

# INSIGHT SKYTECH

# 天虹科技



# Safe Harbor Notice

This presentation contains certain forward-looking statements that are based on current expectations and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.

Except as required by law, we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

# Management Team

- Paul Huang : Skytech Chairman
- Carl Lo : Skytech founder & Vice Chairman
- George Yi : Skytech CEO (Previous AMAT Corporate VP for global field service)



**Paul Huang**  
29 Years experience  
in Semi Equipment

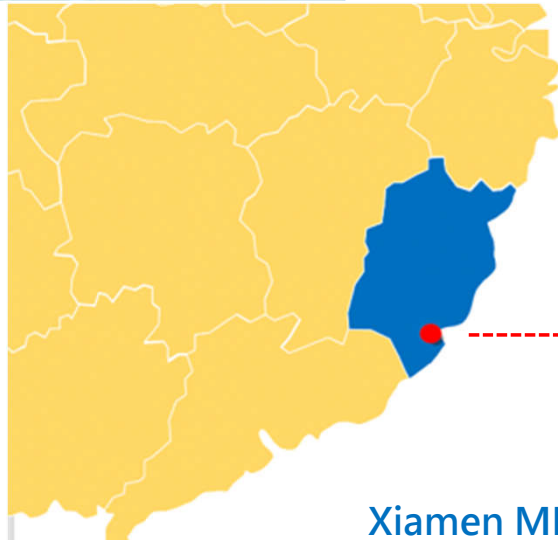


**Carl Lo**  
29 Years experience  
in Semi Equipment



