

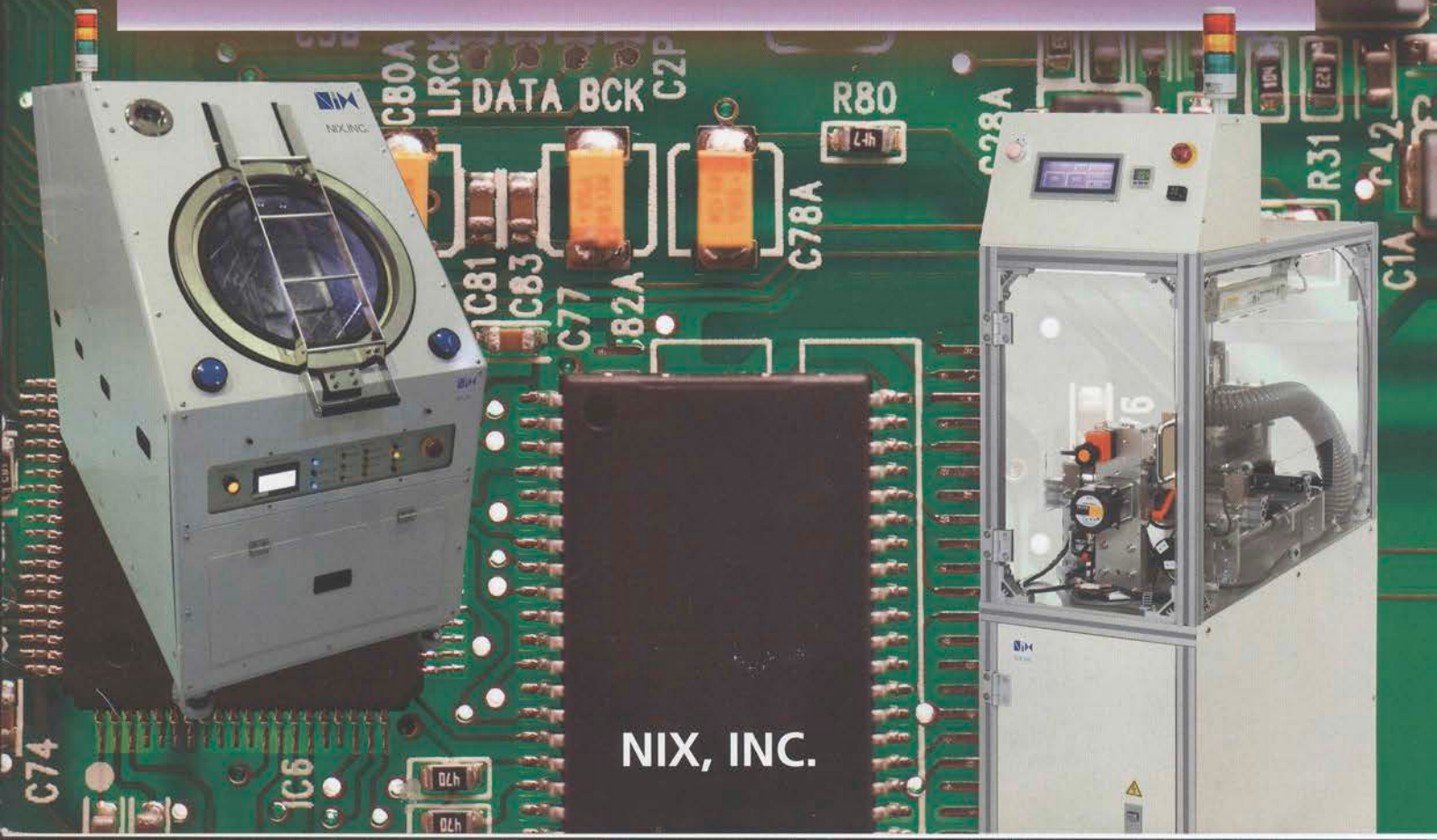


NIX, INC.

NIX PCB SOLUTION GUIDE



NIX is the best partner for improving your factory



NIX, INC.

35 years
of experience

**Our innovative products created cooperating with customers
improve their production process and resolve their problems.**



Nikko-Rack™ Magazine Rack



Printed Board Cleaner



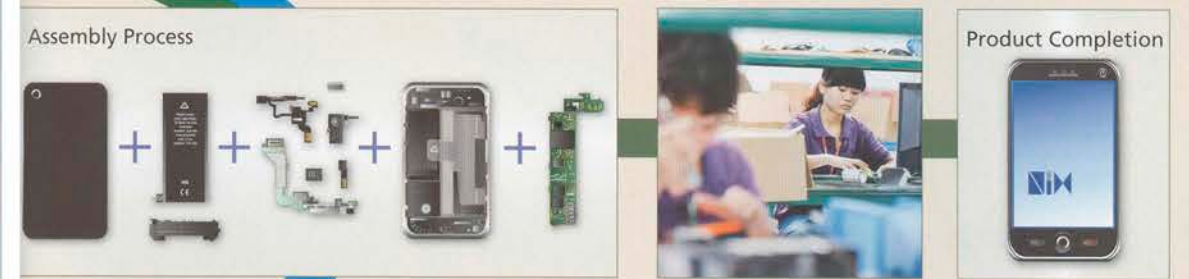
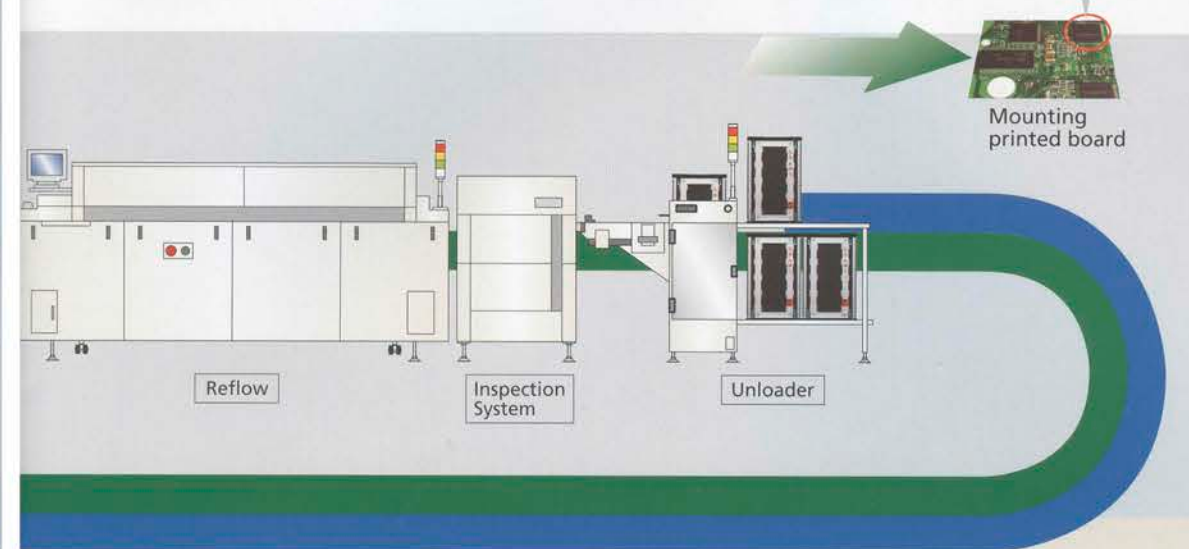
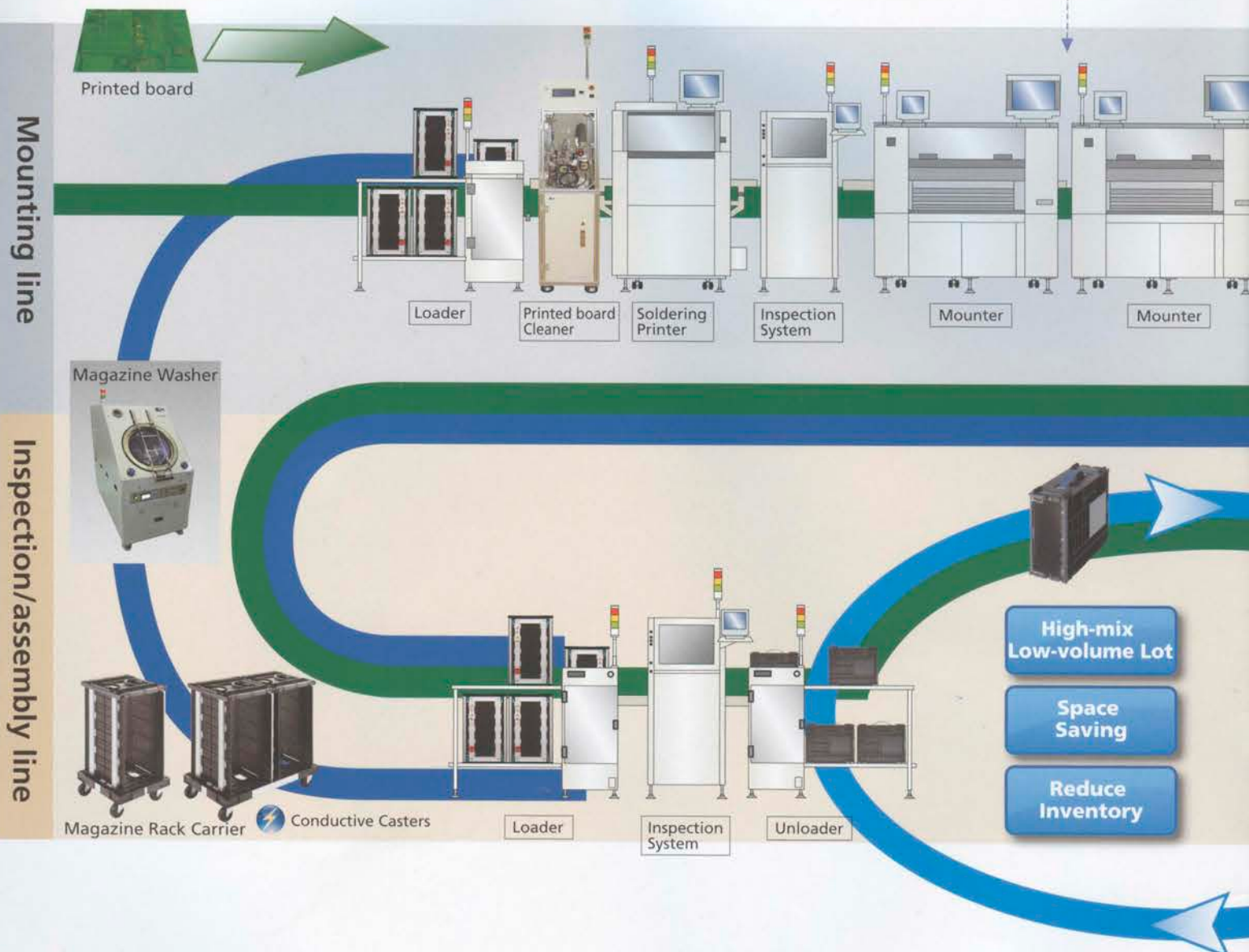
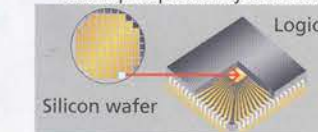
Label Automatic Feeder



