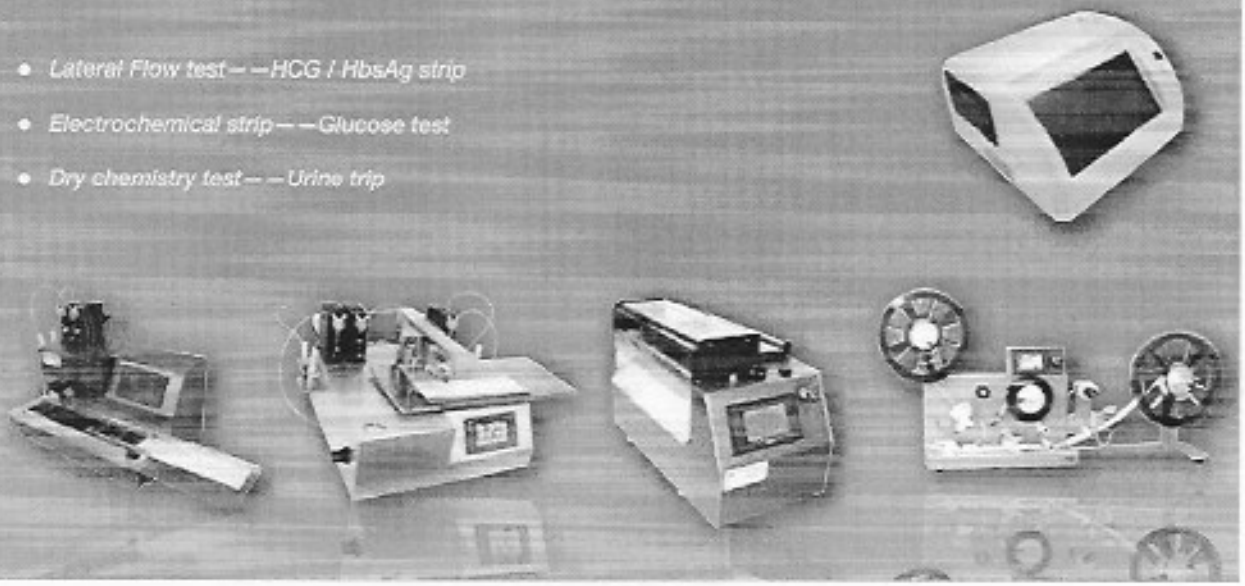
KJN bio
金标生物

Rapid diagnostic industry Server
Founder was involved
since 1998.

Kinbio Tech. Co. Ltd

Manufacturing
Equipment and Raw material for

- *Lateral Flow test——HCG / HbsAg strip*
- *Electrochemical strip——Glucose test*
- *Dry chemistry test——Urine trip*



ISO 9001 Registered

UKAS

Brief Introduction



Kinbio Tech. Co. is a leading supplier of rapid diagnostic machine and raw materials in China. Its founder has been involved in rapid diagnostic field since 1998. Kinbio has a strict quality assurance to its production. Certification of ISO 9001:2000 was passed in April of 2007.

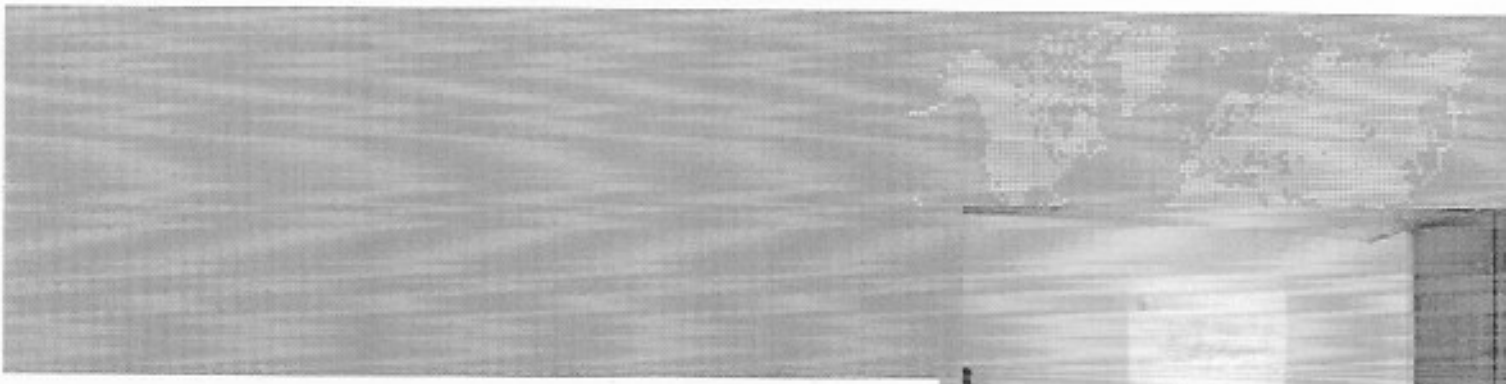
Kinbio has a professional R&D team on mechanical designing and automatic software programming for equipment. Kinbio builts up precision machining plant in with 3 CNC milling machines, 3 electrical discharge wire-cut machine, 1 high precision numerical control grinder, 2 plain lathes, 2 turret milling machine etc. It greatly enhances Kinbio's engineering capacity and brings fast and flexible response to customer's special application. Tailor made and OEM product is available upon request.

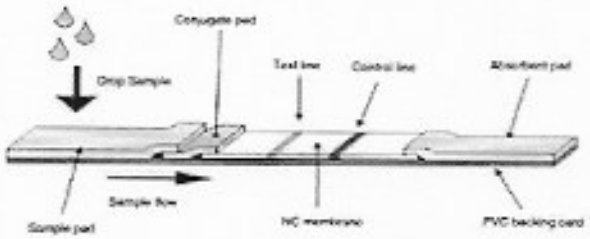


Kinbio has good experience in screening and optimization of raw material for rapid diagnostic kit application since 2000. Currently we offer around 10 kinds of polytester membrane, 8 kinds of glass fibre membrane and 8 kinds of absorbent paper. The material is mainly for lateral flow application. Some of them could also be used for dry chemical and dry biochemical application. We are keeping doing a research for new raw materials which suit for rapid diagnostic industry.



Kinbio would like to offer technical services as following:





In house training

Kinbio could offer in house training to global customer who likes to come to Shanghai. Demonstration of equipment operation and strip production procession will be introduced.

Reagent feasibility study

Kinbio is glad to serve customer who is new to lateral flow application and would like to develop a assay by their appointed reagents(antibody or antigen). The reagents will be evaluated by chosen experienced technician within short time.

Turnkey project

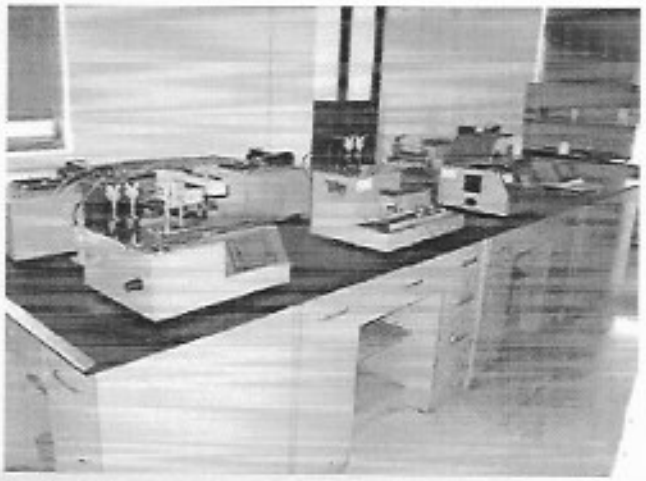
Kinbio is glad to offer turnkey project for global customers. We have good experience in setting up a full range of instruments and designing floor plan for laboratory and production procession. We could also offer full technology transfer solutions for several lateral flow test items cooperated by partners. All the clean room facility could be done by cooperation with our partners.