**George Yi**  
29 Years experience  
in Semi Equipment

# MFG Locations



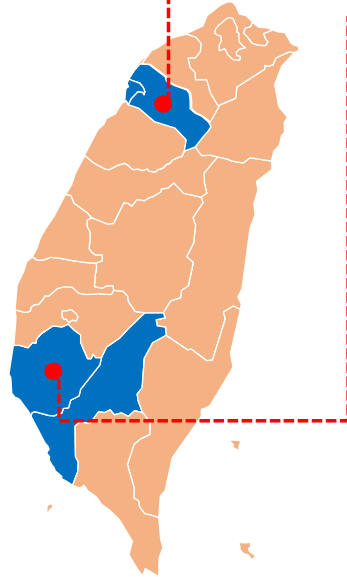
Xiamen MFG



Xiamen

Hsinchu

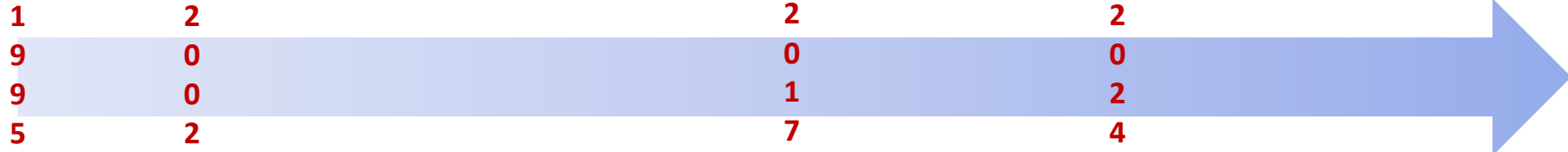
Tainan



Hsinchu MFG

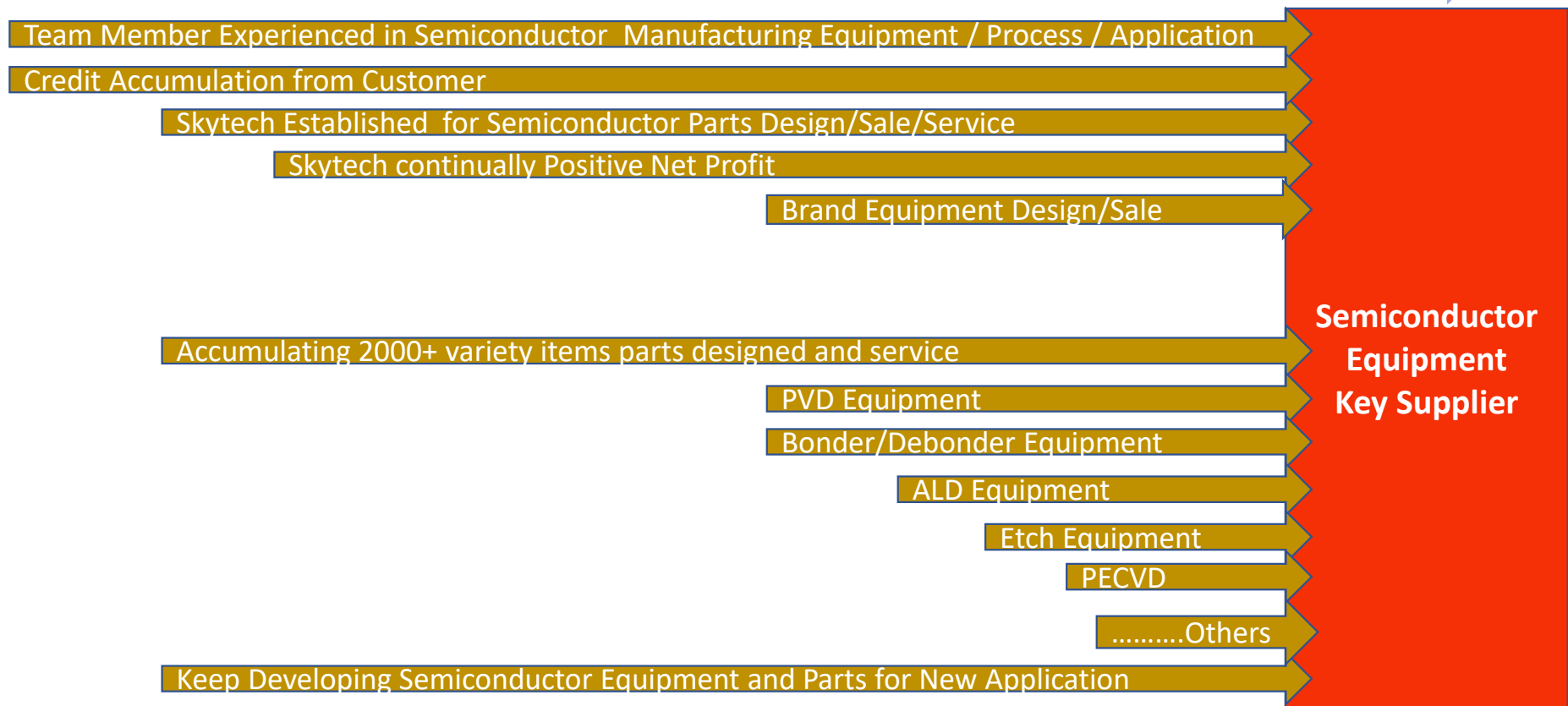


# Capability and Product Development



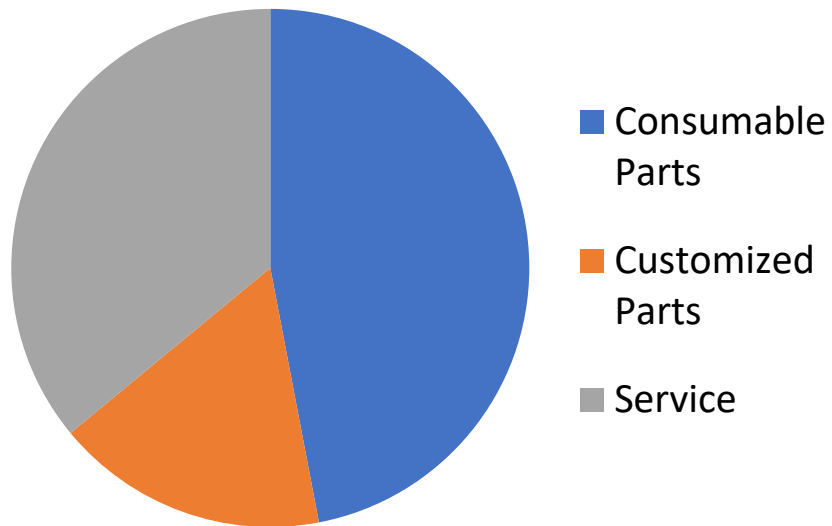
**Capability Accumulation**

**Products Development & Growth**

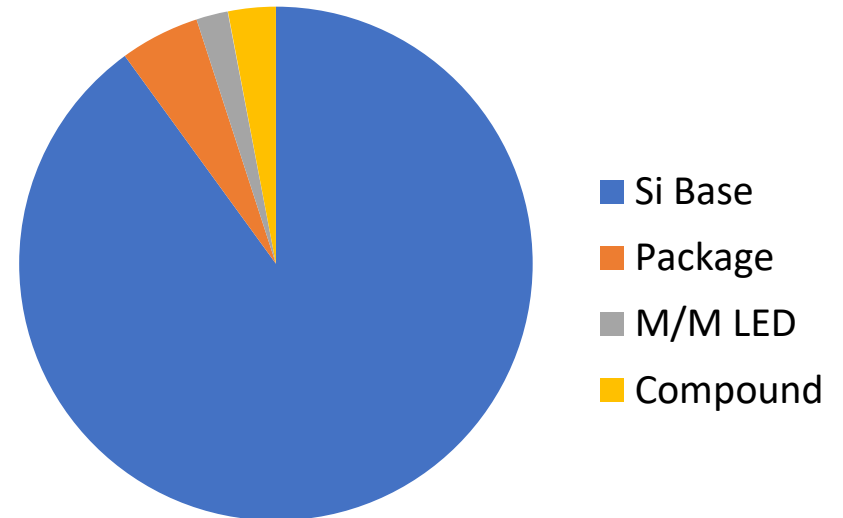


# Component -- Products and Industry Distribution

## Component Product Distribution

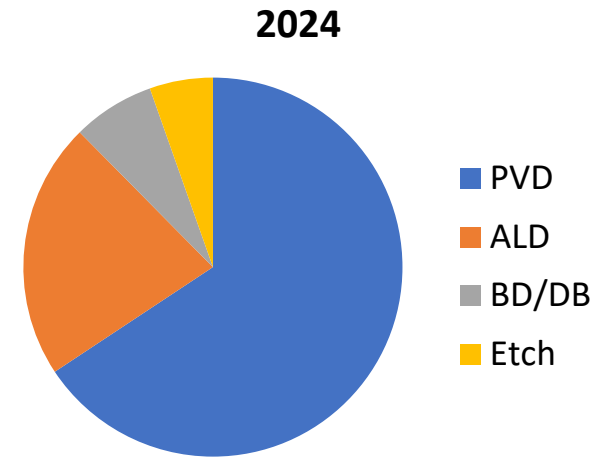
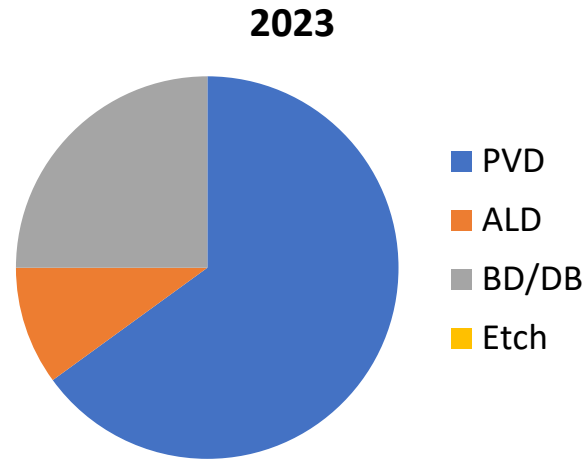