For semi-conductor production process

We will develop in accordance with customer's needs.

- Wafer storage rack
- Wafer production system fixture
- Wafer tip inspection system fixture



Smart Storage Rack



Customized Rack



Static Charge Measure PET Label



Malfunction Indicator Mark



Ko-Rack



Dust Cover



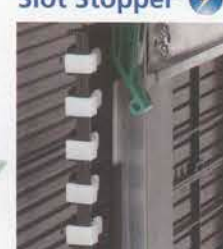
Electric charge prevention



Base Cover



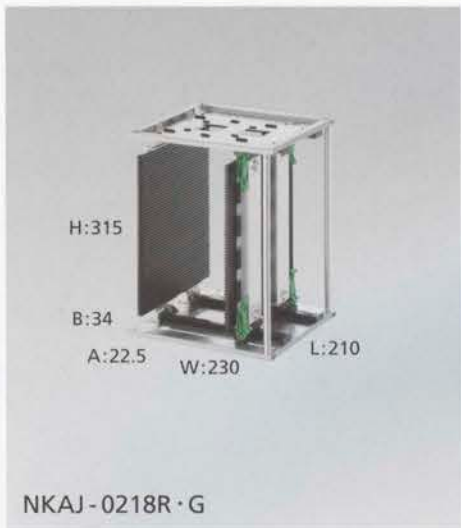
Slot Stopper



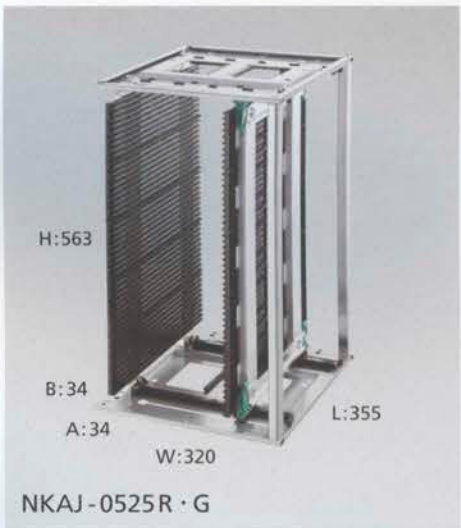
The world top brand of magazine racks: Nikko-Rack™ series