Hapten modification and organic synthesis

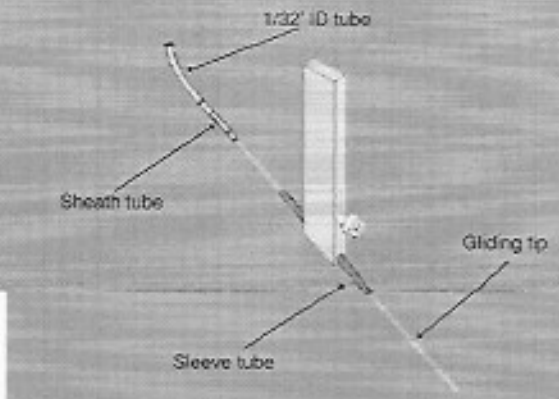
Kinbio is experienced in hapten designing and modification. Cooperation with experienced organic synthesis partners around Shanghai is well organized.

Hapten antibody development

Kinbio offers both Monoclonal antibody and polyclonal antibody development service. For more information,please kindly send your inquiry to mailbox:int-sales@goldbio.cn.



Dispensing Technology

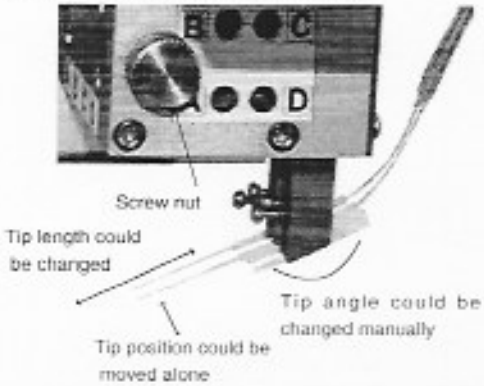


Line dispensing

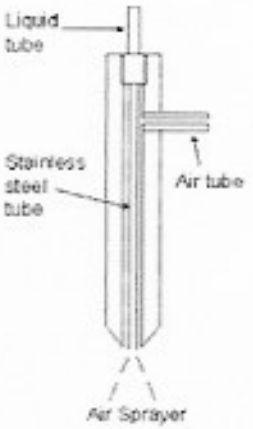
Gliding tip: Kinbio uses a hollow PEEK tube as gliding tip to dispense liquid onto NC membrane by soft touching. No physics imprint could be observed. Gliding tip is connected to 1/32' ID tube by a soft sheath tube to avoid liquid leakage. It is protected by sleeve tube and its extended length could be adjusted. The distance of Gliding tips could be changed by a screw nut. Its angle could also be changed if needed. So it's easy to align gliding tips at the same point for C/T lines coating.

Kinbio designs standard dispensing module with 2 gliding tips and 1 air sprayer. Module with 4, 6 or 8 gliding tips could be tailor made. The height of sprayer and gliding tips could be changed separately for convenient operation. When air sprayer works, its height will be lowered while gliding tips could be raised separately. Air sprayer should be raised when gliding tips work. The dispenser module could be easily equipped on dispenser from other supplier.

Gliding tip ID: Min.. 120μm
Lines distance: 2.5mm
Dispensing volume: 0.10-5.00 μl/cm
Syringe volume: 500μl standard, other volume available







Air sprayer: A hollow stainless steel tube is combined with a pressurized air tube. The liquid driven by high resolution pump is sprayed onto the membrane by pressurized air. The width of sprayed line is mainly decided by the distance of sprayer to the membrane. It's ideal for conjugation coating of lateral flow strip and other application.

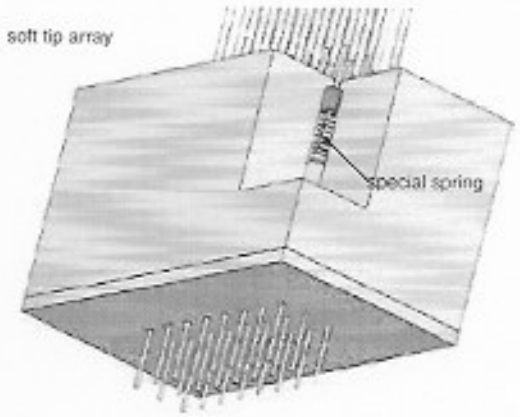
The OD of Kinbio air sprayer is 7mm. It's high efficient colloidal spraying. Aligning 4 air sprayers together for multi line spraying is recommended. Kinbio could also design special module for 6 or 8 air sprayers while the distance of each sprayer is more than 4mm.

Sprayer tube ID: Min. 350μm
Line distance: Min. 4mm
Spraying volume: 0.5-25.0μl/cm
Syringe volume: 1000μl standard, other volume available

Dispensing Technology

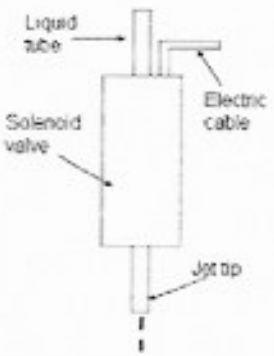
Dot dispensing:

Soft tip: A stainless needle is connected to a soft tube cooperating with a special spring. It could reach membrane by "soft" touching to avoid hurting membrane structure. This soft tip could be used for dot printing of flow throw test. It could also be designed for macro dot array printing which is needed by immunoblot and other application. The Min. dot distance could be around 3mm.



Min. dot volume: 0.1 µl Min. dot spacing: 3mm
Dot line spacing: Min. 3mm Particle size: NO Filtration needed
Syringe volume: 250µl standard, other volume available

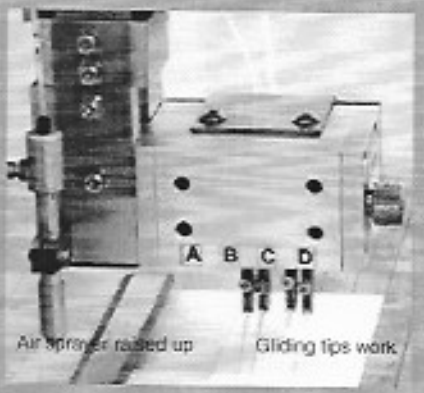
Electromagnetic valve jet: A special tip and a solenoid valve are combined with high resolution pump to maintain certain pressure in the tube. Liquid jets out to form a drop on the substrate upon a short time open of valve. Different drop volumes are available when the open time is defined by program. It's good for membrane coating of flow through kit and enzyme electrode (strip).



Min. dot volume: 0.2 µl Min. dot spacing: 2mm
Dot line spacing: Min. 4mm Particle size: 10 micron Filtration recommended.
Syringe volume: 250ul standard, other volume available

Dispenser Series





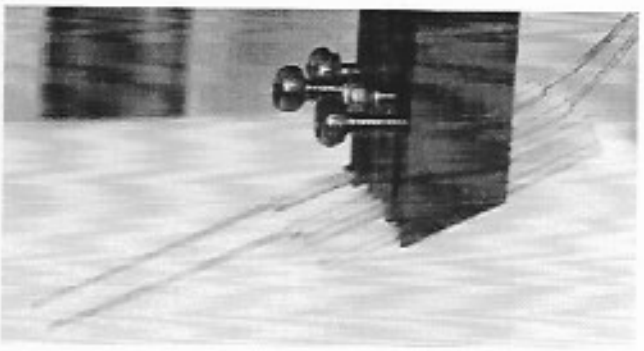
Dispenser features:

Kinbio produces several types of dispenser for different customers. Tailor made or OEM module is also available. Powerful functions below are available in each module.