## Component Industry Distribution

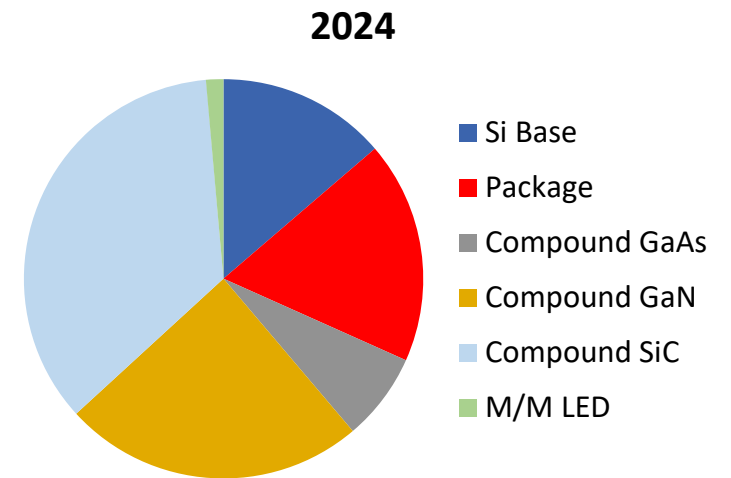
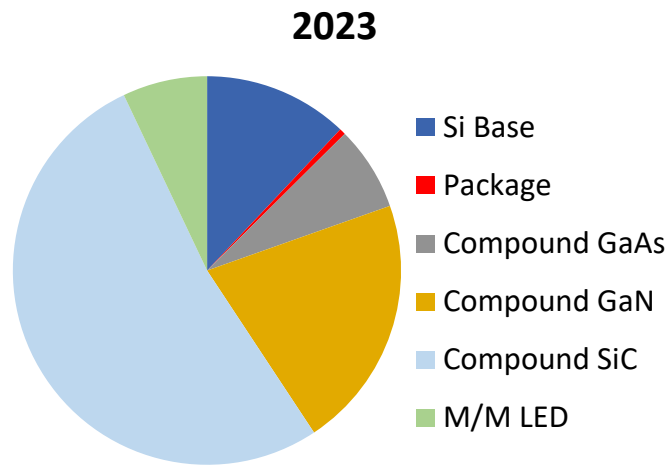