Flexibly offering
idea and design of
custom products
*Please refer to page 6

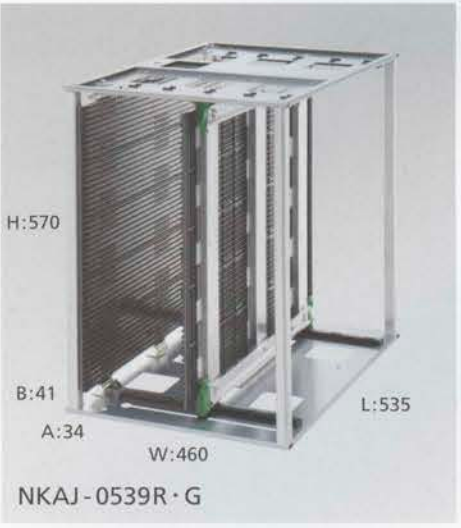
S size



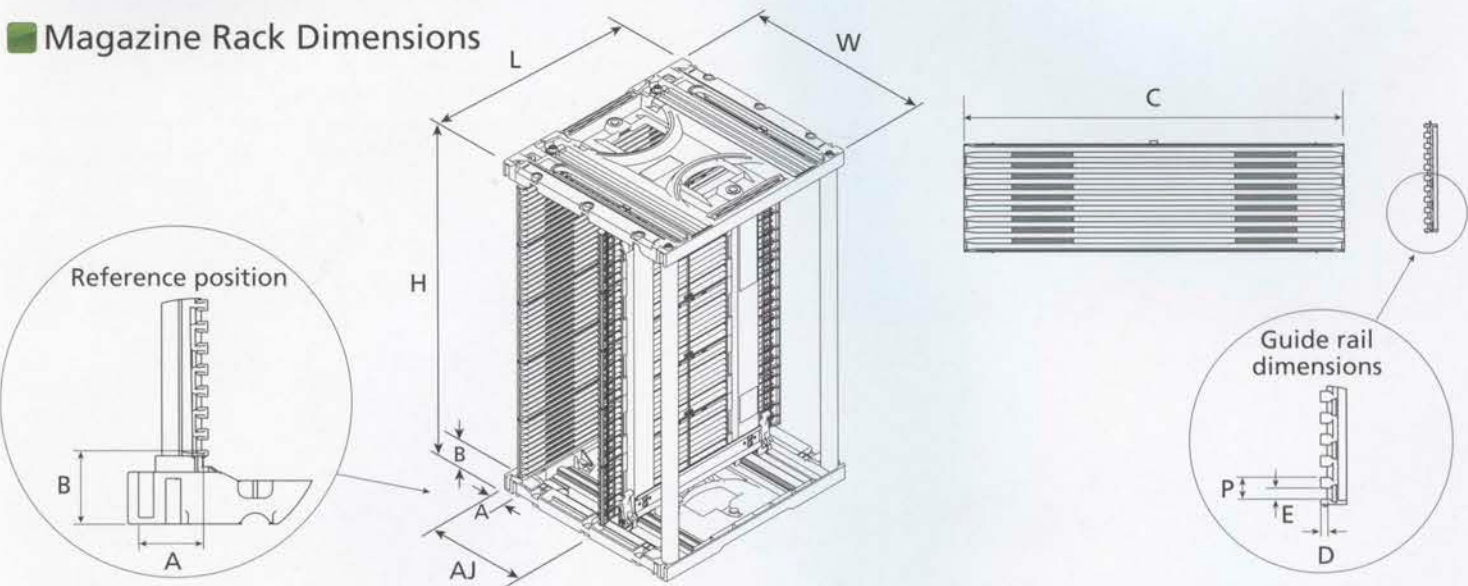
M size



L size



Magazine Rack Dimensions



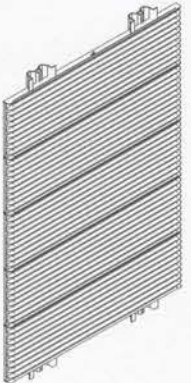
Specifications

Model	Max Tolerant Temperature for the Cardguide (not to exceed)	Method for Width Adjustment	Outer Dimensions			Adjustable Width	Reference Position		Guide Rail Dimension				Number of PCB Capacity	Weight (kg)	Base Material	Availability in Reverse	Stopper Bar (optional)
			L (length)	W (width)	H (height)		A	B	C	D	E	P					
★NKAJ-0211N・G	60℃	R&P	160	160	395	20－110	22.5	34	159	2.5	3.5	8	40	1.9	Metal	×	L=383
★NKAJ-0211R-AL・G	135℃	R&P	260	165	270	20－110	20	34	255	1.5	3	4	50	1.6	Metal	×	L=258
NKAJ-0218R・G	135℃	R&P	210	230	315	20－180	22	34	209	2	2.5	5	50	1.7	Metal	○	L=303
N25	60℃	R&P	355	320	563	50－255	34	34	351	3	5	10	50	3.9	Plastic	○	L=548
R25	135℃	R&P	355	320	563	50－255	34	34	351	3	5	10	50	3.9	Plastic	○	L=548
SR25	165℃	R&P	355	320	563	50－255	34	34	351	3	5	10	50	3.9	Plastic	○	L=548
★T25	135℃	R&P	355	321	581	50－255	35	35	351	3	5	10	50	4.3	Plastic	×	L=561
NKAJ-0525N・G	60℃	R&P	355	320	563	50－250	34	34	351	3	5	10	50	5.2	Metal	○	L=557
NKAJ-0525R・G	135℃	R&P	355	320	563	50－250	34	34	351	3	5	10	50	5.2	Metal	○	L=557
NKAJ-0525SR・G	165℃	R&P	355	320	563	50－250	34	34	351	3	5	10	50	5.2	Metal	○	L=557
NKAJ-0525N3・G	60℃	Screw	355	320	563	50－255	34	34	351	3	5	10	50	3.8	Plastic	○	L=548
NKAJ-0525R3・G	135℃	Screw	355	320	563	50－255	34	34	351	3	5	10	50	3.8	Plastic	○	L=548
NKAJ-0525SR3・G	165℃	Screw	355	320	563	50－255	34	34	351	3	5	10	50	3.8	Plastic	○	L=548

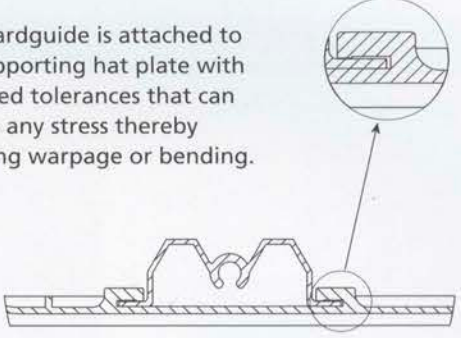
★These items are custom-made. *All standard models are shipped partially assembled. Complete assembly is optional.
*Conductive resistance of magazine racks is $10 \times 10^{-3} - 10^{-10} \Omega \text{cm}$. This is not NIX guaranteed value. **R & P system enables parallel width-adjustment (Quick Width Adjustment) and also is equipped with the AJ slope feature that allows width adjustment within five seconds.

Nikko-Rack Cardguides

The Nikko-Rack cardguides are assembled in five separate sections to add both strength and to simplify ease of replacement if needed.



Each cardguide is attached to the supporting hat plate with designed tolerances that can absorb any stress thereby reducing warpage or bending.



Specifications

Model	Max Tolerant Temperature for the Cardguide (not to exceed)	Method for Width Adjustment	Outer Dimensions			Adjustable Width	Reference Position		Guide Rail Dimension				Number of PCB Capacity	Weight (kg)	Base Material	Availability in Reverse	Stopper Bar (optional)
			L (length)	W (width)	H (height)		A	B	C	D	E	P					
NKAJ-0531R・G	135℃	R&P	535	380	570	50－310	34	41	530	3	5	10	50	9.4	Metal	×	L=564
NKAJ-0531SR・G	165℃	R&P	535	380	570	50－310	34	41	530	3	5	10	50	9.4	Metal	×	L=564
★NKAJ-0531RE・G	135℃	R&P	535	380	570	50－310	34	41	509	2.8	4	12.5	40	11.4	Metal	×	L=564
NKAJ-0531R-34x34・G	135℃	R&P	535	380	563	50－310	34	34	530	3	5	10	50	9.4	Metal	○	L=557
NKAJ-0531SR-34x34・G	165℃	R&P	535	380	563	50－310	34	34	530	3	5	10	50	9.4	Metal	○	L=557
NKAJ-0733R・G	135℃	R&P	460	400	565	70－330	35	35	460	3	5	10	50	8.8	Metal	○	L=557
NKAJ-0733SR・G	165℃	R&P	460	400	565	70－330	35	35	460	3	5	10	50	8.8	Metal	○	L=557
NKAJ-0733R-34x34・G	135℃	R&P	460	400	563	70－330	34	34	460	3	5	10	50	8.8	Metal	○	L=557
NKAJ-0733SR-34x34・G	165℃	R&P	460	400	563	70－330	34	34	460	3	5	10	50	8.8	Metal	○	L=557
NKAJ-0539R・G	135℃	R&P	535	460	570	50－390	34	41	530	3	5	10	50	10.5	Metal	×	L=564
NKAJ-0539SR・G	165℃	R&P	535	460	570	50－390	34	41	530	3	5	10	50	10.5	Metal	×	L=564
NKAJ-0539R-34x34・G	135℃	R&P	535	460	563	50－390	34	34	530	3	5	10	50	10.5	Metal	○	L=557
NKAJ-0539SR-34x34・G	165℃	R&P	535	460	563	50－390	34	34	530	3	5	10	50	10.5	Metal	○	L=557
NKAJ-0546R・G	135℃	R&P	535	530	563	50－460	34	34	530	3	5	10	50	12.3	Metal	○	L=557
NKAJ-0546SR・G	165℃	R&P	535	530	563	50－460	34	34	530	3	5	10	50	12.3	Metal	○	L=557
NKAJ-0525R-G400	135℃	R&P	400	320	563	50－255	34	34	397	3	5	10	50	6.8	Metal	○	L=557
NKAJ-0531R-G400	135℃	R&P	400	380	563	50－310	34	34	397	3	5	10	50	7.6	Metal	○	L=557
NKAJ-0733R-G400	135℃	R&P	400	400	563	70－330	34	34	397	3	5	10	50	7.8	Metal	○	L=557

★These items are custom-made. *All standard models are shipped partially assembled. Complete assembly is optional.
*Conductive resistance of magazine racks is $10 \times 10^{-3} - 10^{-10} \Omega \text{cm}$. This is not NIX guaranteed value. **R & P system enables parallel width-adjustment (Quick Width Adjustment) and also is equipped with the AJ slope feature that allows width adjustment within five seconds.