1. Four lines touch screen is configured for easy operation which saves much time for programming and operation.
2. Min. volume 1μl buffer could be filled or drained. We could set any figure which is no more than syringe volume. It's very convenient to fill reagents in and drain out air bubble. Plenty of time will be saved.
3. Dead volume is nearly zero if we **quantitatively sucks** reagent from outlet tube when pump valve is reversed by valve set function. Fill the tube and syringe full of water, suck about 2μl air from the gliding tip to separate water, then suck 30ul antibody into the tip. After that you could dispense nearly 30cm line with nearly **zero dead volume!** It's perfect for R&D person to save valuable reagent and time.
4. Pump solution refilling could turn to be manual in case air comes into syringe when reagent from reservoir is used up. Remained solution in tubes and syringes could flow back into Reservoir by prime function in case valve set function is reversed.
5. Line volume (volume per distance, μl/cm) of each pump could be easily defined by program regardless of the platform speed.
6. Gliding movement could turn to be repeatable and pause time could be set according to operator situation. It's good for higher dispensing output and production efficiency.

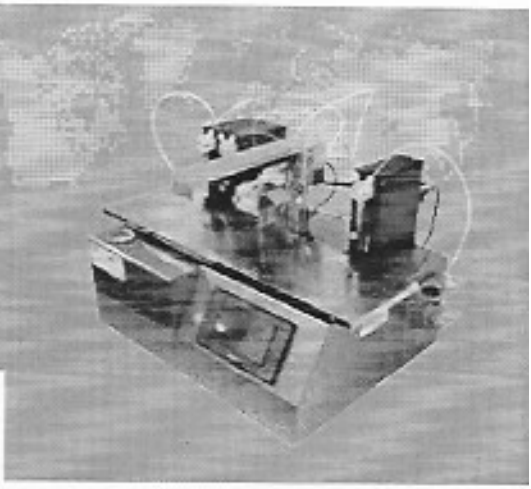
The volume of production of platform-based equipment is normally underestimated. For example, HM3030 carries one single pump can spray 800 lines/hour, the volume could be nearly doubled if one more pump is added. When carrying 4 pumps, HM3030 is capable of C/T lines coating on two pieces of membranes at the same time. The volume of production is 400 – 600 pieces of membranes/cards per hour, equal to 30,000 – 45,000 pieces of strips. The total volume for each month can reach to 4,500,000 pieces of strips for 6 hours * 22 days.

Tailor-made platform-based dispenser can carry 6 – 8 pumps if higher volume is required.





Dispenser Series



Cat. No.	Platform Area (mm)	Dispensing area (mm)	Spraying speed (One pump, times/hour)	Dispensing speed times/hour
HM3020	540x120	320x100	150	250
HM3025	540x120	320x100	150	250
HM3030	540x120	320x100	800	250
HM3035	540x120	320x100	800	250
HM3230	540x220	320x200	1300	250
HM3235	540x220	320x200	1300	250

ZX dispenser HM3020/HM3025

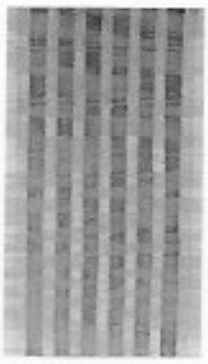
HM3020 is designed for those researchers and manufacturers who don't need to spray much conjugated protein. It moves on X axis and Z axis automatically. The movement on Y axis could be done manually. It's ideal for coating line on strip membrane quantificationally and spraying colloidal occasionally.

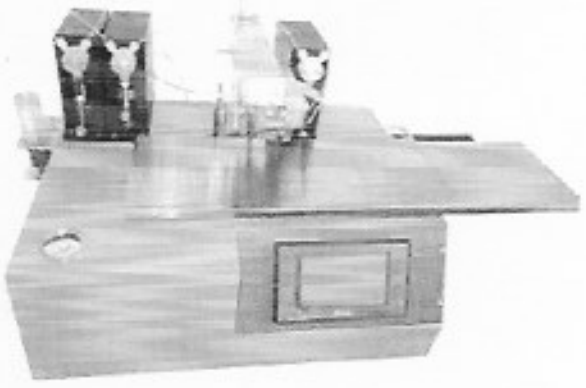
HM3025 is updated version of HM3020 with additional vacuum holddown nest and automatic dispensing/spraying transformation module.

Gliding outpu: 200—300 cards(30cm)/hour
X Slide speed: 50—250mm/S
Dispensing area: 320 x 100 mm
Standard Capacity: 500μl for dispensing and 1000ul or 2500ul for spraying pump.
Dispensing volume: 0.1-9.9ul/cm
Min filling and draining volume: 1ul
Dead volume: nearly zero
Dimension: 50*40*42cm

1 Sprayer output: 120—250 lines(30cm)/hour
Platform area: 540 x120 mm
Gliding tip distance: min. 3mm
Spraying volume: 0.1-9.9 ul/cm
Dispensing position precision: ±0.1mm
Precision: ±0.10mm
Weight: 25KG

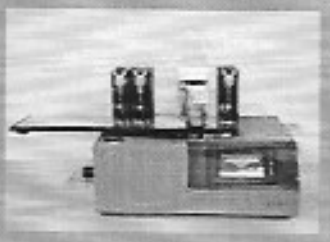




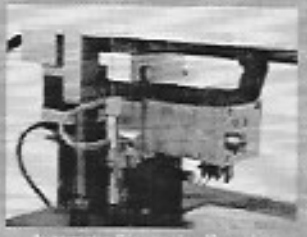


HM3020

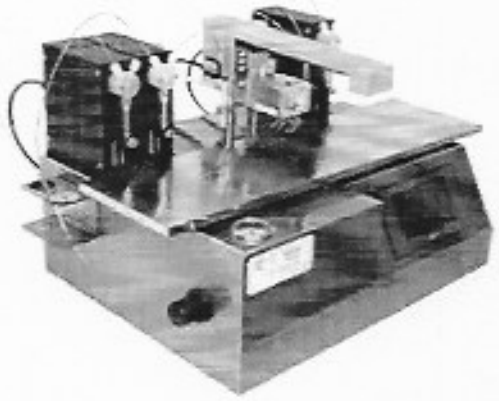
Dispenser Series



HM3035



Automatic Dispensing/Spraying Transformation Module



HM3030

XYZ dispenser HM3030/HM3035

HM3030 is the first choice for most players who start their lateral flow test development. It's ideal for quantitative C/T lines gliding of lateral flow strip. It's also good for colloidal spraying on sheet membrane by circular movement. 20 colloid lines (distance 5mm) could be sprayed by one circle. It moves on XYZ axis automatically and motorized Z axis is much helpful to get different width of sprayed line. There are two pumps for C/T lines and one for colloid line in standard configuration. It could be equipped up to 6 pumps upon requirement.

HM3035 is updated version of HM3030 with additional vacuum holddown nest and automatic dispensing/ spraying transformation module.