# Equipment -- Products and Industry Distribution

## Equipment Product Distribution



## Equipment Industry Distribution

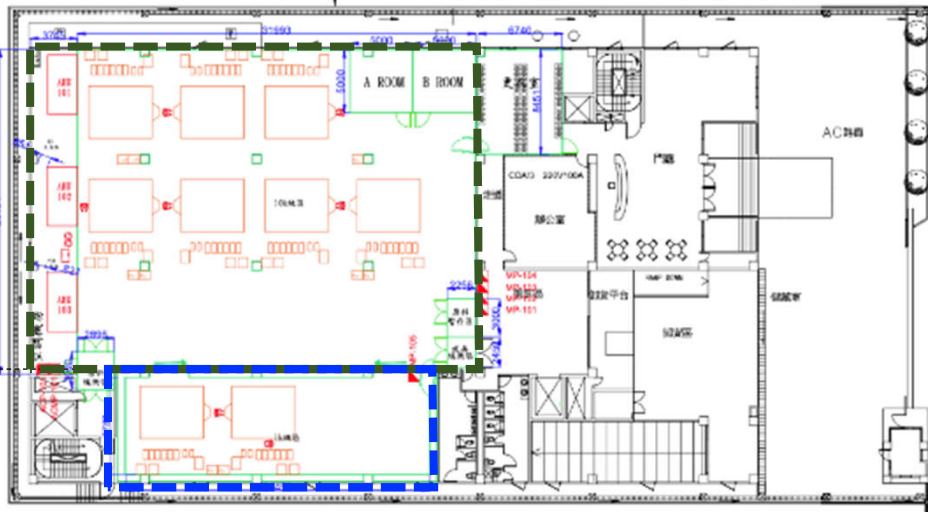


# Hsinchu MFG Cleanroom



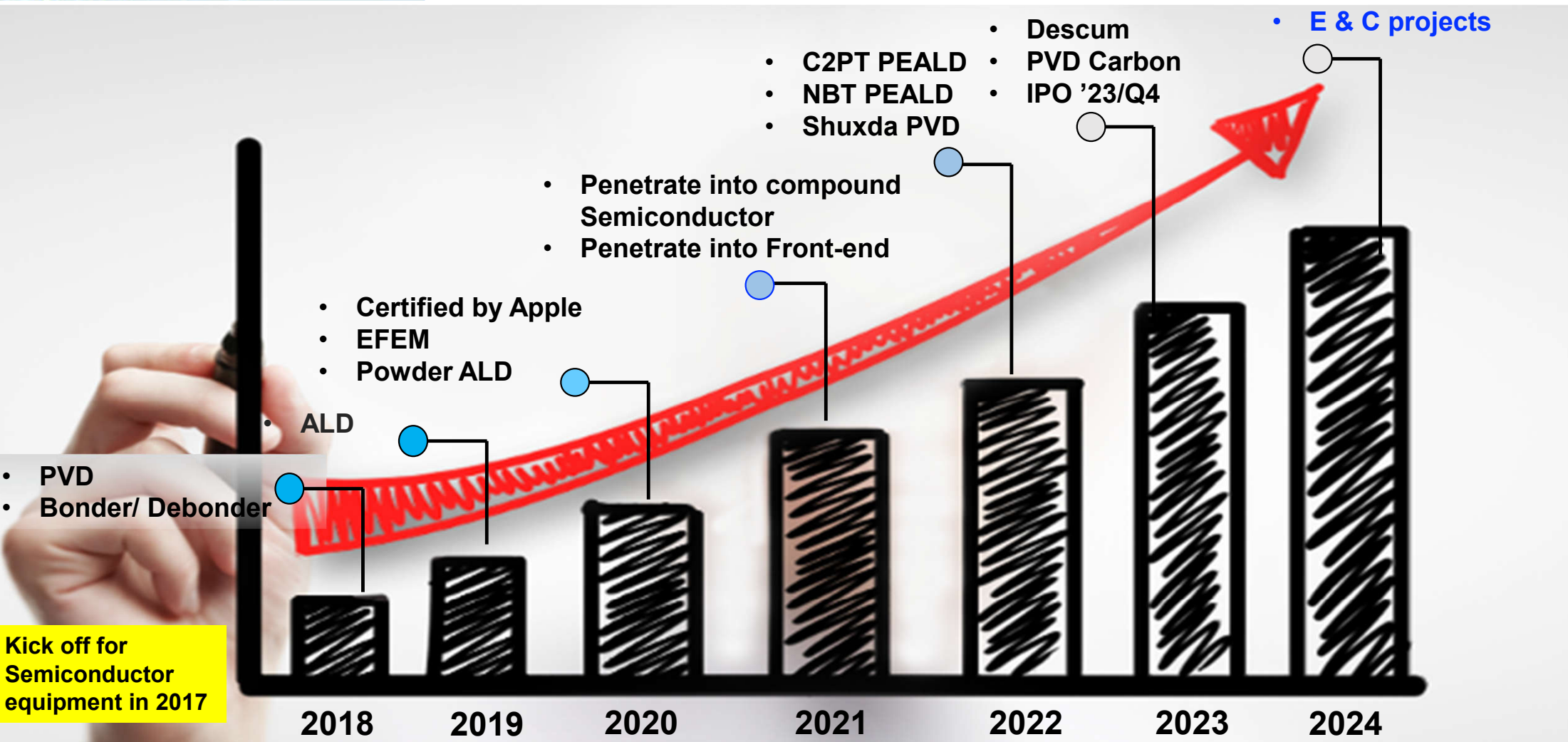
Class 10K