Realizing various needs that this is the one we need

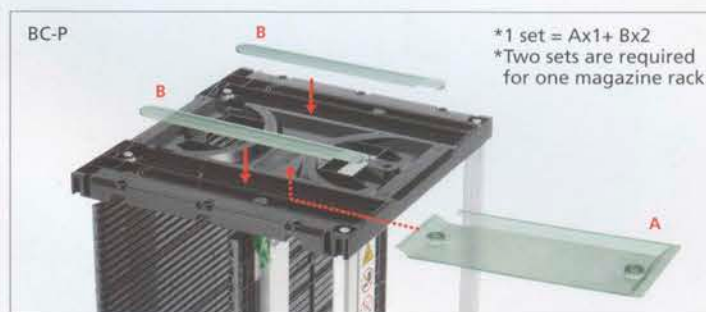
Optional items for Magazine Rack

Base Cover



Model	BC-A	BC-P
Specification	Full Surface Type	Hole Cover Type
Applicable Magazine Rack	M size magazine rack	N25, R25, SR25(refer to p.3 of this catalog)
Features	Magazine Slip-prevention mechanism enables stacking (of two magazines.) *Stackable for N25, R25 & SR25.	Loader/unloader can be used with the base cover attached. (Be sure to check the present condition of the equipment being used.)

Keep dust away from PCB in magazine rack.



*1 set = A x 1 + B x 2
*Two sets are required for one magazine rack

Dust Cover



Protect PCB and magazine rack from dust and ESD.

Model	NA-1	NT-1
Specification	Conductivity ($2.7 \times 10^6 \Omega$)	Preventing electric charge ($1.4 \times 10^{11} \Omega$)
Applicable Magazine Rack	M size magazine rack	
Features	Open/close with a magic tape Using double-sided conductive sheet.	Made of ESD free material. This is a basic model.

*Measurement results only, not NIX guaranteed value.

Slot Stopper



Fill in unused slots to avoid wrong insertion of PCBs.

Model	SLS-M
Specification	Preventing electric charge ($10^{11} \Omega$ or less)
Applicable Magazine Rack	R25, SR25 (refer to p.3 of this catalog)
Features	Prevent charging even in white with unique coloring

Dolly



Dolly for magazine racks. Large size is also available.



Model	DA-0525-1	DA-0525-2
Specification	For 1 rack	For 2 racks
Applicable Magazine Rack	M size magazine rack	
Features	Conductive caster in use Various sizes are available	

Customized Rack

Ko-Rack

Compact size rack most suitable for reducing inventory, customer seeking for saving space and high-mix low-volume lot production!



Model	Adjustable Width	Outer Dimensions			Number of PCB Capacity	Optional Parts					
		L(length)	W(width)	H(height)		Auto Stopper	Rotation Stopper	Upper Handle	Side Plate for Card Holder	Full Side Cover	Spring Type Stopper Bar
K35-S	90 - 144	355	128.5 - 182.5	278	24	○	○	○	○	×	×
K35-B	143.5 - 250	355	182 - 288.5	278	24	○	○	○	○	×	○
K35-A	Assigned width	355	Printed board width+38.5	278	24	×	×	×	×	×	○
K35-AS	Assigned width	355	Printed board width+38.5	278	24	×	×	○	×	○	○

Low Height Magazine Rack



Low profile rack most suitable for inventory reduction and space saving

- Most suitable for high-mix low-volume lot
- Height adjustable per 10 slots
- Light weight

Model	Outer Dimensions			Number of PCB Capacity	Stopper Bar (optional)
	L(length)	W(width)	H(height)		
R25-L2	355	320	163	10	L=148
R25-L4	355	320	263	20	L=248
R25-L6	355	320	363	30	L=348
R25-L8	355	320	463	40	L=448

•Storage pitch: 10 mm •Adjustable width: 50 to 250 mm

Heat-Resistant Rack



Applicable for hot baths with being made of all-metal

- Gap between guide rails for excellent ventilation
 - Exterior dimension and reference position are identical to M size
 - Available to customize for different size PCBs and the storage capacity
- Optional: Stopper Bar

Model	Adjustable Width AJ	Outer Dimensions			Number of PCB Capacity
		L(length)	W(width)	H(height)	
NKLH-0525AL	50 - 250	355	320	562	50
NKLH-0525SU	50 - 250	355	320	562	50

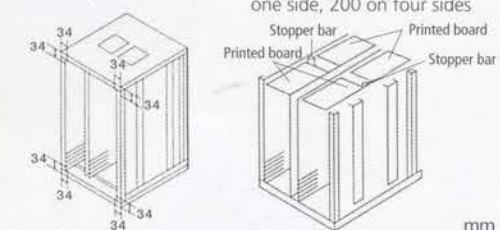
•Guide rail material: AL(aluminum), SU(stainless)

Smart Storage Rack



Available to stow 200 boards in M size rack

- Reference position diagram
- Storage capacity 50 boards on one side, 200 on four sides



Model	Guide Rail (endurance temperature)	Outer Dimensions			Adjustable Width
		L(length)	W(width)	H(height)	
NKAJ-0310N3-WG	60°C or less	355	320	563	30 - 100
NKAJ-0310R3-WG	135°C or less	355	320	563	30 - 100
NKAJ-0310SR3-WG	165°C or less	355	320	563	30 - 100

Example of development of Customized Rack

Racks with RFID for raw printed board/car electronics field

Pitch selected card guide option.

Rack with hand stopper for car electronics field

Rack with stopper open/close feature for industrial system field

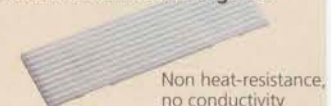
Under fill dry rack for smart phone field

Rack for clean room for semi-conductor field

LED rack for LED field



Ultra wear resistance card guide



Non heat-resistance, no conductivity

Replacement parts for Nikko-Rack™ series. You can change only those that need to be replaced.

