KYUNG NAM PRECISION Co.,Ltd

Kyung Nam Precision Engineering

PCB / Precision Machining

Ⅰ. INTRODUCTION

Introduction / History

HISTORY

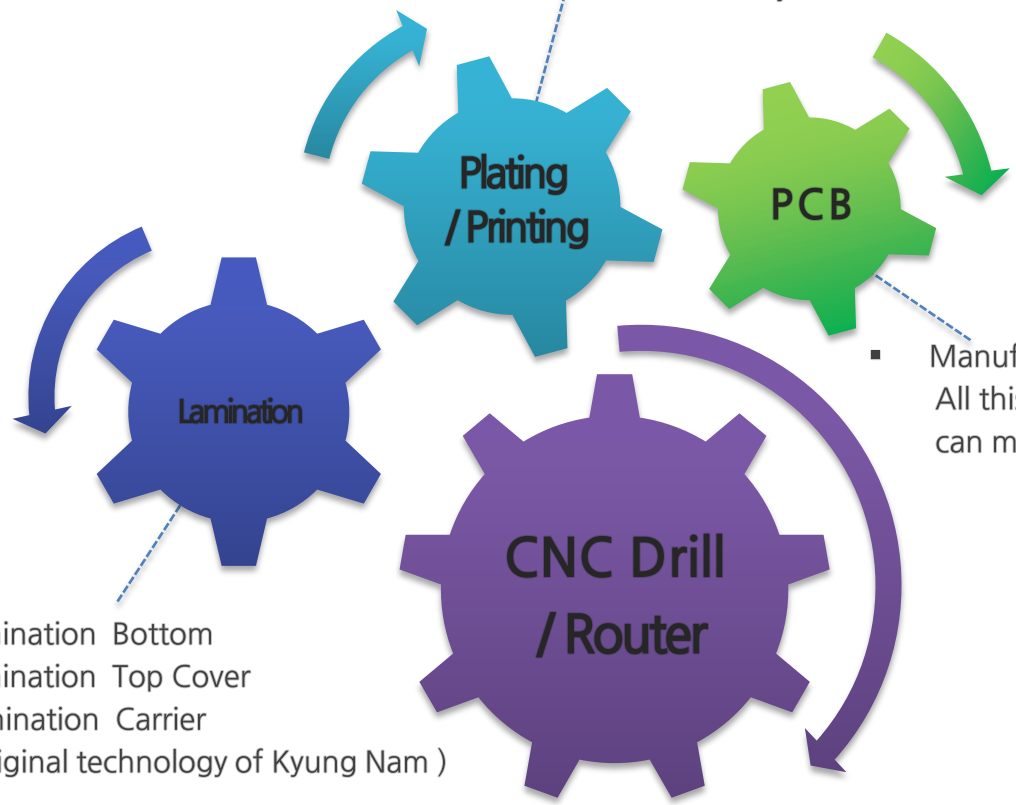
History of Kyung Nam Precision Engineering

2012	Separate Kyung Nam Co.,Ltd. and KN Co.,Ltd. Moved company plant to #1106-1, Hogye-dong.
2005	First completed plant2 in Osan and Anyang. Business entry about FPCB laminate.
2003	Acquired ISO 9001
2002	Kyung Nam ENG Co.,Ltd. is a mergered with KN Co.,Ltd.
2001	Established KN Co. Ltd. Moved KN Co., Ltd to 1plant of Kyung Nam ENG Co., Ltd.
1999	First completed plant1 in Jochiwon. Started to commercialize PCB parts.
1990	Established KYUNG NAM Engineering Co., Ltd. In Anyang
Since 1983	Began Production Division of Precision Manufacturing

II . FIELD OF BUSINESS

Staple Products

Kyung Nam Precision ENG.
Main Products



- Plating and Exposure Circuit
- Wide variety of choices in size and types

- Manufacturing Printed Circuit Board.
  All this as well as products
  can make it order.