Class 1K



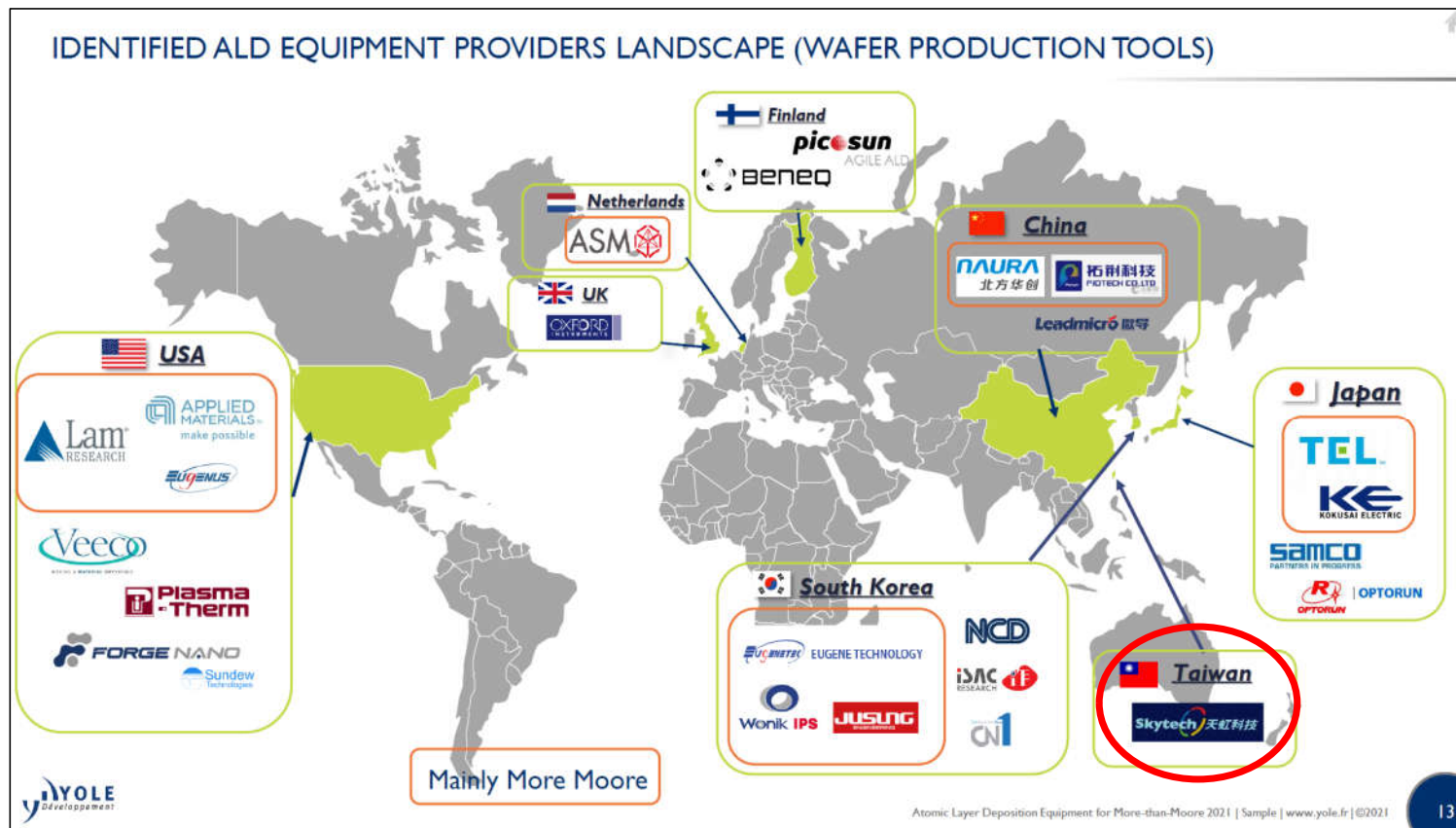


# Skytech Roadmap



**Kick off for Semiconductor equipment in 2017**

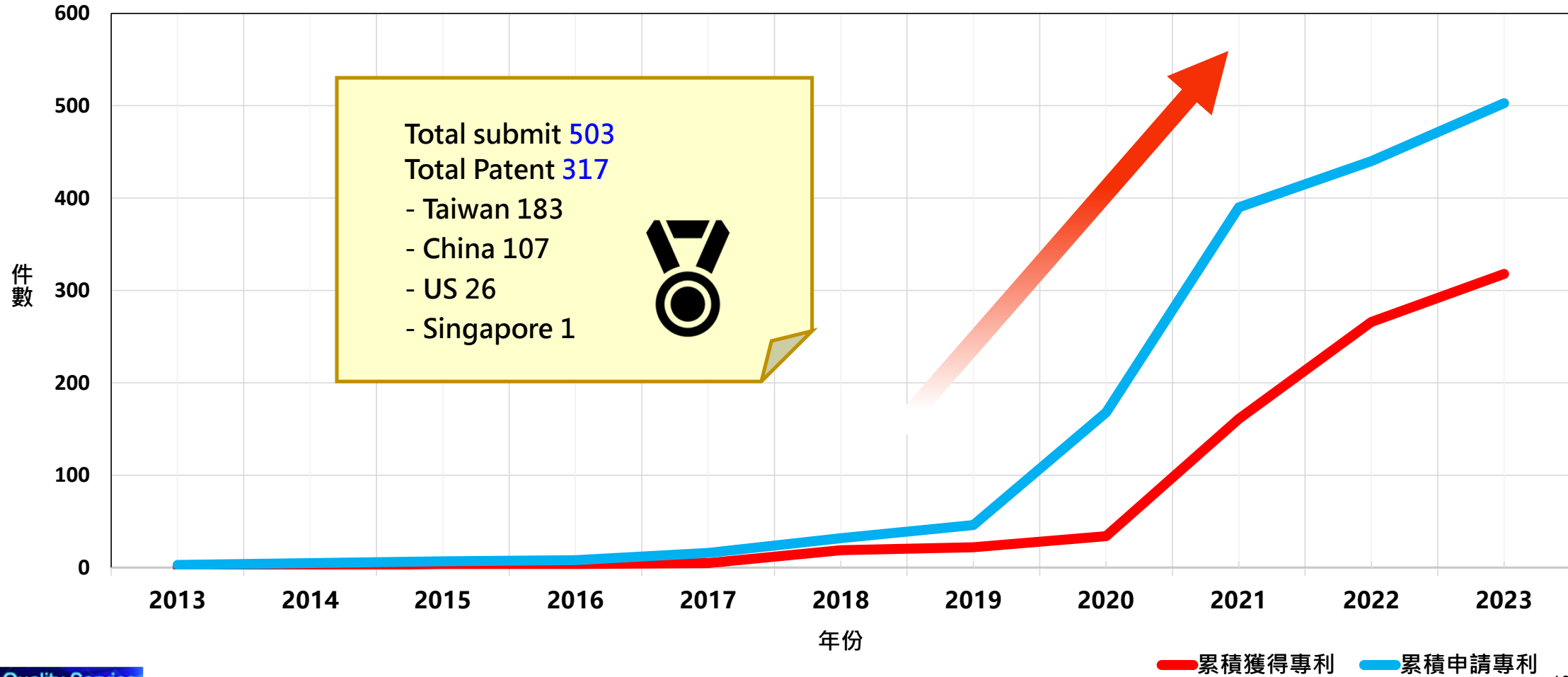
## Skytech has been recognized as one of worldwide ALD equipment suppliers by Yole.



