deco printing

Product Information

Dicing tape & Back-grinding tape



Heat-resistant label & tape



Other tape



Precise printing



◆ Dicing & Back-grinding (Adhesive tape and film for electronics field)

Product	Base film	Base film thickness [μm]	Glue thickness [μm]	Appearance /color	Adhesive strength [mN/25mm]		work / application
					normal	after UV	
LM-200UV	PVC	100	15	frost	2,450	137	Si wafer dicing
MC-240UV	PVC	80	15	clear	3,234	147	
PM1520UV	PO	150	25	frost	24,500	294	Package dicing
PT1020UV	PET	100	25	clear	9,800	200	Glass dicing
PT1822UV	PET	188	25	clear	21,600	300	Glass, Ceramics dicing

Above values are not guaranteed but the representative ones. The values of adhesive strength are of 1 hour after stuck on the proper work material (Si wafer or glass mirror finished). UV irradiation: 300mJ/cm². We also have the premium grade products for special use. Please contact us or our providers.

◆ Heat-resistant tape

Product & its advantage	Structures
K-1453A, K-2453A <ul style="list-style-type: none"> - heat-resistant printable label - clear print - durable to organic solvents - temperature range for use: -30°C ~ 300°C - more than 20 years in the market 	<ul style="list-style-type: none"> White coat layer for printing PI film: Kapton[®] 25μm (K-1453A), 50μm (K-2453A) Heat-resistant adhesive layer Release paper
Aluminum foil substrate tape <ul style="list-style-type: none"> - durable to 250 ~350°C annealing temperature - for seam joint & indication tape for Al foil product 	<ul style="list-style-type: none"> White coat layer for printing Aluminum foil Heat-resistant adhesive layer Release paper
K-1000A, K-2000A, K-1300S, K-2300S Functional heat-resistant adhesive sheet for industry <ul style="list-style-type: none"> - available for shaping with a mold - durable at 260°C reflow temperature - for as parts installed, in-processing use, masking tape, heat-resistant spacer - Heat-resistant acrylic adhesive glue is used for K-1000A and K-2000A - Silicone adhesive glue is used for K-1300S and K-2300S 	<ul style="list-style-type: none"> PI film: Kapton[®] 25μm (K-1000A, K-1300S) 50μm (K-2000A, K-2300S) Heat-resistant adhesive layer A: Heat-resistant acrylic S: Silicone Release paper/film
Label for steels <ul style="list-style-type: none"> - printable label - stick to 400°C steel 	<ul style="list-style-type: none"> Heat-resistant white coat layer for printing Aluminum foil 30μm Heat-resistant adhesive layer Release film
TMK2 Stiffener for FPC <ul style="list-style-type: none"> - substitution use for the thick Kapton[®] - available thickness; 175μm, 225μm, 100μm and other thickness - bonding sheet type available 	<ul style="list-style-type: none"> PI film: Kapton[®] Heat-resistant adhesive layer PI film: Kapton[®]

We are developing and producing adhesive tapes and sheets for various demands, e.g., heat-resistance, chemical durability, strong adhesion, etc. Please contact us or our providers.

◆ Other tapes and Precision printing

We have been trying and realizing various adhesive sheet products, protection sheets, strong-adhesion sheets, both-faces adhesive sheets, and adhesive product of nonwoven fabric, for user's demands (e.g., with functionalities of weather resistance, air-permeability, mothproofing, etc.). Please contact us or our providers.

Functions nurtured by R&D and production for tapes/sheets should be made the best use to the precise screen printing. We are trying it, too.

Our Atsugi Plant, clean class 1000, is usually producing some electric parts (e.g., a membrane switch, an electric terminal of touch panel, a light path plate, deco printing on surface film, etc.) by a precise screen printing, with a strict hue and quality control. Atsugi Plant is trying to realize "Optically Clear Adhesive Layer Printing", too.

About Built-to-order, Secrecy, and limited warranty

UNON-GIKEN will welcome and agree to enter into "Non-Disclosure Agreement" and/or "Sales and Purchase Agreement", if it would be required. Details will be described on the text of the agreement. We hope you understand our situation as following, even if there were not above agreements.

◆ Built-to-Order

We are making the products by built-to-order manufacturing. The lead time would be about 1.5 months after our receiving your (or the supplier's) purchase order (PO) without a forecast of user's demand. The lead time would be reduced if you (or the supplier) could indicate us a forecast attending with an obligation to issue PO within the period. The date of shipping would be discussed between you (or the supplier) and us after receiving the PO.

The proper amount of materials for the product will be prepared after receiving the PO or the forecast. Then, the material's amount would be sufficient for the required quantity of the product, if there were no heavy-trouble of unpredictable.

Trouble, it is a very rare case, but such a situation may occur. Then, a several quantities of the product could be short from PO quantities at shipping, e.g., 98 rolls were shipped for the PO 100 rolls. We would inform you before shipping about it as soon as we could have recognized. So we hope you would accept such a situation, beforehand.

◆ Secrecy, Intellectual Property Right

Even if there is not above agreements between you and us, we will hold in strict confidence, and will not disclose, directly or indirectly, to any third party any technical, economic, financial, marketing or other information received from you. Notwithstanding the foregoing, we hope you agree that we may disclose information, if it were required by law or government regulations. The obligations "non-disclosure" will survive the termination of the discussion, cooperation, or business until such information becomes a part of the public domain without any act, negligence or omission.

If an invention or a utility model is created based on the non-disclosed information from your side, its details shall be informed you. Then its treatments shall be discussed and decided, including whether the intellectual property is applied to the government for a subsidy or not.

◆ Limited Warranty

We warrant you that the product conforms to the SPECIFICATIONS. The warranty will continue for a period of 6 months (or 12 months, the period is explained at discussion, which is depending on the materials to be used) from the date of "glue coating", in case the product is operated in a commercially reasonable manner.

You acknowledges that the products are being sold on an "as is" basis. You further acknowledge that our liability on any claim, whether in contract, tort (including negligence) or otherwise, for any loss or damage arising out of or connected with, or resulting from the manufacture, sale, delivery, resale, repair, replacement, use or performance of any products shall in no case exceed the price for the products which given rise to the claim.

In no event shall we be liable for;

- (a) special, indirect or consequential damages,
- (b) loss of anticipated profit or revenue, loss of use, cost of capital, down-time cost, cost of substitute goods, facilities, service or replacement power,
- (c) property damage external to the goods and loss arising out of such damage, or
- (d) any of the foregoing suffered by a customer of you.

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