

Japan
Beautiful
Quality

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輝かせる



日本鏡鋳株式会社
NIHON KYOBAN CO.,LTD.

为您带来70年以来,不断持续磨练的心与技

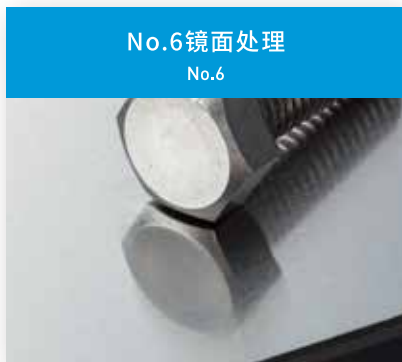
我司专门生产制造于做为用于电子材料,以及装饰板成形模具零件的加压板。

主力产品为用于弱电产品及电子机器...等打印基板成形用模具的加压板,其他还有装饰用具、家具装饰板成形用的加压板、聚氯乙烯垫、抛光用加压板等加工制造。

国内各大弱电制造商及装饰板制造商,甚至在各国电子产品制造商也都有建立贩卖通路。

在总公司工场拥有许多不锈钢用抛光机及校正打平机、电镀加工相关设备,可进行微米级的抛光、喷砂、电镀加工。

几乎所有的工序均为内部制造,制造加工的外包比例控制在10%以下。



Delivering the heart and craftsmanship refined over 70 years.

We at Nihon Kyoban specialize in manufacturing press plates used as molding components for electronic materials and decorative board production.

Our main products are press plates used for printed circuit boards applied to weak-current electric appliances and electronic devices. In addition, we handle the manufacturing and processing of press plates for decorative boards, polyvinyl chloride (PVC) sheets, and gloss press plates used in interior fittings and furniture.

Our extensive sales channels cover not only major domestic manufacturers of weak-current electric appliances and decorative boards but also electronic product manufacturers in other Asian countries.

Our main factory is well-equipped with a large number of polishers, levelers, and plating machines for stainless steel which enables precise polishing, blasting, and plating process at the micron level.

Most manufacturing processes are conducted in-house, therefore the outsourcing ratio remains at less than 10%.



President's Message and Company History

President's Message

Our predecessor company, “Shin-Riken Polishing Works Co., Ltd.,” was established in 1951, and in 1965, it was reorganized as the current “Nihon Kyoban Co., Ltd.” Since our establishment over 70 years ago, we have earned the trust of our customers as a company specializing in surface treatment processing of stainless steel, aluminum, copper plates, and other materials used for press plates.

Our greatest strength lies in the hands of our skilled craftsmen, who possess extensive expertise and advanced techniques in optimal polishing methods. They meticulously hand-finish each product, one by one, even those that present high difficulty. As a result, we have achieved a proven track record of successful deliveries and garnered high praise from numerous customers.

Throughout our history, we have continuously strived to enhance our technical capabilities and improve product quality through the development of steel types and surface treatment processes utilized in various fields that necessitate surface polishing, including electronic components, building materials, and cards. Looking ahead, we remain committed to further improving our quality, adhering to delivery schedules, and building a company that instills confidence and trust in all our customers.

We sincerely appreciate your continued patronage and look forward to continually serving you in the future.

President *Yuichi Kitano*

Company History

Since its establishment, Nihon Kyoban Co., Ltd. has been engaged in the surface treatment processing of decorative boards for construction use and press plates for producing paper-phenolic resin copper-clad laminates, glass epoxy resin copper-clad laminates, melamine resin decorative boards, rigid polyvinyl chloride (PVC), multilayered boards, and cards.

We have devoted all our efforts to developing press plates using various steel types, and have a proven track record of delivering to many customers. With our exquisite polish technique, we have focused on developing our product quality using the most suitable materials for press plates and rigid stainless boards. We have contributed to various fields, including electronics, medical-related industries, and beyond.

- 1951 Shin-Riken Polishing Works Co., Ltd. established to provide mirror surface finishes for laminated boards
- 1953 Changed trade name to “Daiwa Kagamiban Manufacturing Co., Ltd.”
- 1956 Kyobashi Plant expanded (Joto-ku, Osaka)
- 1961 Neyagawa Plant established for manufacturing large-sized mirror surface finish press plates
- 1964 Plating facility added to Neyagawa Plant to start hard chrome plating
- 1965 Reorganized as “Nihon Kyoban Co., Ltd.” [Capital: 5 million JPY].
- 1984 Large-scale automatic No. 6 polishing equipment introduced
- 1987 International trade started
- 1994 Capital increased to 10 million JPY
- 2000 Leveler for straightening press plates introduced
- 2018 Automatic plate thickness gauge for stainless steel introduced
- 2022 Capital alliance with Yoshu Tanpan Sangyo Co., Ltd established



Company Outline



Company name Nihon Kyoban Co., Ltd.