- Lamination Bottom
- Lamination Top Cover
- Lamination Carrier
  (Original technology of Kyung Nam)

Ⅲ. MAIN PRODUCTS

Primary Processed Goods

FRACTION DEFECTIVE - LAMINATION(Hot press) PROCESSING

A

10,000ea per work basis (Result is vary depending on operator and processing)

	Bonding Machine	Circle Guide Pin	Other Rivet	Kyung Nam's Rivet
4 layers	5%	12%	20%	2%
6 layers	4%	16%	24%	2%
8 layers	10%	20%	28%	3%
Up to 10 layers	15%	26%	34%	4%

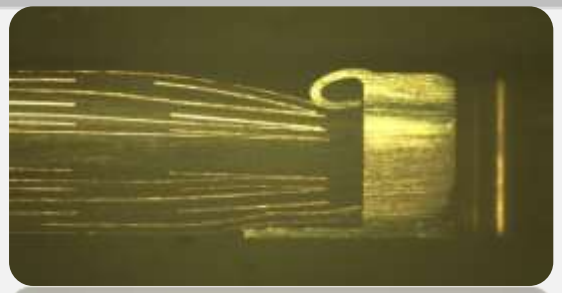
B

10,000ea per work basis (Result is vary depending on operator and processing)

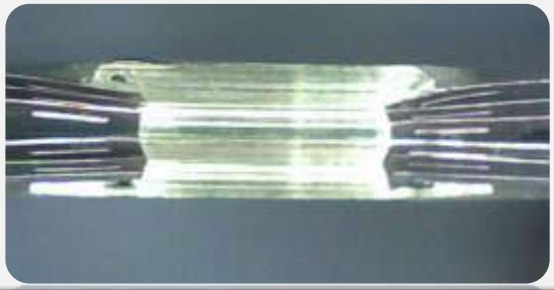
	Bonding Machine	Circle Guide Pin	Other Rivet	Kyung Nam's Rivet
4 layers	4%	10%	18%	3%
6 layers	5%	15%	20%	2%
8 layers	8%	21%	24%	3%
Up to 10 layers	13%	23%	29%	5%