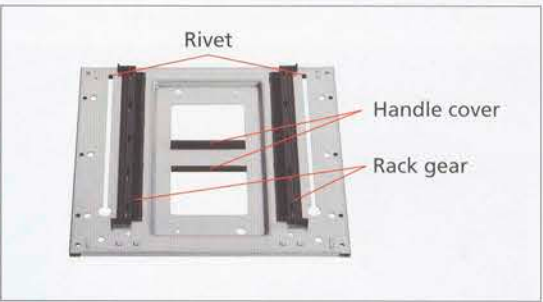
Base



Compatible replacement parts list

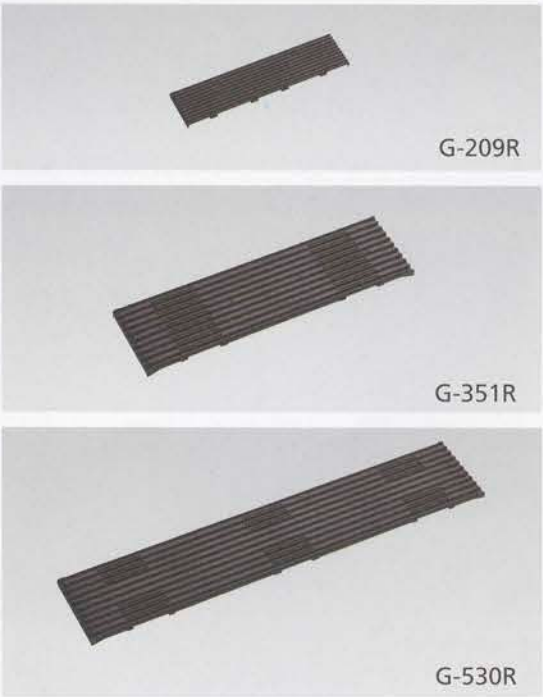
Magazine Rack Model	Base (including 2) B : Base P : Plastic Base M: Metal Base	Guide Rail (including 10) G: Guide Rail N, R, SR: Heat Resistance
NKAJ-0218R · G	BM-0218 *3	G-209R
N25	BP-R25	G-351N
R25	BP-R25	G-351R
SR25	BP-R25	G-351SR
NKAJ-0525N · G	BM-0525 *1	G-351N
NKAJ-0525R · G	BM-0525 *1	G-351R
NKAJ-0525SR · G	BM-0525 *1	G-351SR
NKAJ-0525N2 · G	BP-0525-2	G-351N
NKAJ-0525R2 · G	BP-0525-2	G-351R
NKAJ-0525SR2 · G	BP-0525-2	G-351SR
NKAJ-0525N3 · G	BP-0525-3	G-351N
NKAJ-0525R3 · G	BP-0525-3	G-351R
NKAJ-0525SR3 · G	BP-0525-3	G-351SR
NKAJ-0531R · G	BM-0531 *2	G-530R
NKAJ-0531SR · G	BM-0531 *2	G-530SR
NKAJ-0531R-34x34 · G	BM-0531 *2	G-530R
NKAJ-0531SR-34x34 · G	BM-0531 *2	G-530SR
NKAJ-0733R · G	BM-0733 *2	G-460YLR
NKAJ-0733SR · G	BM-0733 *2	G-460YLSR
NKAJ-0733R-34x34 · G	BM-0733 *2	G-460YLR
NKAJ-0733SR-34x34 · G	BM-0733 *2	G-460YLSR
NKAJ-0539R · G	BM-0539 *2	G-530R
NKAJ-0539SR · G	BM-0539 *2	G-530SR
NKAJ-0539R-34x34 · G	BM-0539 *2	G-530R
NKAJ-0539SR-34x34 · G	BM-0539 *2	G-530SR
NKAJ-0546R · G	BM-0546 *2	G-530R
NKAJ-0546SR · G	BM-0546 *2	G-530SR

*1: With rack gear, handle cover, rivet *2: With rack gear, rivet *3: With rack gear
*Please contact us for compatible replacement part not listed above.



Accessories description (*1, *2, *3)

Card Guide



Corner Joint

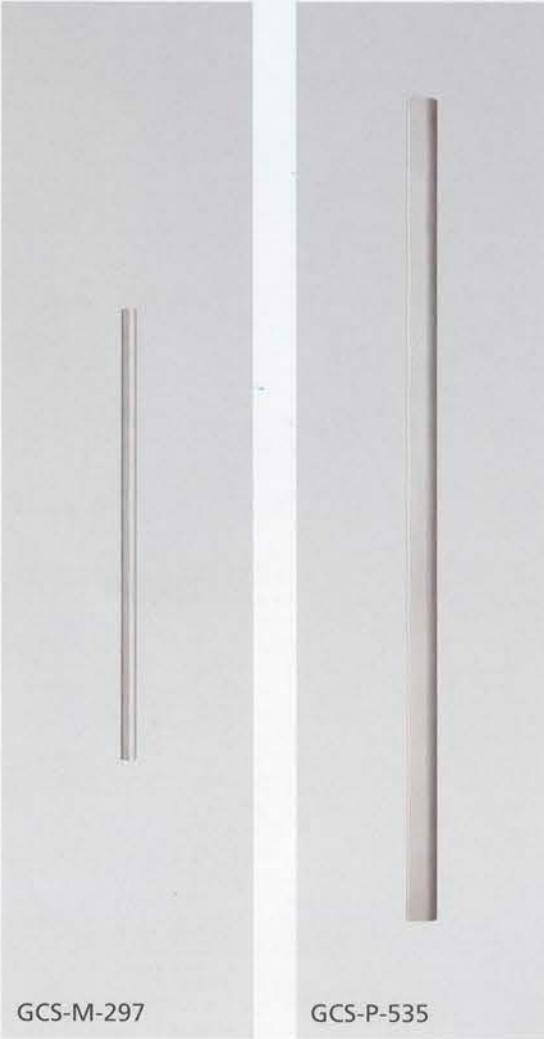


Compatible replacement parts list

Magazine Rack Model	Corner Joint (including two each) LLCJ: Lock Lever Corner Joint M: For Metal Base P: For Plastic Base L: Left R: Right	Guide Channel (*1 includes 2, *2 includes 4) GCS: Guide Channel M: For Metal Base P: For Plastic Base
NKAJ-0218R · G	LLCJ-ML, LLCJ-MR	GCS-M-297 *1
N25	LLCJ-R25L, LLCJ-R25R	GCS-P-535 *1
R25	LLCJ-R25L, LLCJ-R25R	GCS-P-535 *1
SR25	LLCJ-R25L, LLCJ-R25R	GCS-P-535 *1
NKAJ-0525N · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *1
NKAJ-0525R · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *1
NKAJ-0525SR · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *1
NKAJ-0525N2 · G	LLCJ-PL, LLCJ-PR	GCS-P-535 *1
NKAJ-0525R2 · G	LLCJ-PL, LLCJ-PR	GCS-P-535 *1
NKAJ-0525SR2 · G	LLCJ-PL, LLCJ-PR	GCS-P-535 *1
NKAJ-0525N3 · G	—	GCS-P-535 *1
NKAJ-0525R3 · G	—	GCS-P-535 *1
NKAJ-0525SR3 · G	—	GCS-P-535 *1
NKAJ-0531R · G	LLCJ-ML, LLCJ-MR	GCS-M-552 *2
NKAJ-0531SR · G	LLCJ-ML, LLCJ-MR	GCS-M-552 *2
NKAJ-0531R-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0531SR-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0733R · G	LLCJ-ML, LLCJ-MR	GCS-M-547 *2
NKAJ-0733SR · G	LLCJ-ML, LLCJ-MR	GCS-M-547 *2
NKAJ-0733R-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0733SR-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0539R · G	LLCJ-ML, LLCJ-MR	GCS-M-552 *2
NKAJ-0539SR · G	LLCJ-ML, LLCJ-MR	GCS-M-552 *2
NKAJ-0539R-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0539SR-34x34 · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0546R · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2
NKAJ-0546SR · G	LLCJ-ML, LLCJ-MR	GCS-M-545 *2

*1: With screw, flat washer *2: With reinforcement plate, screw
*Please contact us for compatible replacement part not listed above.

Guide Channel



Replacement parts for Nikko-Rack™ series. You can change only those that need to be replaced.

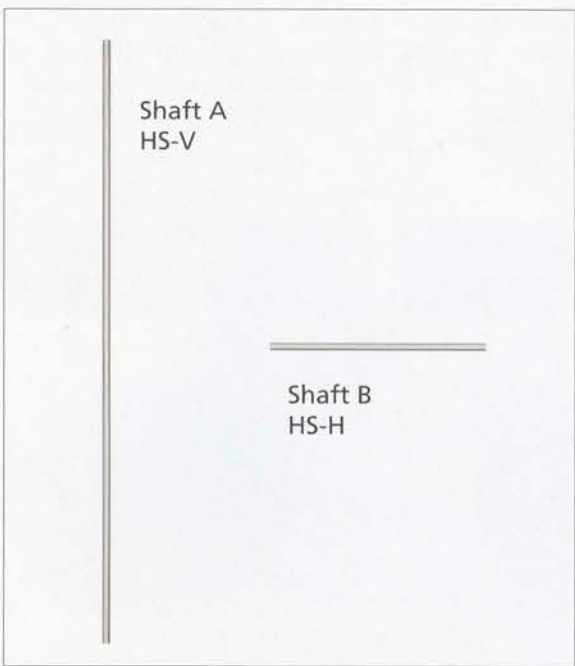
Rack Gear



Hat Plate



Shaft



Pinion Gear



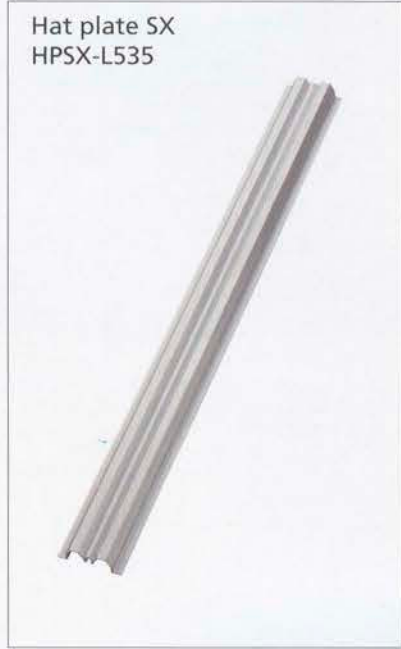
Spring Type Stopper Bar(optional)