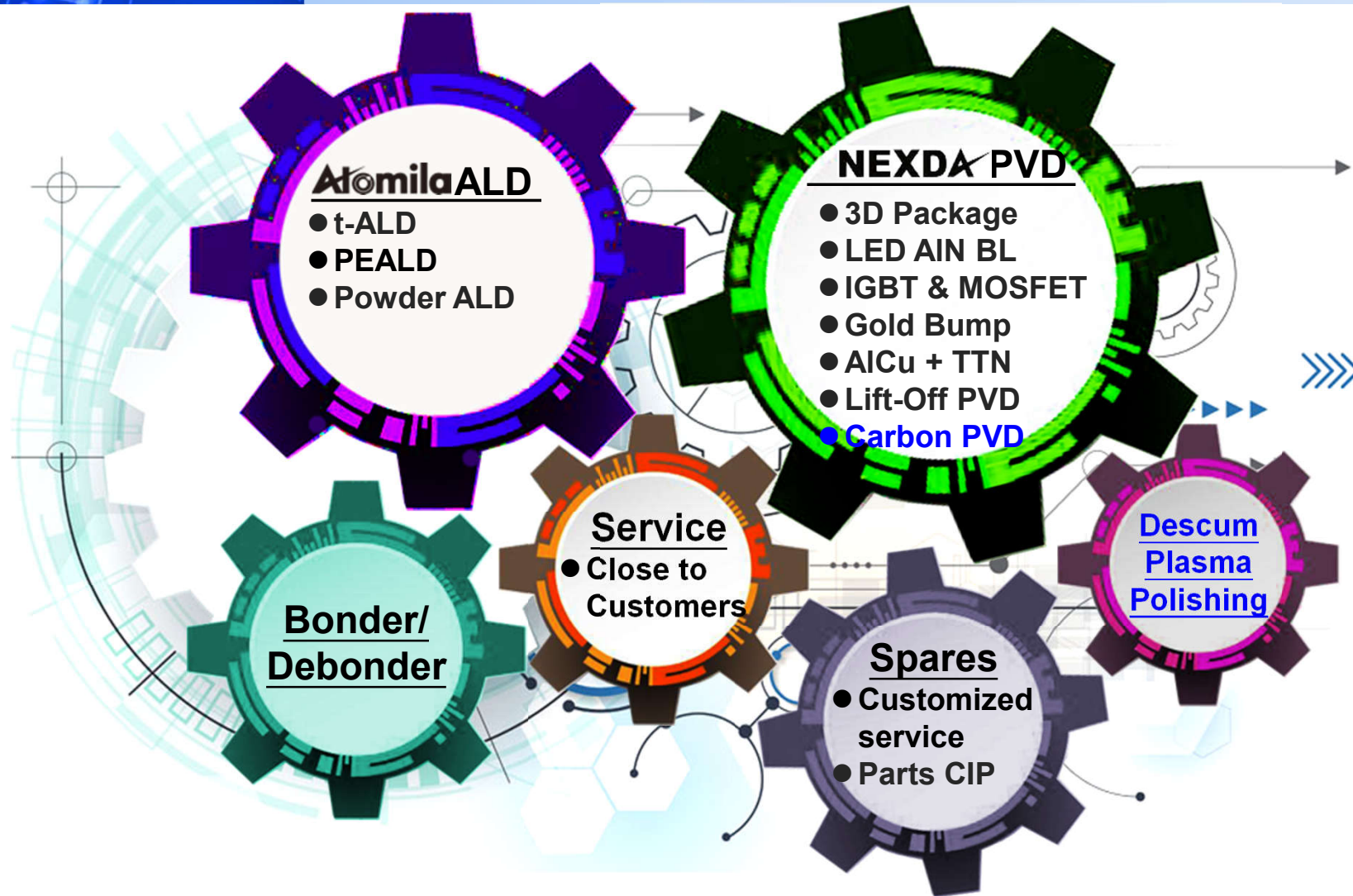
# Skytech Patent Summary

## 國內外專利件數統計

(Up to 2023.12.31)



# Product Group



# Skytech Equipment Product Family

Lift-Off  
PVD

LED AlN  
Buffer  
Layer

IGBT &  
MOSFET

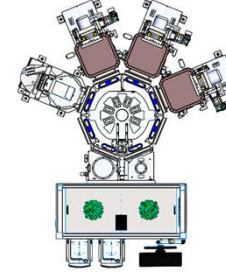
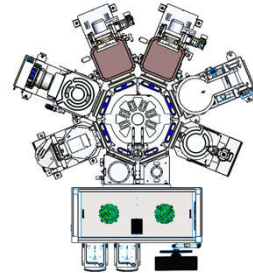
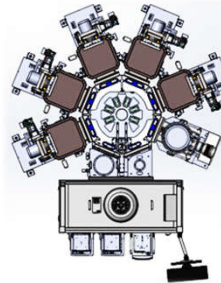
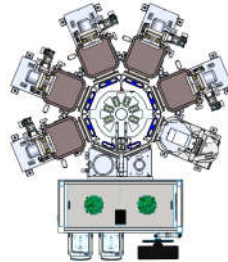
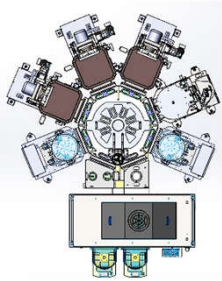
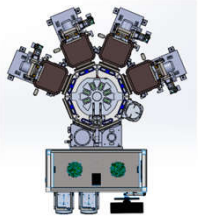
FEOL  
(AlCu +  
TTN)