COMPARATIVE LAMINATION ROCESSING RESULT

▶Using other Rivet

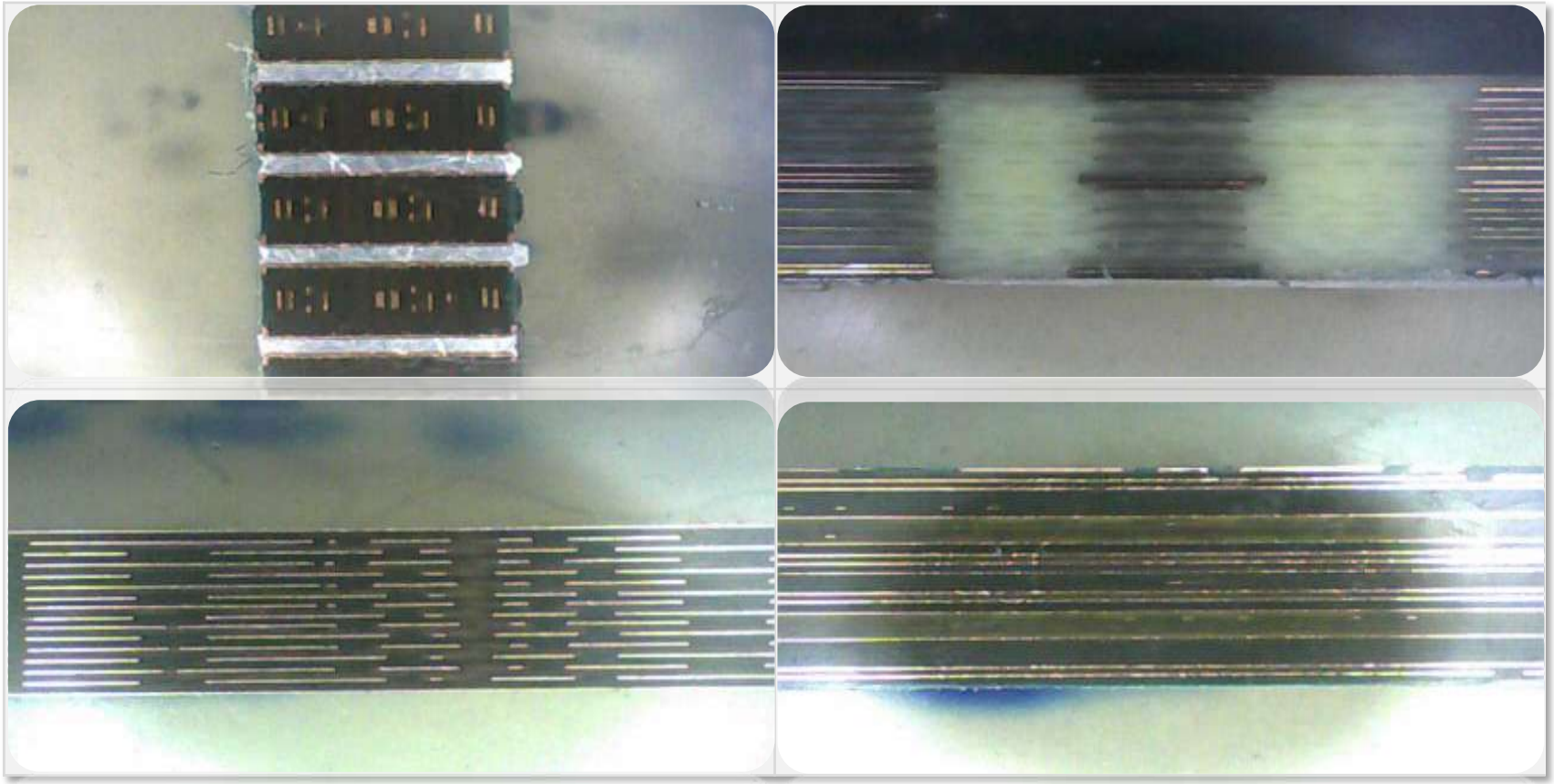
LEFT	RIGHT
	

▶Using Kyung Nam Engineering's Rivet