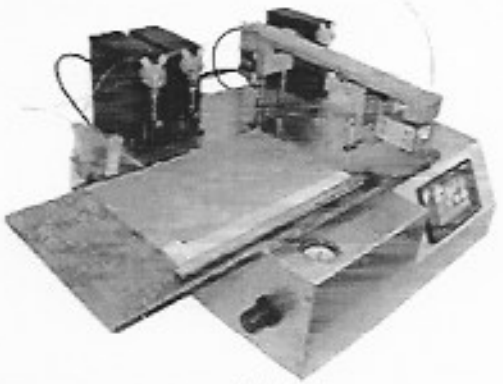
Gliding output: 200 - 300 cards(30cm)/hour
1 Sprayer output: 700 - 900 lines(30cm)/hour
X Slide speed: 50 - 250mm/S — Platform area: 540 x120 mm
Dispensing area: 320 x 100 mm — Gliding tip distance: min. 3mm
Standard Capacity: 500µl for dispensing and 1000ul or 2500ul for spraying pump.
Dispensing volume: 0.1 - 9.9ul/cm — Spraying volume: 0.1-9.9 ul/cm
Min filling and draining volume: 1ul — Dispensing position precision: ±0.1mm
Dead volume: nearly zero — Precision: ±0.10mm
Dimension: 50*40*42cm — Weight: 28KG

XYZ dispensing module HM3230/HM3235

HM3230 is specially designed for customer who likes to improve production efficiency. Its platform is 225mm wider and It's ideal for colloid for spraying on A4 sheet membrane. It will bring even higher efficiency by multi-sprayer module. 4 or 8 sprayers could be installed. There are two pumps for C/T lines and one for colloid line in standard configuration. It could be equipped up to 8 single pumps or two multi-channel pumps upon requirement.

HM3235 is updated version of HM3230, carrying additional vacuum sorption platform and automatic dispensing/spraying transformation module.

Gliding output: 200 - 300 cards(30cm)/hour
1 Sprayer output: 1200 - 1400 lines(30cm)/hour
X Slide speed: 50—250mm/S — Platform area: 540 x220 mm
Dispensing area: 320 x 200 mm — Gliding tip distance: min. 3mm
Standard Capacity: 500µl for dispensing and 1000ul or 2500ul for spraying pump.
Dispensing volume: 0.1—9.9ul/cm — Spraying volume: 0.1-9.9 ul/cm
Min filling and draining volume: 1ul — Dispensing position precision: ±0.1mm
Dead volume: nearly zero — Precision: ±0.15mm
Dimension: 50*69*42cm — Weight: 32KG



HM3230

www.hkbio.com

Dispenser Series



HM8000

Conveyor arrayer DM6000

Conveyor arrayer DM6000 is designed specially for dot dispensing on the membrane in plastic cassettes with micro-solution by soft tips. Plastic cassette will be brought by conveyor and stop precisely below soft tips. It could be fed onto the conveyor from cassette rack or vibrating tray(tailor made). Soft tips with different arraying volumes are available upon customers' requirements.

Max speed: 60cards/min
Arraying volume: 1μl – 10 μl
Standard pump volume: 500μl, 1000μl, 2500μl, 5000μl
Precision: ±0.05mm
Arraying distance: min. 1mm
Dead volume: nearly zero

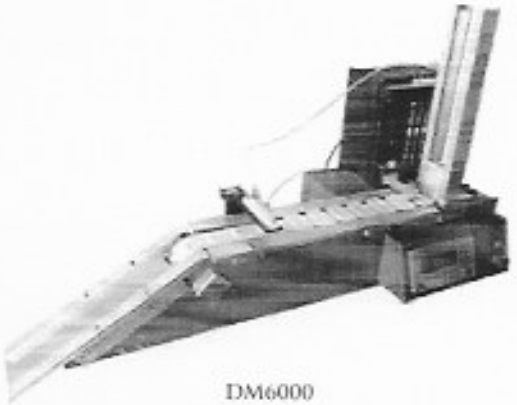


Conveyor dispenser HM8000

HM8000 is particularly designed for customer who is gliding C/T lines on NC membrane of laminated cards in large quantity. Laminated card will be easily taken onto the moving belt at constant speed. When it identifies the coming card automatically, gliding tips come down to touch the membrane and start line dispensing. It stops when the end of the card comes. Output of HM8000 could be around triple of HM3030. It could also dispense lines continuously if the card comes continuously or in roll format. There are two pumps for C/T lines in standard configuration. It could be equipped up to 6 single pumps upon requirement.

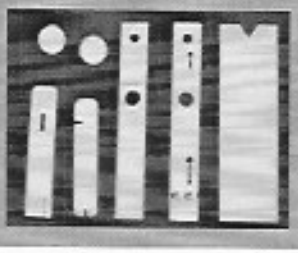
HM8000 could also be equipped by tandem pump for continuous line dispensing. It is recommended to be used with reel laminator CTM620 (see page 16) for high output and labor cost saving.

Output: 800 – 1200 cards(30cm)/hour
Speed: 50 – 250mm/S
Standard pump quantity: 4, additional pumps are available
Card width: 5 – 12cm
Dispensing line distance: 3 mm
Precision: ±0.10mm
Capacity: 500μl
Line volume: 0.1—10μl/cm
Dimension: 55*32*25cm
Weight: 20KG



DM6000

Strip Guillotine Cutter





Strip cutter features:

1.Irregular-shaped cutter is pending patent. It's very useful for those glucose strip manufacturers who need round corner for better operation and outlook. Other test strip with Irregular shape could also be cut out. Special blade set needs to be tailor-made. The special blade set could be installed on special models of ZQ4200 and ZQ2000,ZQ2400.

2.Both up and down blade could be replaced easily and sharpened. To avoid friction heat, the down blade was designed to save grinding surface between up blade. The up blade could last 1-3 million cut upon one sharpen.

3.Up feed roller and its side panel could be easily upturned. It saves much time when operator cleans glue on the blade surface. It's also very convenient for blade replacement and adjustment.

4.Our unique up blade configuration takes only seconds to remove up blade for glue cleaning and installation.

5.Unique down blade design prevents strips to being cut to pieces in case it is taken into clearance between blades.

6.Cut rotor could be rotated manually for blade clearance confirmation.



Strip Cutter

Cat. No.	Max cut speed (times/min)	Strip Width(mm)	Max Card Width(mm)	Remained Width(mm)	Blade angle	Irregular-shaped cut	Screen
ZQ2000	240	0.5-9	98	12	30	Optional	LED Screen
ZQ2400	240	0.5-9	128	12	30	Optional	LED Screen
ZQ4000	450	0.5-9	98	12	15/30	No	Touch Screen
ZQ4500	550	0.5-9	98	12	15/30	No	Touch Screen
ZQ5000	400	0.5-9	128	12	15/30	No	Touch Screen
ZQ4200	400	0.5-9	98	20	15/30	Optional	Touch Screen

Strip Guillotine Cutter

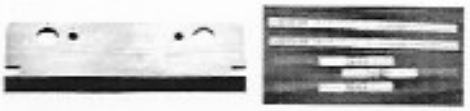


ZQ2000/ZQ2400

Automatic Strip Cutter ZQ2000

ZQ2000 is designed mainly to cut immune chromatography test paper plate (maximum width is 98 mm) into the immune strips. It is suitable for the production of the lateral flow strip, dry chemistry test paper, dry biochemical test paper and other material. It is an economic guillotine cutter for small and medium scale manufacturers and researchers. The cutting width can be set by digital microcomputer and it is very easy to operate in the operation interface of microcomputer. Feeding roller is made from special synthetic rubber so the precision and wear resistant of cutter is improved by the excellent friction.