Advanced  
Package

Gold Bump  
/ Bumping

t-ALD +  
Pre-treatment

PEALD  
NBT/C<sup>2</sup>PT



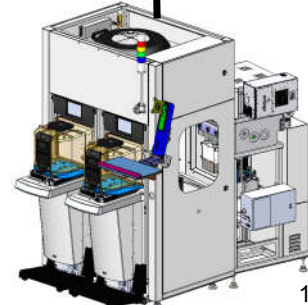
Bonder

De-  
Bonder

Skiwar

Powder  
t-ALD Al<sub>2</sub>O<sub>3</sub>

Descum/  
Plasma Polish

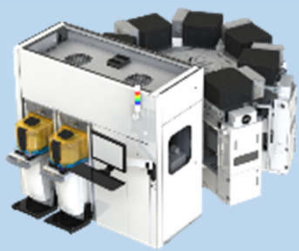


# Core Competence & RD Direction

## High Vacuum Plasma & Wafer Thinning Solution Provider



**High Vacuum & Plasma**



**Descum & Plasma Polish**



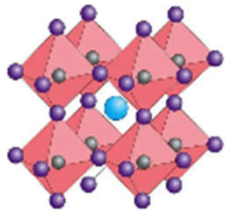
**PVD**



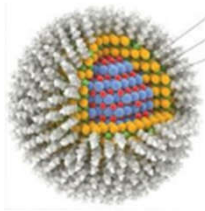
**Powder ALD (for QD)**



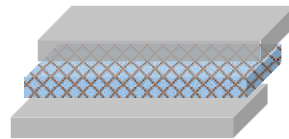
**ALD**



**Perovskite QD**



**CdSe QD**



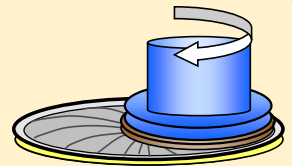
**QD film/ QD Glass**

Silicon Semiconductor  
Frontend/Adv. Package/IGBT BM  
(PVD, ALD, Bonder, Descum)

Compound Semiconductor  
GaAs/InP/SiC/GaN  
(PVD, ALD, Bonder, De-bonder,  
Plasma Polish)

LED/Mini LED/ Micro LED  
(PVD, ALD, Powder ALD) & (QD solution)

CPO (Co-Package Optics)  
(PVD)



**Wafer Thinning**



**Bonder**

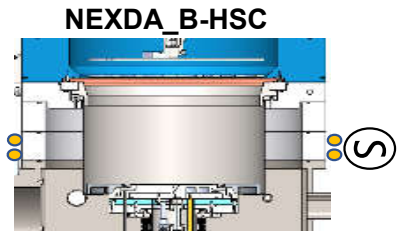
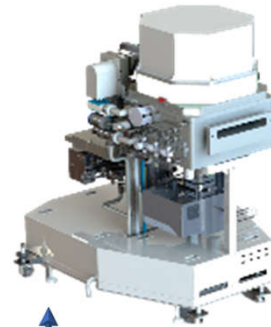


**De-Bonder**

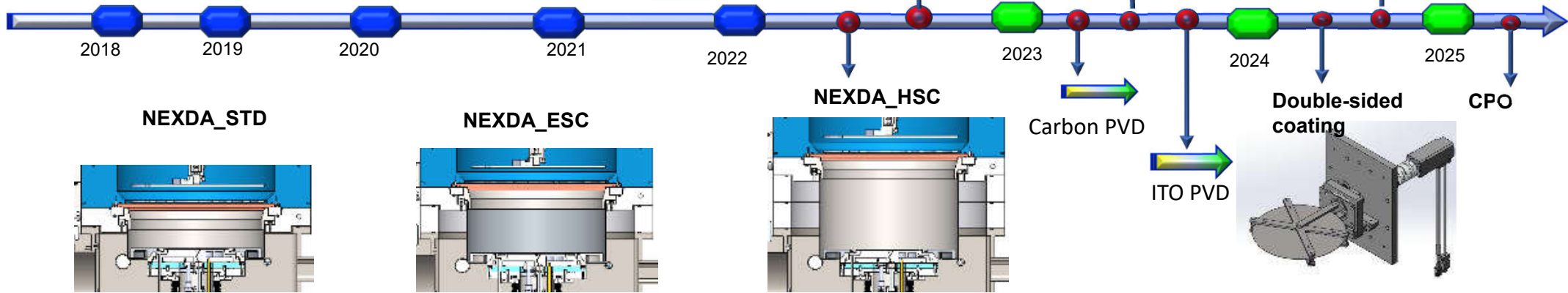
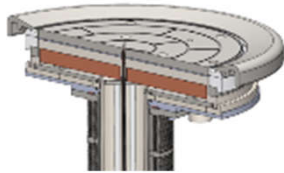
# Roadmap of PVD

## NEXDA

- ESC: Enhanced Step Coverage
- HSC: High Step Coverage
- B-HSC: Bias High Step Coverage