LEFT	RIGHT
	

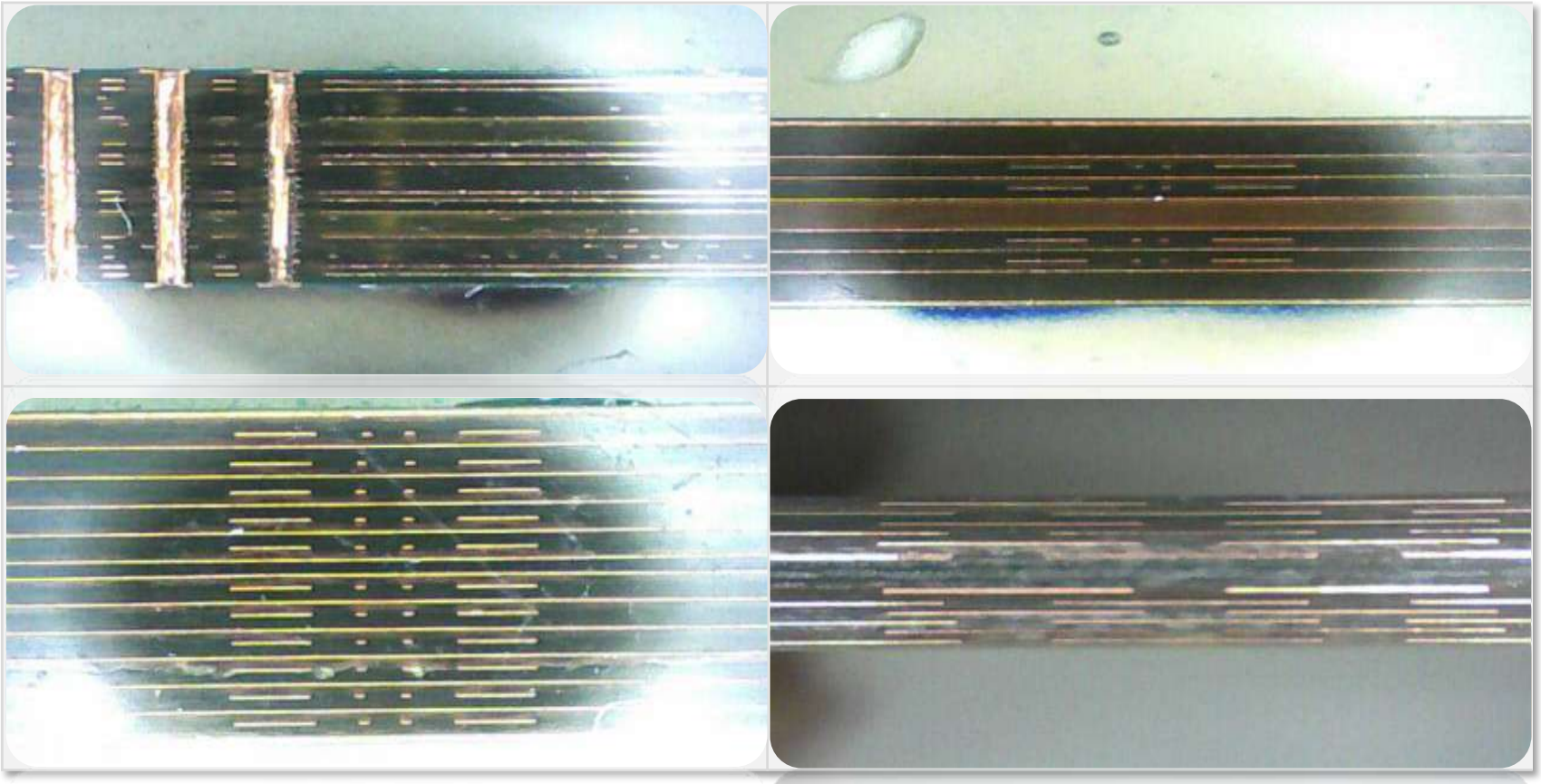
I. LAMINATION CROSS SECTION (Show result of stabilization processing)