Dimension: 420 x 380 x 250 mm Weight: 28 kg Max card width: 98mm
Cut precision: ±0.05mm Cut speed: Max 240 times/min
Strip width: 0.50—9.00mm Residual width: 12mm



Automatic Strip Cutter ZQ2400

It has all the same functions as ZQ2000 but it could cut card with width of 128mm. So it could be used for both lateral flow strip and urine strip production. Which is suitable for small and medium scale manufacturers and researchers.

Dimension: 420 x 380 x 250 mm Weight: 30 kg Max card width: 128mm
Cut precision: ±0.05mm Cut speed: Max 240 times/min
Strip width: 0.50—9.00mm Residual width: 12mm

Features of ZQ2000/ZQ2400

1.The upper blade is made of special alloy steel material and is sharpened after using 1 million times under the condition of normal using.

2.The lower blade is designed to the slit type.The cut strips are hard to access to the gap between upper blade and lower blade.Which can greatly reduce the rejection rate.

3.You don't need to loosen or remove any component to clean blades when the surface of blades have some mucilage glue during the cutting process.

4.The upper blade can be cut by manual rotation. You can chose the clearance and friction resistance between upper and lower blades during the blade installation process.

5.Tool baffle can be turn casually, which is easily to clean up for blades and feeding roller.

6.You can cut, recede cutter, lift cutter,feed forward and backward, single cut,and so on by the electronic operation panel.

7.These machines have the functions of automatic counting and limited number so that you can control and statistic the output.

Strip Guillotine Cutter

Programmed high speed cutter ZQ4000

ZQ4000 is designed mainly to cut immune chromatography test paper plate (maximum width is 98 mm) . It is suitable for the production of the lateral flow strip ,dry chemistry test paper, dry biochemical test paper and other material.It can be used for large scale manufacturers and researchers. Other configuration and performance of ZQ4000 is consistent with ZQ3000,but the fastest cutting speed of ZQ4000 is 450 times/min. The standard configuration of ZQ4000 have touch display screen and feeding roller lift device.

Dimension: 420 x 380 x 250 mm Weight: 32 kg Max card width: 98mm
Cut precision: ±0.05mm Cut speed: Max 450 times/min
Strip width: 0.50—9.00mm Residual width: 12mm



ZQ4500

Programmed High Speed Cutter ZQ5000

ZQ5000 is designed mainly to cut immune chromatography test paper plate with bigger width (maximum width is 128 mm) . It is suitable for the production of the lateral flow strip ,the urine strip and other dry chemistry test paper and dry biochemical test paper or other material. Other configuration and performance of ZQ5000 is consistent with ZQ4000,but the fastest cutting speed of ZQ5000 is 400 times/min. The standard configuration of ZQ5000 have touch display screen and feeding roller lift device.

Dimension: 420 x 380 x 250 mm Weight: 38 kg Max card width: 128mm
Cut precision: ±0.05mm Cut speed: Max 400 times/min
Strip width: 0.50—9.00mm Residual width: 12mm



ZQ4000

Super high speed cutter ZQ4500

It has all same the functions as ZQ4000 but the fastest cutting speed of ZQ4500 is 550 times/min. Over speed cutting will rise the temperature of blade and make the soften rubber from sheet stick on the blade surface. So you can equip with PTC tool temperature controller. In order to reduce the strip lateral pressure from blade incline,we recommend you use the blade with 15 degrees of incline angle that is processed by the special steel.

Dimension: 420 x 380 x 250 mm Weight: 38 kg Max card width: 98mm
Cut precision: ±0.05mm Cut speed: Max550 times/min
Strip width: 0.50—9.00mm Residual width: 12mm



ZQ5000

Strip Guillotine Cutter

Features of ZQ4000/ZQ4500/ZQ5000

1. The upper blade is made of special alloy steel material and is sharpened after using 1 million times under the condition of normal using.
2. The lower blade is designed to the slit type.The cut strips are hard to access to the gap between upper blade and lower blade.Which can greatly reduce the rejection rate.
3. You don't need to loosen and remove any components to clean blades when the surface of blades have some mucilage glue during the cutting process.
4. The upper blade can be cut by manual rotation. You can chose the clearance and friction resistance between upper and lower blades during the blade installation process.
5. Tool baffle can be turn casually, which is easily to clean up for blades and feeding roller.
6. There is an edge sensing probe so that it can find the exact location of first cutting.
7. You can cut, recede cutter, lift cutter,feed forward and backward, single cut,and so on by the electronic operation panel.
8. These machines have the functions of automatic counting and limited number so that you can control and statistic the output.
9. It can be used to cut the roll type NC membrane before sticking and can cut out rapidly around 300mm film which avoid the edge waste of membrane by manually cutting.
10. The width of the strip can be automatically calibrated at any time.

Sensing programmed cutter ZQ4200

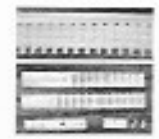
ZQ4200 is designed to cut strip upon printed mark. It's an ideal machine for glucose strips researchers and manufacturers. Its optical sensor could identify printed mark to avoid cumulative error. Cutting speed, quantities could be easily defined via touch screen. It could also cut Lateral Flow strips and Immunoblot strips when the mode function is turned on. In that case, it has the same cutting speed and precision as ZQ4000.

ZQ4200 with Irregular-shaped cut is available now. Glucose strip with round corner could be cut in high speed without cumulative error. Any irregular shapes could be designed and related blades set could be tailor made.

Dimension: 420 x 380 x 250 mm
Max card width: 98mm
Strips width: 0.50—9.00mm
Residual width: 20mm
Weight: 38 kg
Cut precision: ±0.1mm
Width control: 0.50—305.00mm
Cut speed: Max 400 times/min



ZQ4200





Sheet Guillotine Cutter

Programmed sheet cutter CT300

CT300 is an ideal machine for researchers to cut sheet raw material to long strip such as sample pad, conjugate pad and absorbent pad. It could be used to cut uncut sheet to test strip in laboratory.It could also cut reel material if the material could be fed manually. It will greatly improve the precision and output comparing to manual cutter.

There is only one rubber roller in CTD300 and its precision is relatively low, while its remained width is only 6mm. There is only one metal roller in CTM300 . But its precision is good enough to cut sprayed lines on conjugated pad sheet. CTS300 is also designed for sheet material cut into long strips such as sample pad, conjugate pad and absorbent pad. It has both down and up roller. Two rollers could improve the precision while its remained width will be around 15mm. CTS300 is better for roll material cutting which usually need pulling force. CT450(sheet length within 450mm) could be tailor made. The detailed information about CT300 are as follows.



CTD300/CTS300

Model number	Configuration	Precision (mm)	Residual width (mm)	Introductions
CTD300P	Single rubber roller	±0.20	6	It can be used to cut all kinds of auxiliary materials and it have average precision, maximum width of 305 mm.
CTS300	Double rubber rollers	±0.10	14	It can be used to cut all kinds of auxiliary materials and it have average precision, maximum width of 305 mm.
CTD300M	Single metal roller	±0.15	6	It can be used to cut glass fiber polyester membrane sheet of rough surface, such as the sheet after spraying metal.
CTS300B	Double rubber rollers	±0.10	19	It can be used to cut all kinds of auxiliary material with high precision, maximum width of 305 mm

Dimension: 420 x 320 x 250 mm
Cut precision: ±0.1-0.20mm
Row width: 1.50—320.00mm
Cut speed: Max 120 times/min

Weight: 40 kg
Strip widths: 0.20-310.00mm
Residual width: 6-19mm

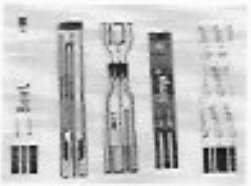
Sheet Guillotine Cutter

Sensing sheet cutter SPT300

SPT300 is designed to cut sheet upon printed mark. There are two rotor systems to feed the sheet and two optical sensors to identify the printed mark position. It will start to cut if both marks are in the right position. It's ideal for glucose strip manufacturers to cut their printed sheet into long strip while ZQ4200 could cut it to test strips. SPT450(sheet length within 450mm) could be tailor made.