Location 13-5, Izumo-cho, Neyagawa City, Osaka Prefecture, 572-0821, Japan

TEL +81(0)72-824-0123

FAX +81(0)72-824-1887

President Yuichi Kitano

Capital 10 million JPY

Established October 16, 1965

Total Number of Employees 25

Service Items Press plates and mirror surface finish plates for construction materials

1. Stainless steel plates

Mirror surface polish, matte finish, hard chrome plating, BG (No. 6) polish

2. Aluminum plates

Mirror surface polish, matte finish, and hard chrome plating

Applications Press plates used for manufacturing paper-phenolic resin copper-clad laminates, glass epoxy resin copper-clad laminates, rigid polyvinyl chloride (PVC), melamine resin decorative boards, multilayered cards as well as decorative boards for construction use (elevators, building interior), other

Major Customers Aica Kogyo Company, Limited, Aica Harima Kogyo Co., Ltd., C.I. TAKIRON Corporation,
(Listed in random order) Sumitomo Bakelite Co., Ltd., Mitsubishi Chemical Corporation,

TAIHEI CHEMICALS LIMITED, Panasonic Corporation, NIHON DECOLUXE CO., LTD.,

IBIKEN Co., Ltd., ELNA CO., LTD., Kitagawa Seiki Co., Ltd.,

OSAKA SODA CO., LTD., DYMCO, LTD., DAIKEN CORPORATION,

Okura Industrial Co., Ltd., FANUC CORPORATION, TOYO LITE Co., Ltd.,

Kyodo Printing Co., Ltd., SHOEI Printing Co., Ltd., SATO SHOJI CORPORATION,

TOKYO TOKUSHU SHIGYO CO., LTD., NP Trading Co., Ltd., Yoshu Tanpa Sangyo Co., Ltd.,

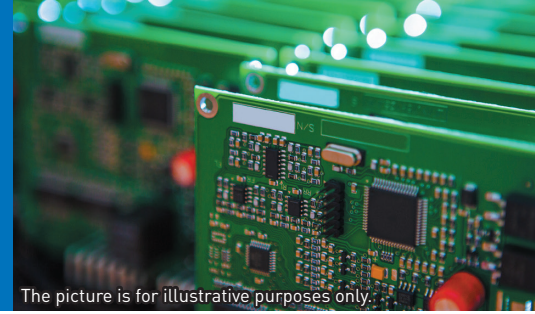
JABURO Industry Co., Ltd., Doosan Electro-Materials Co.,Ltd. LG Chem, Ltd.

As well as approx. 50 other companies

Export to: China, Taiwan, the Republic of Korea, Thailand, India, Malaysia



Press Plates for Manufacturing Electronic Substrates



The picture is for illustrative purposes only.

One plate creates a cutting-edge substrate and shapes the future.

Our skilled craftsmen, equipped with Japan's top-class stainless steel and aluminum polishing techniques, support cutting-edge technologies.

Main Products

- BG No.6

Our Strengths

- Achieving exceptional smoothness through flat surface finishing.
- Developing plates that do not distort even with repeated heating and cooling at the customer's end through our unique heat treatment process.

Product Applications

- Molding electronic substrates
 - CCL (Copper Clad Laminate) industry
 - PCB (Printed Circuit Board) industry

Work Flow



We are here to address your concerns!

I don't know which company to choose.

Our over 70-year history is a testament to customer trust. Please feel free to consult with us for any inquiries.

I need a small quantity.

We accept orders starting from one piece. Please don't hesitate to consult with us, even for prototyping or small-scale batches.

I need to meet a tight deadline.

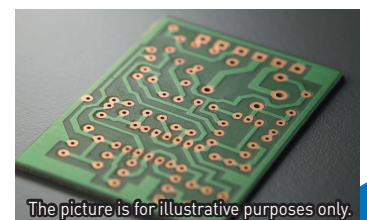
Please don't hesitate to consult with us, even if you are facing a tight deadline. We will respond promptly and efficiently.

I want to repair a plate with surface damage.

We accept requests for re-polishing, repairs, and more, even for a single plate. Please feel free to consult with us.

Customer Review

We were contacted by a customer who was searching for small batches of plates for their prototype production. They mentioned that due to the nature of their product, they required an extremely precise polishing finish, making it challenging to place an order. After a thorough consultation, we delivered several ranges of finishing samples based on the No.6 polish. The customers were thrilled with the successful completion of the prototypes.



The picture is for illustrative purposes only.

NIHON KYOBAN PROCESS

Processing



We continue to refine our skills and strive to push the boundaries of polishing.

Electronic Base Materials(plating boards)

including Steel Type SUS304, etc.

① Belt grinding



② Plating



Electronic Base Materials (CCL, PCB)

including Steel Type SUS630, etc.

① Belt grinding



Decorative Boards (matte-finish boards)

including Steel Type SUS304, etc.