▶Using Kyung Nam Engineering's Rivet



II. LAMINATION CROSS SECTION (Show result of stabilization processing)

▶Using Kyung Nam Engineering's Rivet



III. LAMINATION CROSS SECTION (After hot press processing)

▶ Using Kyung Nam Engineering's Rivet

To fix a rivet to the circuit board with melting EPOXY

IV. COMPLECTION LAMINATION WORK
(Guide and Rivet hole X-Ray picture)

▶Using Kyung Nam Engineering's Rivet

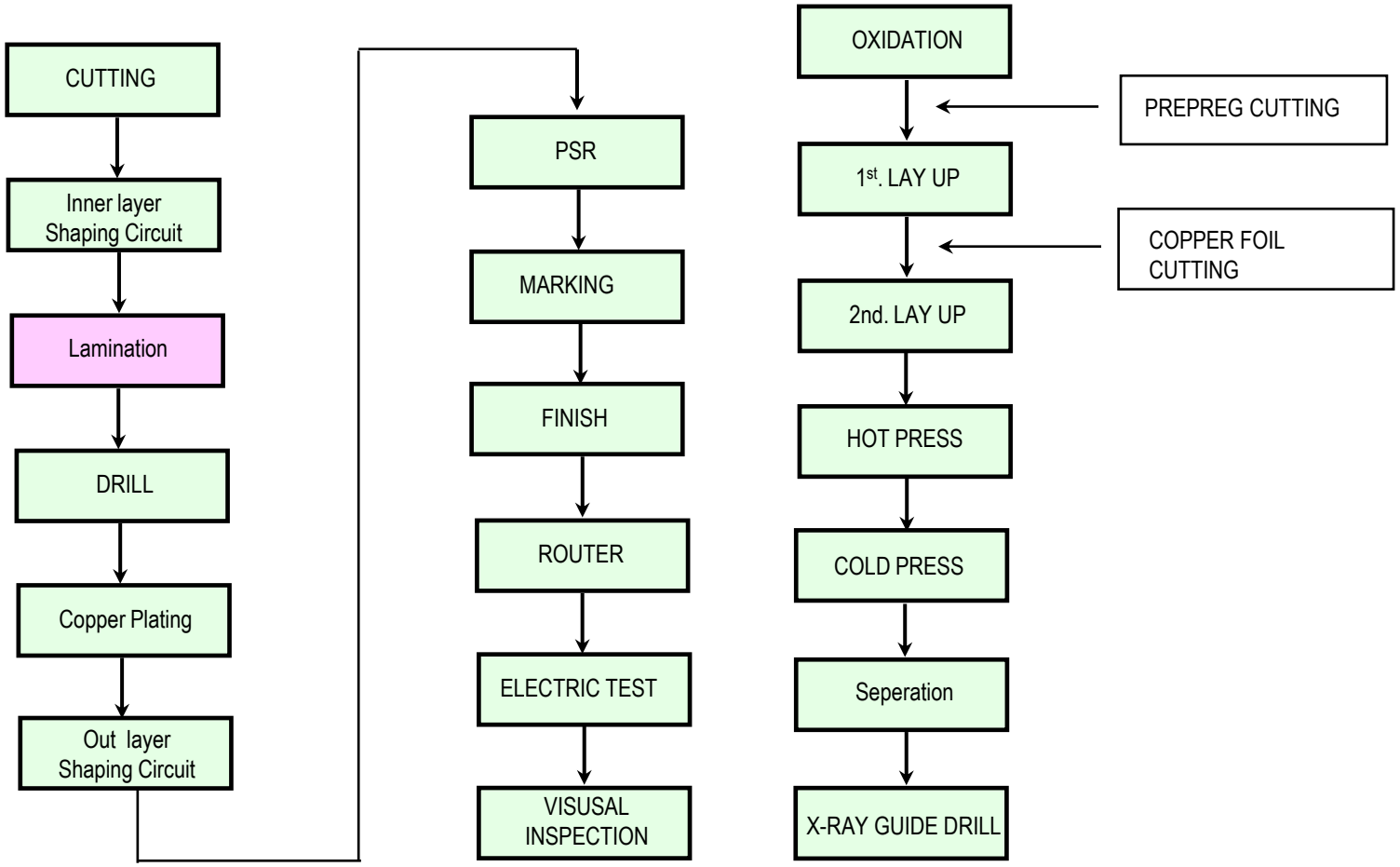
GUIDE HOLE



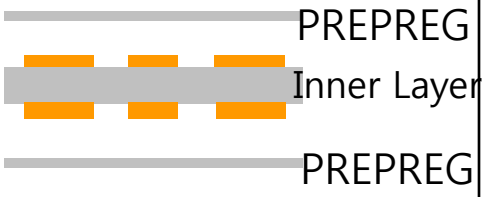
RIVET HOLE

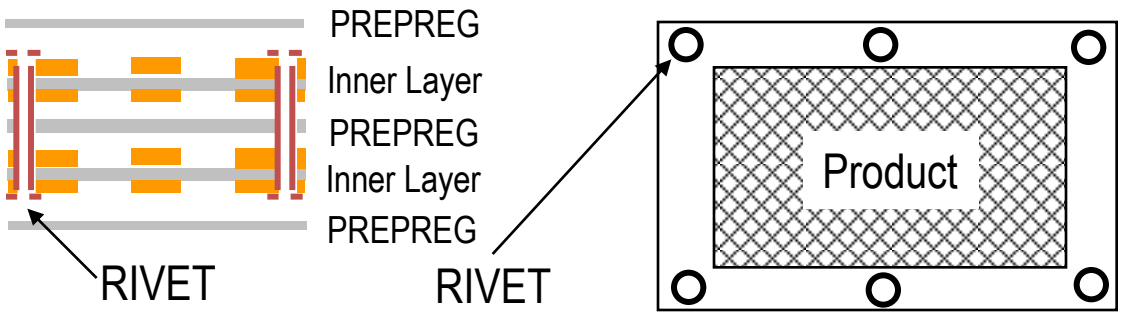
COMPLECTION LAMINATION

V. PCB Process (MLB PCB)

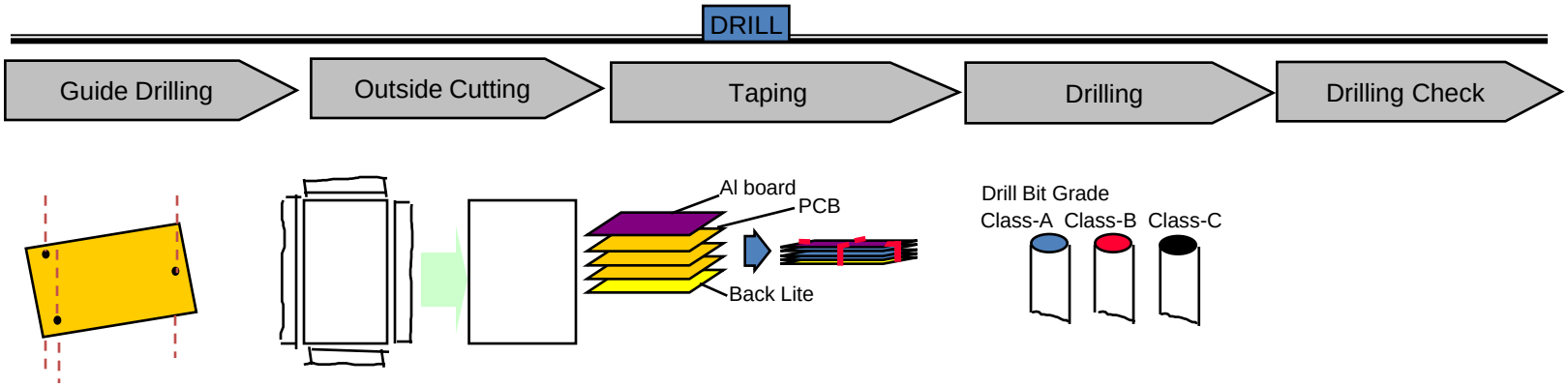


VI. LAY - UP Process (MLB PCB)

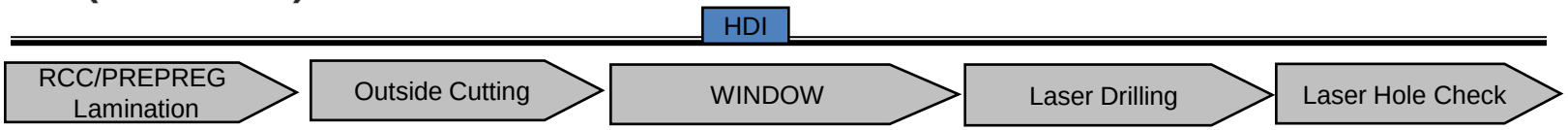