SPT300





Model number	Configuration	Precision (mm)	Residual width (mm)	Introductions
SPT300	Double rubber rollers	±0.1	19	It can be used to cut auxiliary materials with printing tags accurately , maximum width of 305 mm.
SPT450	Double rubber rollers	±0.1	19	It can be used to cut auxiliary materials with printing tags accurately , maximum width of 450 mm.

Dimension: 540 x 300 x 360 mm
Cut precision: ±0.1mm
Width control: 0.50—450.00mm
Cut speed: Max 100 times/min

Weight: 44 kg
Max sheet widths: 305mm(SPT300),450mm(SPT450)
Residual width: 19mm



YK725/YK1225

Dimension: 430x 390 x 210 mm
Max speed: 16m/min
Conveyor belt width: 700mm(YK725),1200mm(YK1225)

Weight: 26 kg
Cassette thickness: 3-12mm

Assembly roller YK725/YK1225

YK725/YK1225 is a bench conveyor cassette roller and is designed to compact the cassette with the diagnostic test strip.

The gap between roller and conveyor belt could be changed from 3 to 12mm. Kinbio designs a soft roller before cassette reach hard roller. Soft roller will hold the cassette before it was pressed by hard roller. It will greatly reduce defective products. Kinbio could supply hard roller with different hardness to adapt cassette with unevenness surface. YK725 is suitable for operation of 4-6 people, YK1225 is 6 to 12 people.Tailor made roller is available according to customer requirements.

Laminator



MTB300

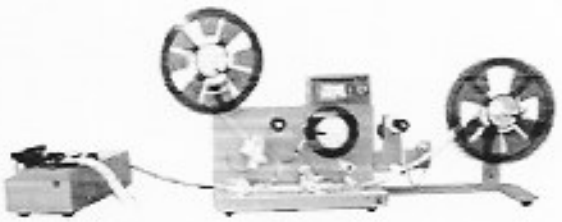
Manual laminator MTB300

MTB300 is ideal for lateral flow strip researchers and manufacturers who care for precise card lamination to assure good quality. Its motor drives a ruler to pause on the appointed position where the sample pad, conjugate pad, NC membrane and absorbent pad need to be laminated. It helps worker to identify the right edge to engage the pads and save much time. The pause position and pause time could be set via the keyboard. The ruler movement could be controlled by footswitch. The backing card will be hold by vacuum device connected to in house vacuum pump. To adapt different backing card size, the platform with vacuum device could be changed.

Power: 36W
Max. width: 90mm
Width: 120mm
Weight: 11kg
Ruler precision: ±0.10mm
Card length: 310mm
Dimension: 37.5 x34.4x14.5cm

Reel laminator CTM620

CTM620 is designed for large scale test strip production. It's ideal to laminate reel NC membrane and absorbent pad on reel PVC backing card while the laminated card could be cut into uncut sheet for further dispensing procession. It could laminate two kinds of reel material. If all the material is ready in reel format, two CTM620 could laminate four kinds of material onto backing card and here comes the uncut sheet for final strip production.

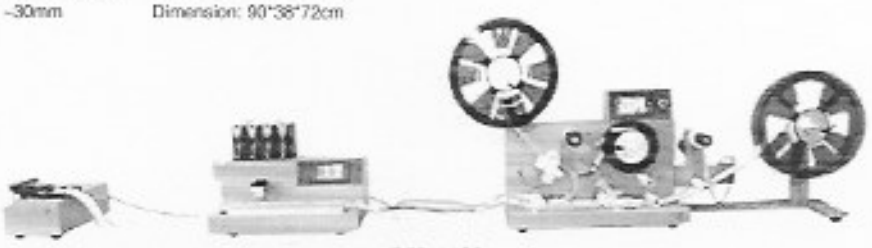


CTM620

Roll to card membrane dispenser RHM680

RHM680 combining dispenser HM8008 with CTM620 could laminate continuously NC membrane and absorbent pad onto backing card, and then it dispenses C/T lines by HM8008. On-line guillotine cutter will cut dispensed card into the uncut sheet for further procession. This machine could increase production efficiency and reduce labor cost.

Specification
Laminating speed: 50 – 200mm/S (equal to 10 – 40 cards/min)
Precision: ±0.15mm per 100m membrane
NC membrane width: 5mm –30mm
Weight: 35kg
Card width: 55 – 115mm
Dimension: 90*38*72cm



RHM680

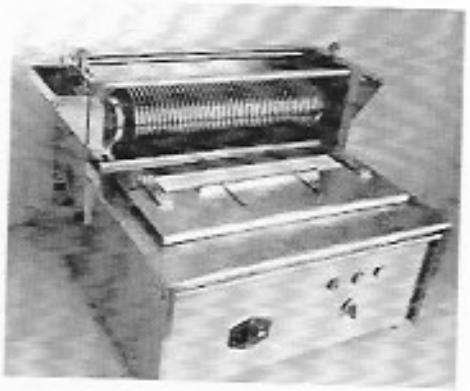
Rotary Cutter/Slitter

Rotary cutter GQ300

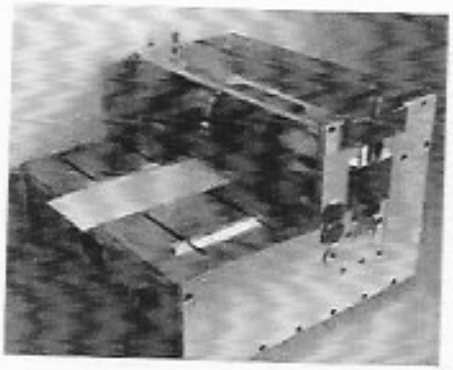
GQ300 is designed to cut electrochemical uncut sheet (such as glucose), Dry biochemical uncut sheet or dry chemistry uncut sheet at fixed width. It's quite convenience for material positioning and safe operation. Special localizer could be made to adapt card with position roles. OEM model is available. The blades module could be changed easily for different strip width. Each damaged blade could be replaced easily.

Max. card width: 305mm
Min. strip width: 4mm
Dimension: 42 x 35 x 30 cm

Max. card thickness: 1.5mm
Rotation speed: max. 60 times/min
Weight: 45 kg



GQ300



FTZ300

Rotary slitter FTZ300

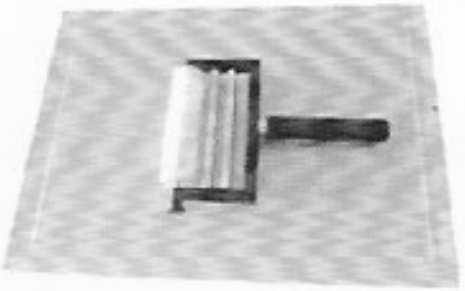
FTZ300 is designed for slitting sample pad, conjugated and absorbent pad by sheet format. It normally use dish blade for cleaning cut. Optional flat cut model is available. It's made of drive unit and blades module. It's also very easy to change blade module to get different strip width. It's also easy to change the lower blade set with new width gasket to match the same upper blade set. Each damaged blade could be replaced easily.