① Belt grinding



② Applying mirror surface finish



③ Sand blasting



Decorative Boards (plating)

including Steel Type AL5052, AL6061, etc.

① Dry polishing



② Plating



③ Applying mirror surface finish



Decorative Boards (plating) including Steel Type SUS304, NSS431, etc.

① Belt grinding



② Base polishing/Planar



③ Dry polishing



④ Plating



⑤ Applying mirror surface finish



Major Equipment

- Polishing machines: 12
(manual: 9, automatic: 3)
- Shot blast machines: 2
(matte finish)
- Plating equipment
- Leveler
- Thickness gauge
- Shirring

	Machine No.	Weight	Maximum Plate (unit: mm)			Minimum Plate (unit: mm)		
		Maximum	Thickness	Width	Length	Thickness	Width	Length
①Belt grind	C-2	100kg	3.0	1,295	3,130	0.8	300	1,000
	C-3・C-5	100kg	2.0	1,290	3,100	0.8	300	1,000
②Wet polish for finish (aluminum)	A1~A3・A5	155kg	5.0	1,440	3,500	0.8	300	300
	A4	155kg	5.0	1,440	3,500	0.8	300	300
③Sand blast	S-1	155kg	5.0	1,300	3,000	1.5	300	300
	S-2	155kg	5.0	1,270	3,000	1.5	300	300
④Manual dry polish	B-1~B-6	150kg	5.0	1,440	3,500	0.8	300	300
⑤Plating (aluminum)	M-1・M-2	150kg	5.0	1,500	3,500	0.8	600	600
	M-3・M-4	100kg	3.0	1,300	2,800	3.0	1,000	2,000
⑥Automatic polish (planer)	P-1・P-2	150kg	5.0	1,440	3,500	1.0	1,000	2,000
Conveyer		150kg	—	1,440	3,700	—	1,000	2,000
Plating conveyer		150kg	—	1,440	3,500	—	600	600
Fork lift vehicle		2t	—	—	—	—	—	—

*The size each machine can handle is based on the maximum weight.

*The red numbers indicate that the machine's weight limit is exceeded when using the maximum size plate.

*For the plating conveyer, the weight listed is the amount that can be clamped onto a jig.



The SUS301 and SUS630 H introduced here are both press plates developed jointly with Nippon Yakin Kogyo Co., Ltd. We process the finest materials using our advanced polishing technology. Due to the processing using both Nippon Yakin Kogyo Co., Ltd.'s residual stress removal treatment and our internal stress removal treatment, no warping occurs even after repeated heating and cooling.

It is a press plate that is scratch-resistant and most suitable for manufacturing multi-layer, high-density printed circuit boards, and is already being used by many customers.

(1) Chemical Component

Grade	C	Si	Mn	P	S	Ni	Cr	Cu	Nb
SUS301 H	≤ 0.15	≤ 1	2	0.045	0.03	6 ~ 8.00	16 ~ 18.00	—	—
SUS630 H	≤ 0.07	≤ 1.00	≤ 1.00	≤ 0.04	≤ 0.03	3 ~ 5.00	15 ~ 17.50	3 ~ 5.00	0.15 ~ 0.45

(2) Mechanical Behavior

Grade	0.2% Proof stress N / mm ²	Tensile strength N / mm ²	Elongation %	Hardness HV
SUS301 H	1027	1189	18	≥ 380
SUS630 H	≥ 1257	≥ 1412	≥ 6.6	≥ 450

(3) Physical Behavior

Characteristics	Grade	SUS301 H	SUS630 H
Modulus of length elasticity (kN / mm ²)		173	196
Specific gravity (20°C)		7.93	7.8
Thermal conductivity (100°C) (W / m · K)		16.3	13.7
Thermal expansion coefficient (100°C) (x 10 ⁻⁶ / °C)		16.9	11.2

(4) Specifications of Products

Plate thickness/Size			
SUS301 H	0.8mm ~ 1.8mm × 1220mm		
SUS630 H	1.2mm ~ 1.8mm × 1295mm		
※ Please consult us regarding product dimensions (length).			
Grade	width	length	Right Angle Degree (diagonal difference)
SUS301 H	- 0, +2	- 0, +2	≤ 2
SUS630 H	- 0, +2	- 0, +2	≤ 3
Tolerance of thickness	≤ 0.05mm		
Flatness	Set on the Surface plate and maximum gap is less than 3mm.		
Classification of finish	Grinding is No.6 finish (Surface roughness Ra less than 0.12 μ)		
Appearance	Appearance inspection shall be executed on the both sides of all products and there should be no defect on the appearance other than slight defect which does not give any influence on the products		
Chamfering, Hallmark	R of the corner and both sides are chamfered and designated No. shall be stamped on.		
Other	It shall be settled by mutual consultation when any difference of the view for this specifications, or the problems on the Items which are not mentioned, shall be happened.		

(5) Material Manufacturer

Nihon Yakin Kogyo Co.,Ltd