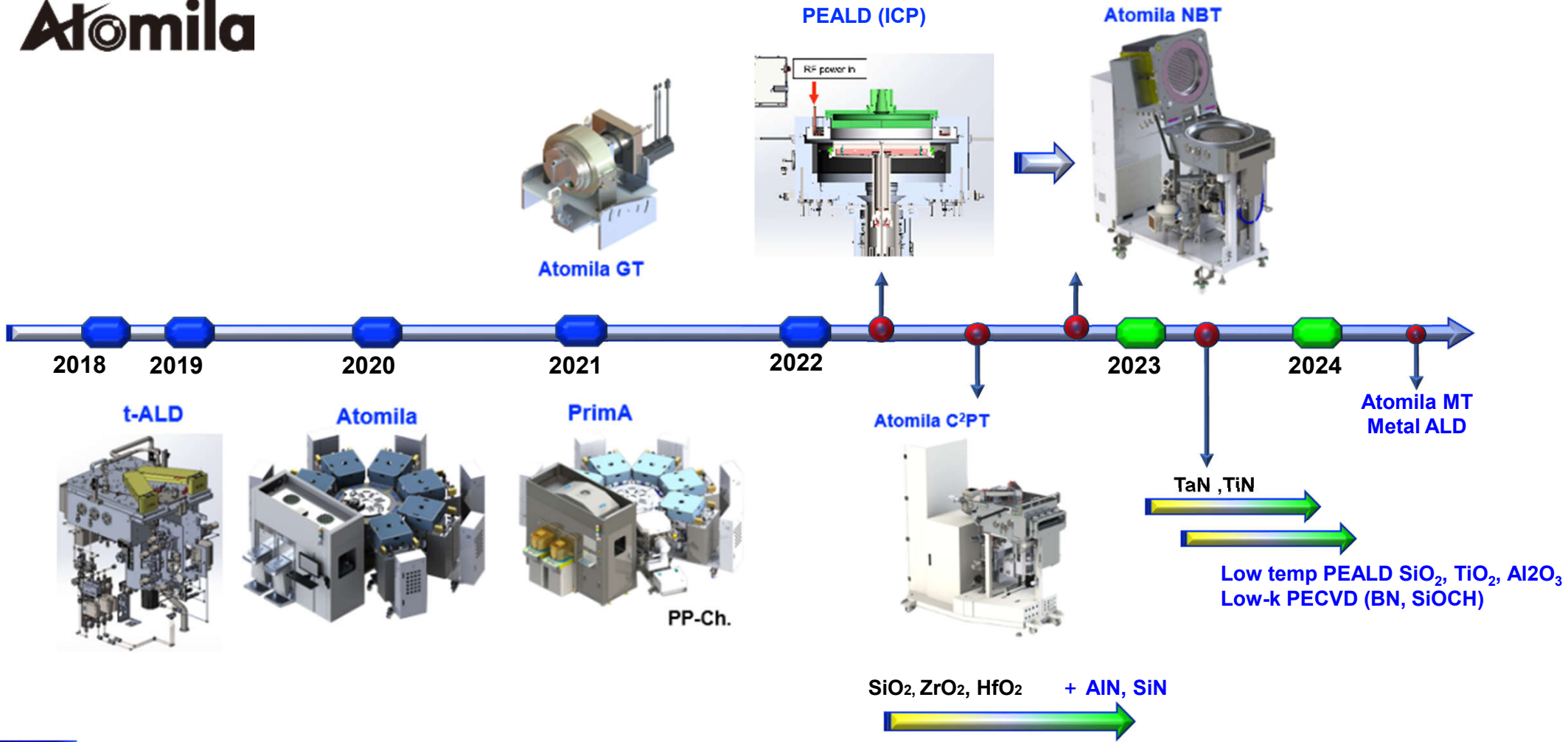


AlN Heater



# Roadmap of ALD

## Atomila



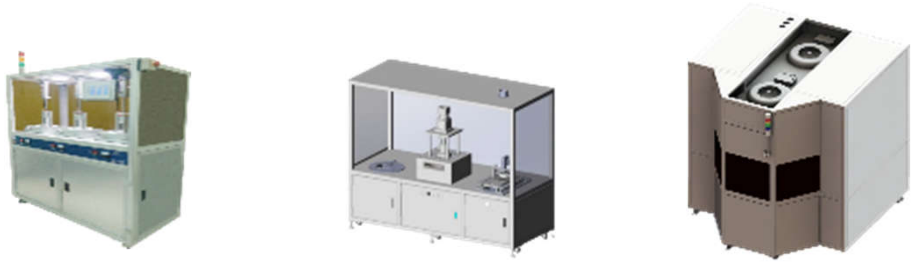


# Roadmap of Bonder & Debonder

**CatapultA**



**Bondela**

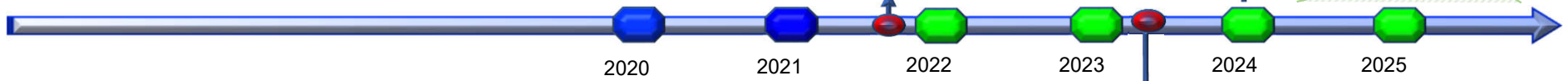


● Develop high precision Bonder (for 3DIC hybrid bond)



● 8"、12" Bonder (For wafer thinning)

compatible with wafers both 4-inch and 6-inch diameters



Automatic separation thinning wafer and breathable suction cup

# Roadmap of Descum & Plasma Polish

## Descum

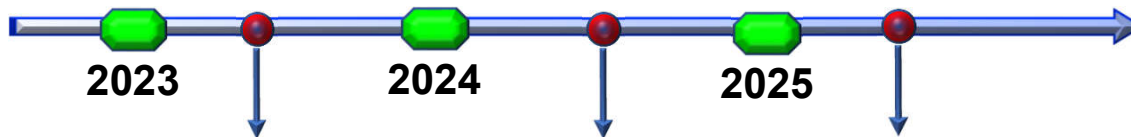


## Plasma Polish & Dry etching



*Integrated with Std. EFEM*

*Integrated with Narrow Body LL*



2023

2024

2025

**Descum & Dry etching for 3DIC related application :**

- PI & PR descum
- LTHC dry etching

**SiC Plasma Polish**

**Dry etching for SiC MOSFET**

- SiC MOSFET backside etching
- SiC trench gate formation

**Atomic layer etching (ALE) for p-GaN HEMT**

- Low damage AlGaN Etching



**Skytech** 天虹科技

**Atomila Bondela Catapulta NEXDA Shuxda**

# Consolidated Income Statement

Unit : NT Thousand ; EPS: NT

Item	2020	2021	2022	2023
Operating revenue	998,574	1,655,712	1,815,477	1,992,643
Gross profit	390,197	662,528	845,972	877,142
Gross profit %	39.08%	40.01%	46.60%	44.02%
Operating expenses	381,474	471,843	557,629	554,503
Profit before income tax	77,090	241,538	366,469	364,581
Net profit	61,787	224,620	316,862	306,661
EPS	1.63	4.57	5.66	5.02