Max. card width: 305mm
Min. strip width: 9mm
Dimension: 42 x 38 x 25 cm

Max. card thickness: 1mm
Slit speed: Max. 60 times/min
Weight: 28 kg

Membrane coating machine BM300

BM is a manual tool for customer that can pour blocking solution to a transparent acrylic pool for blocking treatment. It could also be used for conjugated colloidal coating. A PVDF roller could push the solution to all the area of membrane to make it is coated evenly . It's every easy to take out the roller for clean washing.



Filling Machine

Desktop reagent filler

Our filling machine is designed as a desktop reagent filler for in vitro diagnostic industry application. It could automatically fill reagent to tube(vial or bottle) and screw the cap. The tube and its cap could be manually put onto the turntable. The turntable could be designed to fit different size tubes(vials or bottles) while it could only work on one of them. The turntable could be changed easily to adapt other bottles if customer has more type of bottles. To save labor cost, the tube and its cap could also be fed onto the turntable automatically while adding vibrate tray system. The machine is very easy and convenient to operate,and maintain.

Special design is available to fill reagent into special tubes and bottles, such as centrifuge tubes, FOB sampling bottles, biochemical reagent bottles.

Filling volume: 0.1-15ml
Size: 9-28 mm in diameter, 35-100mm in height

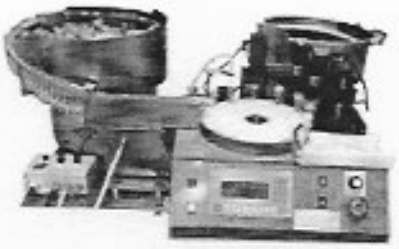
Working speed: 10-40 bottles/ min
Voltage: 220/110 v

Product name	Model number	Pump type	Automatic capping (N:NO/Y:YES)	Automatic putting bottles (N:NO/Y:YES)	Wheel diameter (mm)	Dimension (mmxmmxmm)
Manual desktop filling machine	GZ2501	Peristaltic	N	N	250mm	510*400*320
	GZ3501	Penstaltic	N	N	350mm	610*500*320
	GZ2502	Gradient	N	N	250mm	530*400*320
	GZ3502	Gradient	N	N	350mm	610*500*320
Automatic setting cap filling machine	GZ2503	Peristaltic	Y	N	250mm	530*900*410
	GZ3503	Peristaltic	Y	N	350mm	610*1000*410
	GZ2504	Gradient	Y	N	250mm	550*900*410
	GZ3504	Gradient	Y	N	350mm	630*1000*410
Full-automatic desktop filling machine	GZ2505	Peristaltic	Y	Y	250mm	1010*900*410
	GZ3505	Peristaltic	Y	Y	350mm	1110*1000*410
	GZ2506	Gradient	Y	Y	250mm	1050*900*410
	GZ3506	Gradient	Y	Y	350mm	1130*1000*410





Manual desktop filling machine



Full-automatic desktop filling machine

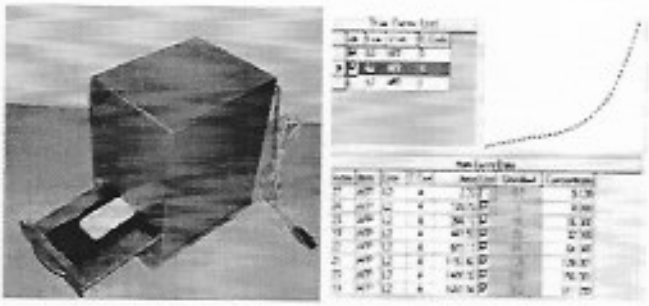


Automatic setting cap filling machine

Test Strip Reader

Strip analyzer DT1032

It's a sensitive image analyzer to read color intensity of lines on Lateral flow strip. It's a powerful tool for manufacturers to control quality during R&D and production. Its software could search lines in fixed reaction area automatically and figure out parameters such as peak height, line distance, area integral etc. It will reduce membrane background noise for accurate result. Kinbio offers different test strip readers according different cassette size to device holder. Software is able to remember C/T line position automatically when related parameters of one project is set.



Pixel: 640 x 480
Dimension: 15 x 13 x 19 cm
Date interface: USD2.0
Card channel: flexible
Weight: 2.5kg
Date repeatability: < 5%



Desktop strip reader DT2050

Kinbio developed DT2050 for mobile and fast detection supported by battery. Coupling latest CMOS sensor and digital image analysis technology, DT2050 could detect very weak line signal with good stability. It's quite nice for clinical POC application with in house industrial PC. All the operation could be done on the large area touch screen. Related strip picture, line peak and data could be displayed and printed by its built in printer. OEM product is available.

CMOS Pixel: 640 x 480
Weight: 1.8 kg
Date interface:USD2.0
Dimension: 26 x 22 x 13 cm
Date repeatability: < 5%

Foil pouch pager APF-15

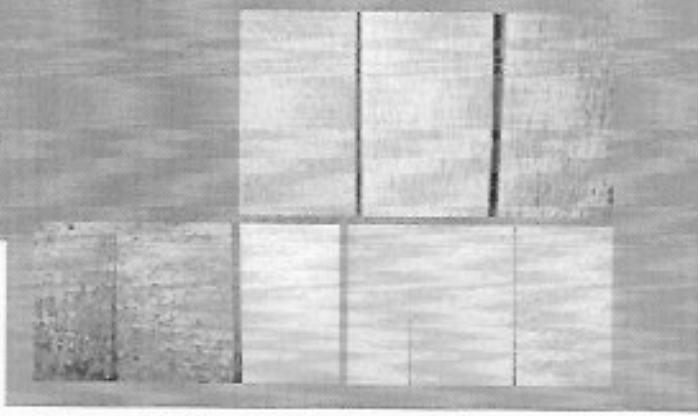
APF-15 can be used to separate fold bags or cards into Single Page automatically so that ink-jet printer can complete spurting process easily.The standard length of conveyor belt is 1.5 meters.



APF-15

Material width: 60 mm - 280 mm
Material thickness: 0.02 mm - 5 mm
Speed adjustment: frequency stepless governor
Volume: 1500x 750x 340 mm

Raw Materials



Raw material has been proven to be stable in rapid test. It could be supplied by strip, sheet or rolls format. Raw material starter kit is available for item selection and quality confirmation.

Colloidal gold test paper consumable packages

Customer used all kinds of materials to find the best material to produce production, in view of the few demands number of all kinds of materials during the product research phase, kinbio offered the consumable package used in the rapid diagnostic field by ourselves screening for many years. If you want to find the best material to produce rapidly and place an order after you find the best raw material, we can send you our consumable package so that you can put on production quickly and speed up the development progress.



Glass fiber

Smooth on the surface, fiber and thickness uniformity, excellent machinability. Roll, sheet and strip with nominated width is available.