Compatible replacement parts list

Magazine Rack Model	Rack Gear (*1 includes 2 *2 includes 4) RG: Rack Gear	Hat Plate (*1 includes 2 *2 includes 4 *3 includes 6) HP: Hat Plate	Hat Plate SX (including 2) HPSX: Hat Plate SX	Hat Plate Joint (including 2) HPJ: Hat Plate Joint
NKAJ-0218R・G	RG-202-L, RG-202-R *1	HP-0218 *2	—	—
N25	—	HP-L500 *1	HPSX-L535	HPJ-0525
R25	—	HP-L500 *1	HPSX-L535	HPJ-0525
SR25	—	HP-L500 *1	HPSX-L535	HPJ-0525
NKAJ-0525N・G	RG-0525 *2	HP-L500 *2	—	HPJ-0525
NKAJ-0525R・G	RG-0525 *2	HP-L500 *2	—	HPJ-0525
NKAJ-0525SR・G	RG-0525 *2	HP-L500 *2	—	HPJ-0525
NKAJ-0525N2・G	—	HP-L500 *1	HPSX-L535	HPJ-0525
NKAJ-0525R2・G	—	HP-L500 *1	HPSX-L535	HPJ-0525
NKAJ-0525SR2・G	—	HP-L500 *1	HPSX-L535	HPJ-0525
NKAJ-0525N3・G	—	HP-L500 *1	—	HPJ-0525
NKAJ-0525R3・G	—	HP-L500 *1	—	HPJ-0525
NKAJ-0525SR3・G	—	HP-L500 *1	—	HPJ-0525
NKAJ-0531R・G	RG-310 *2	HP-L507 *3	—	HPJ-530
NKAJ-0531SR・G	RG-310 *2	HP-L507 *3	—	HPJ-530
NKAJ-0531R-34x34・G	RG-310 *2	HP-L500 *3	—	HPJ-530
NKAJ-0531SR-34x34・G	RG-310 *2	HP-L500 *3	—	HPJ-530
NKAJ-0733R・G	RG-310 *2	HP-L502 *3	—	HPJ-0733
NKAJ-0733SR・G	RG-310 *2	HP-L502 *3	—	HPJ-0733
NKAJ-0733R-34x34・G	RG-310 *2	HP-L500 *3	—	HPJ-0733
NKAJ-0733SR-34x34・G	RG-310 *2	HP-L500 *3	—	HPJ-0733
NKAJ-0539R・G	RG-390 *2	HP-L507 *3	—	HPJ-530
NKAJ-0539SR・G	RG-390 *2	HP-L507 *3	—	HPJ-530
NKAJ-0539R-34x34・G	RG-390 *2	HP-L500 *3	—	HPJ-530
NKAJ-0539SR-34x34・G	RG-390 *2	HP-L500 *3	HPSX-L535	HPJ-530
NKAJ-0546R・G	RG-460 *2	HP-L500 *3	HPSX-L535	HPJ-530
NKAJ-0546SR・G	RG-460 *2	HP-L500 *3	HPSX-L535	HPJ-530

*Please contact us for compatible replacement part not listed above.



Compatible replacement parts list

Magazine Rack model	Shaft A (including 2) HS: Hexagon shaft V: For vertical	Shaft B (including 2) HS: Hexagon shaft H: For horizontal	Pinion Gear (including 8) PG: Pinion Gear	Spring Type Stopper Bar (optional) S: Stopper Bar L: Length
NKAJ-0218R・G	HS-V-0218	HS-H-0218	PG-P	S-L303
N25	HS-V-0525	HS-H-0525	PG-P	S-L548
R25	HS-V-0525	HS-H-0525	PG-P	S-L548
SR25	HS-V-0525	HS-H-0525	PG-P	S-L548
NKAJ-0525N・G	HS-V-0525	HS-H-0525	PG-P	S-L557
NKAJ-0525R・G	HS-V-0525	HS-H-0525	PG-P	S-L557
NKAJ-0525SR・G	HS-V-0525	HS-H-0525	PG-P	S-L557
NKAJ-0525N2・G	HS-V-0525	HS-H-0525	PG-P	S-L548
NKAJ-0525R2・G	HS-V-0525	HS-H-0525	PG-P	S-L548
NKAJ-0525SR2・G	HS-V-0525	HS-H-0525	PG-P	S-L548
NKAJ-0525N3・G	—	—	—	S-L548
NKAJ-0525R3・G	—	—	—	S-L548
NKAJ-0525SR3・G	—	—	—	S-L548
NKAJ-0531R・G	HS-V-3139	HS-H-313946	PG-P	S-L564
NKAJ-0531SR・G	HS-V-3139	HS-H-313946	PG-P	S-L564
NKAJ-0531R-34x34・G	HS-V-0525	HS-H-313946	PG-P	S-L557
NKAJ-0531SR-34x34・G	HS-V-0525	HS-H-313946	PG-P	S-L557
NKAJ-0733R・G	HS-V-0733	HS-H-0733	PG-P	S-L557
NKAJ-0733SR・G	HS-V-0733	HS-H-0733	PG-P	S-L557
NKAJ-0733R-34x34・G	HS-V-0525	HS-H-0733	PG-P	S-L557
NKAJ-0733SR-34x34・G	HS-V-0525	HS-H-0733	PG-P	S-L557
NKAJ-0539R・G	HS-V-3139	HS-H-313946	PG-P	S-L564
NKAJ-0539SR・G	HS-V-3139	HS-H-313946	PG-P	S-L564
NKAJ-0539R-34x34・G	HS-V-0525	HS-H-313946	PG-P	S-L557
NKAJ-0539SR-34x34・G	HS-V-0525	HS-H-313946	PG-P	S-L557
NKAJ-0546R・G	HS-V-0525	HS-H-313946	PG-P	S-L557
NKAJ-0546SR・G	HS-V-0525	HS-H-313946	PG-P	S-L557

*Please contact us for compatible replacement part not listed above.

S-L

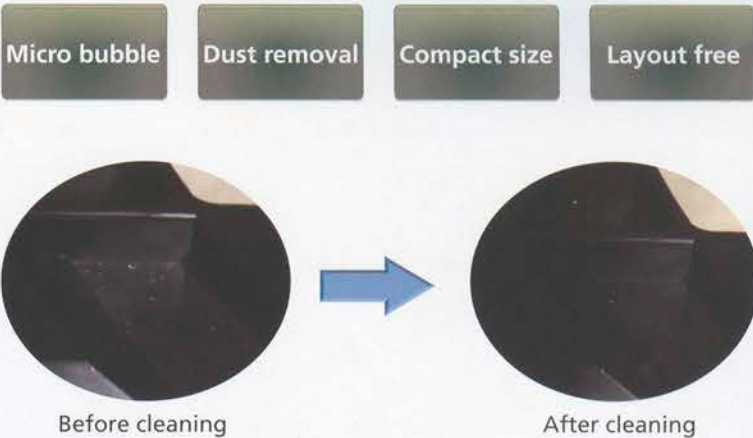
*Optional part. Not attached to magazine rack.