4 Layer	Up to 6 Layer
	1. RIVET method To fix between layer and layer of up to 4 layer PCB. Registration prevention, Integration of PCB at Press process.



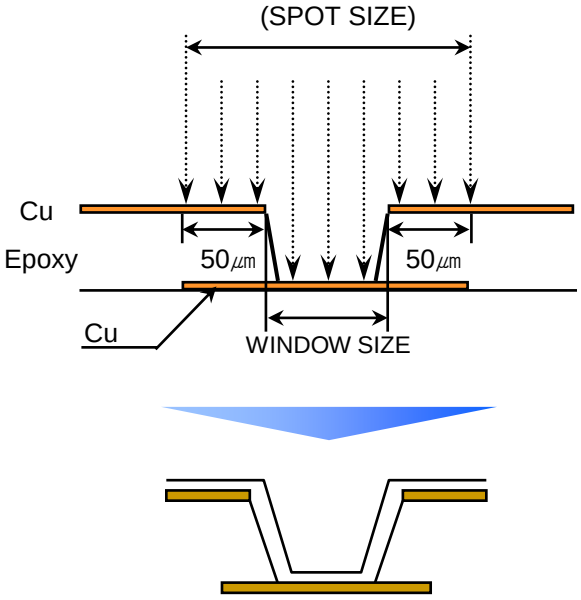
VII. DRILL Process (MLB PCB)



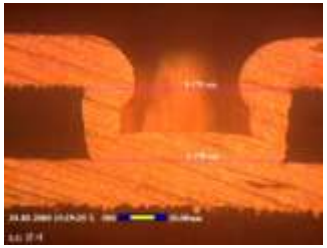
VII. LASER DRILL Process (MLB PCB)



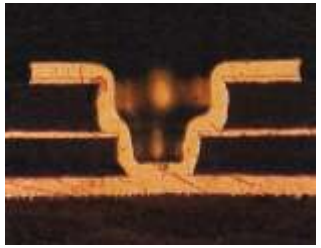
7. LASER DRILL Process (Conformal method)



8. Micro via Hole Type



< SBL >



< MBL >

his is to certify that

KYUNG NAM PRECISION CO.

has been assessed and registered by
INTERNATIONAL QUALITY SYSTEMS PTY LTD
for the operation of a quality system
that complies with the requirements of:

ISO 9001:2000
Quality management systems - Requirements.