Cat. No	Thickness (mm)	Absorbent quantity (g/m2)	Absorbent speed	Note
SB06	0.30±0.05	400-530	20-26mm/60s	Rigid glass fiber with good hydrophilic, suitable for sample pad application and may be available for conjugate pad.
SB08-1	0.40±0.05	600-700	20-26mm/60s	
SB08-2	0.40±0.06	500-600	30-40mm/60s	
CB06	0.30±0.05	550-650	---	
CB08	0.40±0.05	825-925	---	
BT40-1	0.46±0.05	420-550	10-20s/40mm	Microfiber with diameter of 0.6~3μm with good hydrophilic, suitable for whole blood membrane after treatment.
BT50	0.50±0.03	500-700	15-25s/40mm	
BT03	0.30±0.03	300-400	20-30s/40mm	
BT35	0.22±0.03	270-320	50-80s/40mm	
RB45	0.24±0.03	300-500	30-50s/40mm	Soft glass fiber with very good absorbency, good for sample and spraying conjugate pad
RB65	0.30±0.05	550-650	25-35s/40mm	

Raw Materials

Absorbent paper

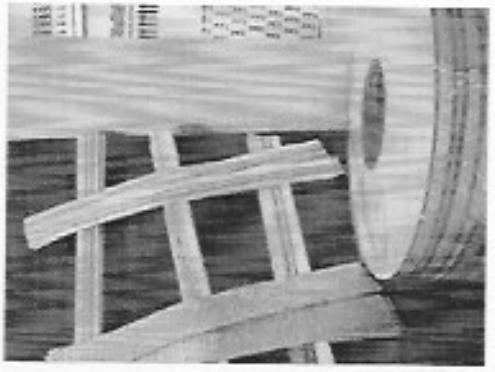
Absorbent paper from Kinbio is made of 100% plant fiber with No Chemical Additives and excellent water absorption. Different types of absorbent paper are available for different products according their own wicking rate and water absorption. Generally speaking, absorbent paper with too high wicking rate is not very good for sensitivity of tests.

Cat. No.	Thickness (mm)	Absorbent speed (s/40mm)	Absorbent quantity (g/m2)	Note
SX18	0.41±0.03	4-8	280-380	Good water absorption, suitable for sample pad or conjugate pad
SX27	0.68±0.05	10-30	400-600	Good water absorption
SX42	1.0±0.10	20-40	800-1000	Thicker, high wicking rate
SX45	1.40±0.10	30-50	1000-1150	Thicker, high wicking rate
CH27	0.68±0.05	80-110	400-600	More rigid, normal wicking rate
CH37K	0.95±0.08	40-70	600-900	More rigid, good water absorption

PE mark film

Ultra-thin plastic membrane coated with pressure sensitive adhesive is very soft to be laminated to most components in lateral flow strip. The glue is inert bio-active substance. Color and symbol could be appointed and printed upon request. Strip and roll with requested size is available. This membrane is soft, good bonding strength, available for long-term storage without falling off. This is one of the best mark films in colloidal gold industry.

Kinbio is capable of customizing PE mark film with different colors, symbols, images, and formats (roll or sheet) upon customer's requirements. Small order (Min. 80 square meters per order) could be done to adapt requirement of special product or new product development.



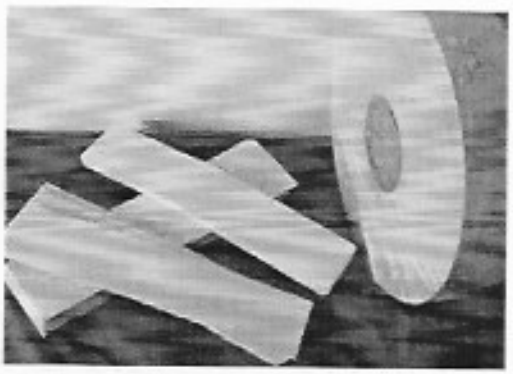
Initial bonding strength: ≥ No. 3 steel ball endurance bonding strength: ≥ 80 hours

Raw Materials

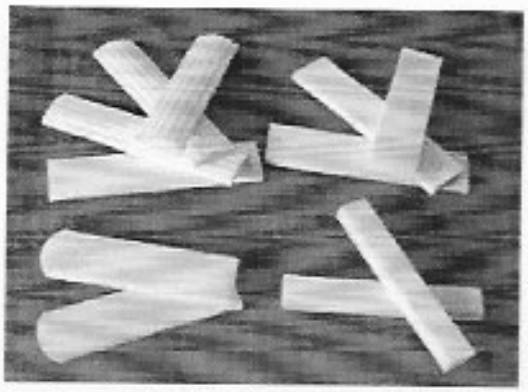
Plastic backing card

Pure white PVC backing card with high polymeric pressure sensitive glue SM31, the thickness 0.4mm is available for dipstick strip and 0.25mm available for cassette strip. Specified cut lines on liner paper could be made upon request. The glue shows inert to bio-active substances and doesn't affect on immunoreactions. It could be supplied by sheets or rolls with requested size. Plastic material, PS and PET materials are available for customization.

Kinbio developed new high polymeric pressure sensitive glue CP12 for different surface tension of various types of raw material. CP12 has excellent initial bonding strength and much better adherence effect on many kinds of raw material which SM31 is not suitable for.



ilial bonding strength: ≥No. 3 steel ball endurance bonding strength: ≥80 hours



Diagnostic wicks

Kinbio created a perfect method to produce bonded fibers. Special surface modification procession is done to improve hydrophilicity of the bonded fiber. It's an idea wicking components in lateral flow devices such as midstream pregnancy and ovulation tests. It's also good for other applications requiring collection and transfer of sample liquids or reagents. OEM Product is available at any shape and any length.

Kinbio is able to offer related products for Pre-Filter Media and Pipette Filter Media. Related information about Profile shape is needed before further Details discussion. OEM production is acceptable to any potential market.

Raw Materials

Polyester fiber

Kinbio polyester fiber has excellent hydrophily, uniformity fiber and fine structure after special treatment. Fiber composition doesn't affect the reaction of bioactivator. It's suitable for colloidal gold conjugate pad and sample pad.

Cat. No.	Thickness (mm)	Absorbent quantity (g/m2)	Absorbent speed (s/40mm)	Note
KL20	0.08±0.02	70-115	--	Slight lyophobic
NJ20	0.06±0.01	70-100	--	Normal hydrophily, no obvious absorbency
DL42	0.48±0.08	500-700	10-20	Excellent absorbency, suitable for sample pad and conjugate pad
VL68	0.16±0.03	100-170	18-28	Good hydrophily, available for sample pad/conjugate gold pad, suitable for membrane coating and spraying
VL78	0.23±0.03	170-230	10-20	Good hydrophily, available for sample pad/conjugate gold pad, suitable for membrane coating and spraying
VL98	0.30±0.03	230-300	10-20	Good hydrophily, available for sample pad/conjugate gold pad, suitable for membrane coating and spraying
HPP42	0.25	370	80	Good hydrophily and Water absorption, available for colloidal gold soaking or spraying and sample pad.
KL43	0.35	400	110	

Desiccant



Cat.	Siz(mm)	Weight(g)	Equal Silica gel weight
KBF-3	25×12×1	0.2±0.05	0.5
KBF-6	30×20×1	0.4±0.08	1
KBF-15	60×25×1	1.0±0.1	2.5
KBY-2	20×10×2.5	0.3	1
KBY-ρ	ρ 10×25	0.12	

Plastic cassette

We offer a wide range of plastic cassette, tailor made product is available upon order.

Cat.No	Strip Num.	Strip W.	Strip L.	Card L.	Card W.	Window Size	W. Mid/ End
KB1460	1	4	60	65	32	3.6*12.4	27
KB1467	1	4	67	70	20	3.6*12	27
KB1470-4	1	4	60	70	20	3.6*16.4	28
KB1470-3	1	3	60	70	20	3.6*16.4	28
KB1472	1	3.5	60	70	20	3*15.5	---
KB2461	2	4	60	70	32	3.4*17.4	28
KB3461	3	4	60	70	44	3.4*17.4	28
KB4461	4	4	60	70	56	3.4*17.4	28
KB5461	5	4	60	70	65	3.4*17.4	28



Plastic Cassette



FOB sampling bottle



Test strip bottle



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