Perfection for removing contamination in magazine rack and printed board

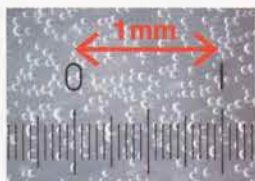
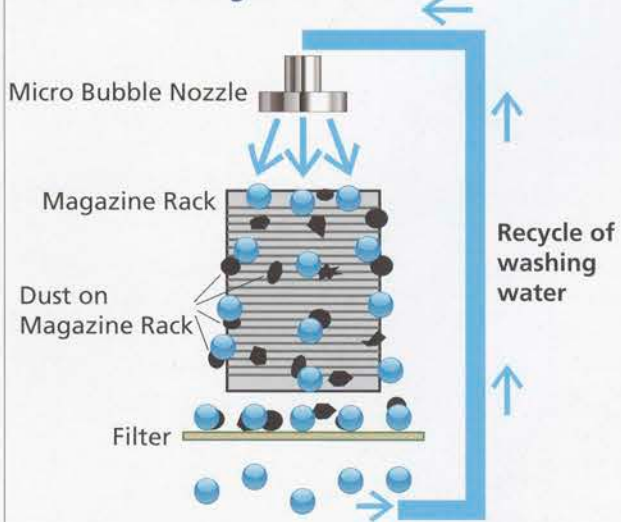
Magazine Washer PAT. P



Powerful cleaning with Micro Bubble remove dust and debris attached Magazine Racks. Protecting quality of printed board by clean magazine rack. In addition, contributing to reduction of contamination in the entire plant.



Structure of Magazine Washer



What is micro bubble?
Super fine bubble with size of 50 micron(0.05mm) is called as a micro bubble.
*A single scale represents 50 micro

[Example of Contamination]

Dust collected from the filter that washed 240 magazine racks (80 x 3 days)



Basic specification	
Item Name	Magazine Washer
Model	MRW-MB
Cleaning Specification	Micro bubble + shower washing
Outer Dimensions	800(W) x 1600(L) x 1500(H) mm
Weight	750 kg (including washing water 100 kg)
Rack Loading Height	Approx. 1000mm
Power Supply/Electric Capacity	3-phase AC200V 50Hz/60Hz, 40A(Max.)
Paint Color	NIX standard color [Munsell 7.2Y9.4/0.8(gross):white-cream]

System specification	
Size of Magazine Rack	M size *1
Tact Time	2 to 10 minutes/rack *2
Washing Solution	Recycling pure water (*3) + NIX water (*4)
Consumables	Filter (*5), washing water (*5)
Optional	Drying heater (*6), signal tower, washing other than rack

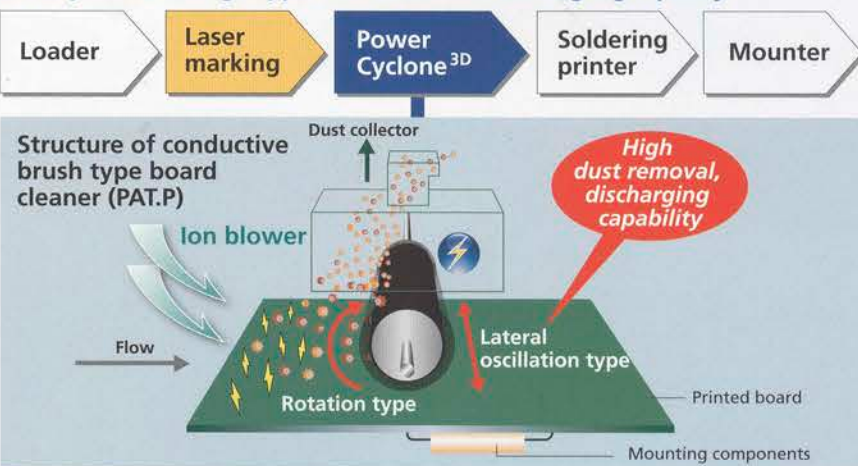
*1 With weight restriction (8 kg or less)/balance restriction (width 100 mm or more)
*2 With rack weight/balance/operation method *3 Tap water is permissible
*4 Dedicated washing water (with preservative agent)
*5 Exchanging is mandatory (monthly) *6 With rack weight/balance for drying level

Printed Board Cleaner

Power Cyclone^{3D}



Unique technology ensures high performance in the removal of contamination. Power Cyclone 3D with lateral oscillation and conductive brush provide strong support for customers seeking high quality.



- Upper brush type(standard), double side brush type(optional)
 - Static electricity removal(50 V or less; no ionizer, based on NIX test)*
 - Most suitable for dust removal of laser masking
 - Removing contaminants of 5µm(based on NIX test)*
 - Maintenance free(requiring periodical cleaning) ■ Low running cost
- *NIX measurement results only, not NIX guaranteed value.

Easy brush replacement (PAT.P)



Easy brush height adjustment (PAT.P)



Example: Set to 0016 in case of printed board thickness t1.6 mm



Basic specification	
Item Name	Power Cyclone 3D
Model	M3DM-IN
Cleaning Specification	Upper surface cleaning of printed board with conductive brush
Outer Dimensions	815(L) x 350(W) x 1387(H) mm : conveyor length 370mm
Weight	Approx. 90 kg
Transportation Height	900 ± 20mm
Mounted Components Height	No component on printed board surface, back surface, MAX 25mm
Power Supply/Electric Capacity	AC100V 50Hz/60Hz, 200VA
Paint Color	NIX standard color [Munsell 7.2Y9.4/0.8(gross):white-cream]

*Other, 460 mm width printed board, double face cleaning, deflection prevention feature, and custom option is available

System specification	
Direction of Flow	Right → left/Left → right
Criterion	Front reference / back reference
Printed Board Size	M size (50 x 50 to 250 x 330 mm)
Interface	Molex 4-pin connector (1490R · P1)
Conductive Brush Height Adjustment	Manual up/down traverse type
Operation Panel	Power supply SW, touch panel, pressure sensor, buzzer, EMG stop
Breaker	Install inside main body

All traceability concerns are cleared by NIX unique products and systems.

Auto labelling website.
"NAVI" is now available for focused on
the printed board traceability.
<http://www.labelnix.com>

Label Feeder for Mounter



Reducing process time and labor cost by changing label manual attaching to automated attaching.
Label can be attached automatically using existing mounter.
High speed/high accuracy attaching is available with mounter function.
Advantage of less expensive/space saving comparing to dedicated label attaching system.
Label feeder consists of two types of NPOD series (with printing feature) and AMP series (without printing feature)

Feeder with printing function NPOD series

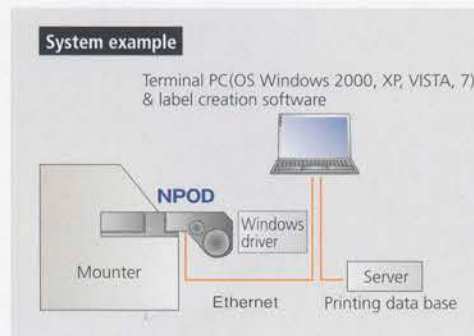
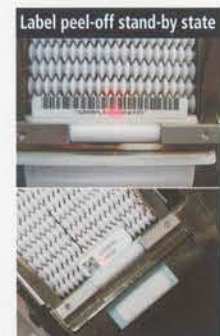


[Printer specification]

- Model : NPOD
- Printing Type : thermal transfer 600 dpi
- Maximum Printing Range : Max. width 40 mm, Max. height 30 mm
- Communication I/F : Selectable either Ethernet or RS-232C
- WindowsXP, Vista, 7 (32-, 64-bit) with printer driver
- With printer built-in command and front (available to create custom software)
- With external input/output connector (DSUB-15 pin)

[Label & ribbon specification]

- Label Shape Type : punch shape horizontal single face label (N/A for continuous forms)
- Label Size : Width 4 to 40 mm, length 4 to 30 mm
- Label Mat Width : 10 to 45 mm
- Label Roll Size : Max. outer diameter 200 mm, core inner diameter 76.2 mm
- Applicable Label : NIX STATINIX static charge countermeasure polyimide
- Applicable Ribbon : Max. ribbon width 50 mm x 300 m (DK620 series)