QUALITY SYSTEM CERTIFIED

General Manager

Date of Registration: 17 October 2003

Registration Number: Q03-0201

This certificate should be read in conjunction with the associated Scope of Certification.

JAS-ANZ

Accreditation by the Joint Accreditation System of Australia and New Zealand.
Acc No. S142 | 94MA

실용신안등록증

등 록 제 0267678 호

출원 번호 제 2001-0030524 호
출 원 일 2001년 12월 20일
등 록 일 2002년 02월 27일

고안의 명칭 피시비기판의 홈가공장치

실용신안권자 백형열(591228-1002057)
경기 안양시 만안구 석수2동 417-3 한신아파트 114동 304호

고 안 자 백형열(591228-1002057)
경기 안양시 만안구 석수2동 417-3 한신아파트 114동 304호

위의 고안은 실용신안법에 의하여 실용신안등록원부에 등록되었음을 증명합니다.

2002년 02월 27일

특 허 청

특 허 증

특 허 제 0460185 호

출원 번호 제 2003-0060811 호
출 원 일 2003년 10월 01일
등 록 일 2004년 11월 26일

발명의명칭 피시비기판 제조공정에 있어서, 다단식으로 적층된 판자재고정용 리벳의 자동 제공방법및 그 장치

특허 권자 백형열(591228-1002057)
경기 안양시 동안구 호계동 1106-1

발 명 자 백형열(591228-1002057)
경기 안양시 동안구 호계동 1106-1

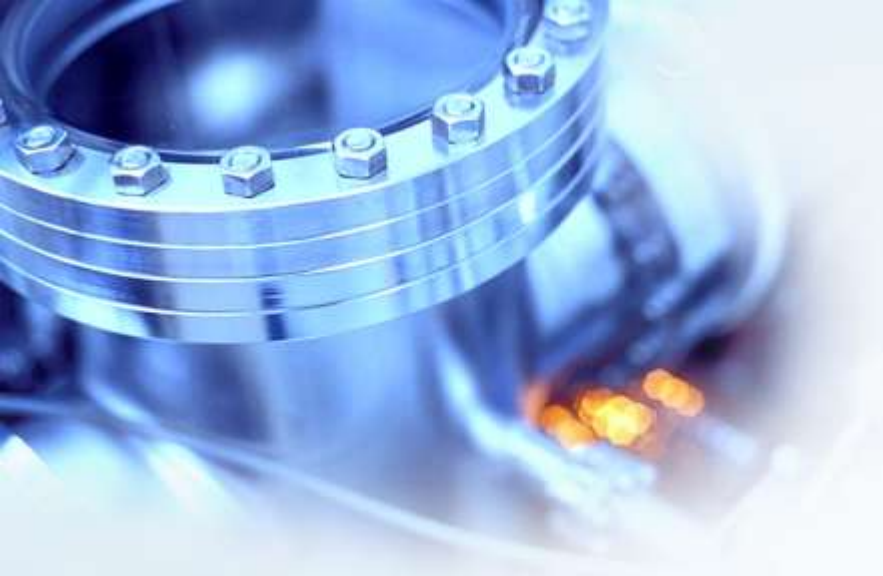
위의 발명은 특허법에 의하여 특허등록원부에 등록되었음을 증명합니다.

2004년 11월 26일

특 허 청

We promise we will be your reliable partner
with our original technology and experience.
Thank you for being with us!

-CEO Mr. Baek-



KYUNG NAM PRECISION Co.

PRECISION MANUFACTURING / RIVET / PIN / JIG / RING

- Add : #1106-1. Hogye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Korea
- Tel : 82 - 31 - 458 - 0507
- Fax : 82 - 31 - 429 - 0503