Feeder without printing function AMP series



[Specification]

- Model : AMP
- Label Shape : Punch shape horizontal single face or multiple column (N/A for continuous forms)
- Label Size : Width 3 to 38 mm, length 3 to 50 mm
- *Depending on mounter model and sheet left/right margin
- Label Feed Rate : Selectable from 30, 53, 95 mm/sec
- Label Peel-off Unit : Requiring GMP module 1/AMP 1
- *GMP module consists of two types
- Power Supply : In use with direct connector connection from mounter
- *Separate power supply is required depending on model of mounter.
- Please contact us for detail

Detachable GMP label peel-off module Easily adjustable for various label size



Mounter Manufacturers	Mounter Model Name	Label Feeder Model Name with Printing Function	Label Feeder Model Name without Printing Function	GMP Module Compatible		
				GMP01-001 *Note 1	GMP02-001 *Note 2	LMG *Note 3
JUKI	KE700/1000/2000/3000 (mechanical feeder model)	—	AMPJ01-001	△	○	○
	FX series, KE3000 (electrical feeder model)	—	AMPJF01-001	△	○	○
	NXT, NXT II, AIM, AIMEX, XPF	—	AMPFN02-001	△	○	○
Fuji Machine MFG	NXT, NXT II, AIM, AIMEX, XPF	—	AMPFN02-002 *With reel holder	△	○	○
	QP2, QP3, XP	NPOD-F	AMPF01-001	×	○	○
	IP	—	AMPF01-001	×	×	○
Yamaha	YV100, XG100, YG100/88	—	AMPY01-001	×	○	○
	YS12, YS12F, YS24X, YS88, YS100, YSM-40	—	AMPYS01-001	×	○	○
Panasonic	CM402, 602, 212, 101, DT401, CM212, NPM	NPOD-CM	AMPPC02-001	24 to 44 mm length label only	3 to 14 mm length label only	○
	MPAV2, MPAG3, MSF, MCF, BM	—	AMPP02-001	×	○	○

*Note 1. Applicable label size for GMP01-001: Label base sheet width 3 to 42 mm, label length 3 to 50 mm (24 to 44 mm for AMPPC02-001)
width 3 to 42 mm, label length 3 to 35 mm (3 to 14 mm for AMPPC02-001)
*Note 2. Applicable label size for GMP02-001: Label base sheet width 3 to 42 mm, label length 3 to 35 mm (3 to 14 mm for AMPPC02-001)
*Note 3. LMG is custom module for size to which GMP01 or 02 is not compatible. △: Please contact us for detail.

Dedicated model for real time printing label attaching

Dedicated model for label attaching capable of traceability from the top of mounting line (custom specification).
Attaching position can be changed by either one of two types, manual type/automated type.

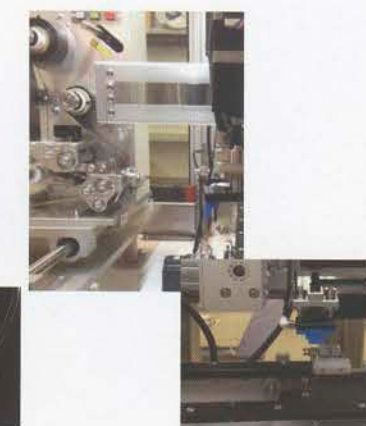
*Loader and unloader before and after label attaching system are available.

LM series



Attaching position XY manual

L series



Attaching position XY auto

- Thermal transfer printer; 300 or 600dpi mounted
- Available to attach after verifying legibility after printing (LM type verifies after attaching)
- Compact/space saving with 2 inches head mounted
- Two types of auto setting/manual setting for attaching position
- Attaching angle is settable in every 90 degrees
- Minimum height of label is 4 mm or more
- Custom specification available

Specifications

Model	TPR-612LM	TPR-612L	TPR-624LM	TPR-624L
Printing Resolution	300dpi	300dpi	600dpi	600dpi
Maximum Printing Width	53.33mm	53.33mm	58mm	58mm
Base Sheet Width	20 - 65mm			
Minimum Label Height	4mm or more			
Ribbon Width	30 - 64mm			
Communication I/F	RS-232C			
Bar Code Reader for Verification	Keyence SR-510 *Other readers are compatible			
Built-in Character	JIS level-1 kanji set, level-2 kanji set, ANK character, etc			
Built-in Bar Code	2-dimension QR, micro QR, PDF417, micro PDF417, DataMatrix (ECC200) 1-dimension Code39, JAN, UPC, NW7, ITF, Code128, EAN128 (GS1-128)			
Attaching Position	XY manual	XY auto	XY manual	XY auto
Attaching Angle	Fix	Every 90 degrees auto	Fix	Every 90 degrees auto
Attaching Position Specifying Registration Method	—	PC or touch panel	—	PC or touch panel

*Including two types of in-line and batch

*Printing and control software will be a custom application based on agreement

Printers, label drawing software

High Performance Printer BBP-16



Main specifications

Model	BBP16	BBP16 (with cutter)	BBP16 (with peel)
Print Resolution	300 dpi	600 dpi	600 dpi
Print Head Width	104 mm	104 mm	104 mm
Max. Base Sheet Width (narrow specification)	15 - 90 mm	15 - 90 mm	15 - 90 mm
Max. Base Sheet Width (wide specification)	25.4 - 113 mm	25.4 - 113 mm	25.4 - 113 mm
Label Length	4 - 1016 mm	18 - 1016 mm	25.4 - 152.4 mm
Gap Length between Labels	Min. 2 mm	Min. 2 mm	Min. 2 mm

- High performance fine printing is available with 600 dpi printing head mounted
- Minimum height of label is 4 mm or more
- Label drawing software CODESOFT compatible
- Easy generation of 2-dimensional code such as QR code
- Windows XP SP2 or higher, with Windows Vista, Windows 7, 8 compatible printer drivers

CODESOFT



Low cost, Compact Printer BBP11



- Low cost and compact thermal transfer printer.
- Available to carry-on with light weight (2.5kg)
- 300 dpi printing head mounted
- Special discounted price available with set purchasing with Label drawing software CODESOFT.
- With Windows Vista, Windows 7, 8 compatible printer drivers

Main specifications

Model	BBP11
Print Resolution	300dpi
Max. Base Sheet Width	118mm
Max. Label Width	105mm
Min. Label Length	6.35mm
Max. Label Outer Diameter	127mm (203.2mm when using external holder)

CODESOFT

Label for thermal transfer printer

Heat-resistant proof polyimide label (before re-flow)



Static charge countermeasure polyimide label "STATINIX"
NIX original labels are most suitable for automated attaching with label feeder cassette
Various types of polyimide label are available to recommend in accordance with application

Base Material Type Code	Color	Applicable Temperature (5 minutes)	Label Total Thickness
STATINIX	Matte white	-70°C - 260°C	0.094 mm
B728	Matte white	-70°C - 260°C	0.111 mm
B416	Gloss white	-70°C - 230°C *	0.076 mm
B729	Matte white	-70°C - 260°C	0.086 mm
B724	Matte amber	-70°C - 280°C	0.111 mm

*Applicable temperatures will be up to 270°C in the case of 80 seconds.

Heat endurance test



Static charge countermeasure polyimide label.
Top: Pre-reflow
Bottom: Post-reflow; No change



Polyester B423
Top: Pre-reflow
Bottom: Post-reflow; Shrunk

Non heat-resistant proof label (post reflow)

Labels are most suitable for attaching after reflow. Labels in accordance with application are available to recommend such as static electricity countermeasure label.



Base Material Type Code	Applicable Temperature (30 days)	Label Total Thickness
B473	-40°C - 120°C	0.087 mm
B423	-70°C - 110°C	0.076 mm
B459	-40°C - 100°C	0.079 mm