



Global leader in advanced material & IT solution

COMPANY PROFILE

INNOX ADVANCED MATERIALS CO., LTD.

1. Company Overview

Company	INNOX Advanced Materials Co., Ltd
CEO	Chang, Kyeong Ho / Kim, Pil Young
Foundation	November 8, 2001
Share Outstanding	9,232,420
Capital Stock	KRW 4.7 billion (3.98million dollar)
Homepage	www.innoxamc.com
Main Businesses	Flexible Circuit materials, OLED materials Semiconductor Back-end materials

Revenue



\$266M USD/2018

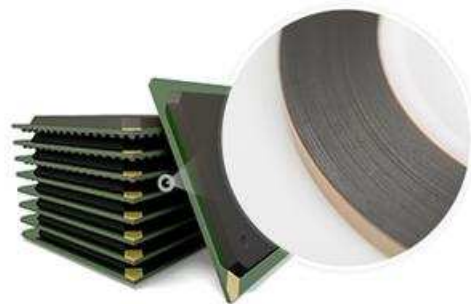
Staff



630Employees
(R&D 130)



Main Business



Semiconductor Materials



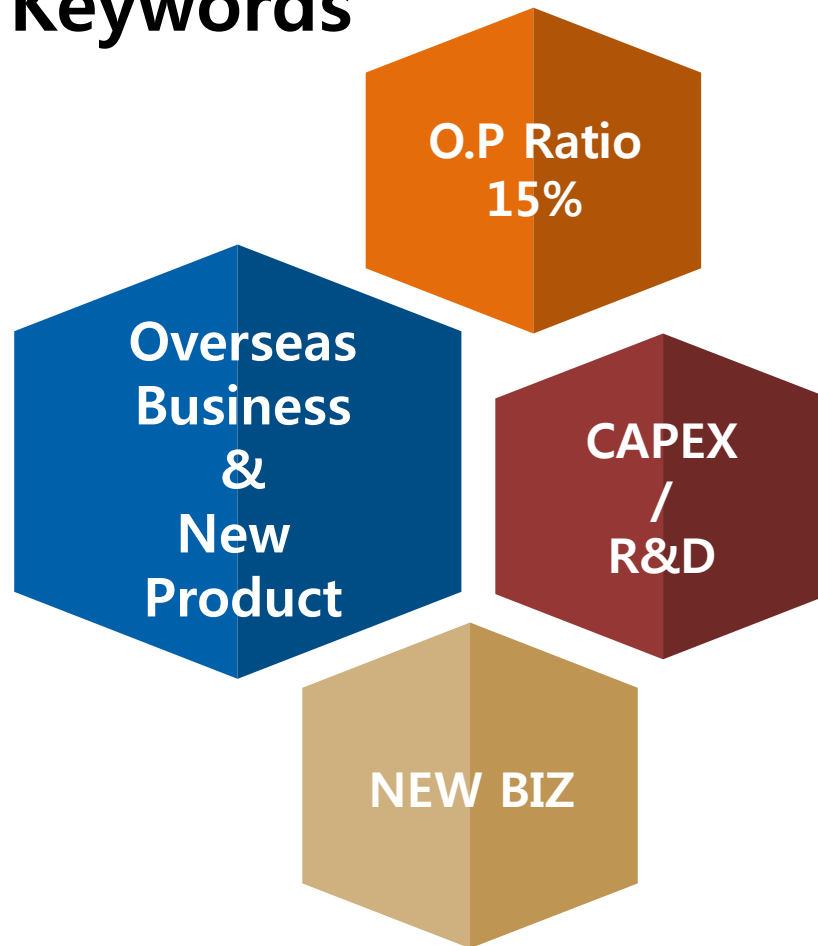
Circuit Materials



Display / OLED Materials

2. Business Plans

Keywords



Promote foreign market entry

- lower dependence on local smart-phone makers
- establish production facility and expansion in China market

product quality improvement

- SMARTFLEX : Increasing 2Layer Sales
- INNOSEM : overseas sales of DAF, QFN

Growth of INNOLED

- Enter growth phase and further sales increase of Wearable & flexible display materials

Finding NEW BIZ

- New business discovery
- High-value materials development
- Taking over Altonsports Co., Ltd.

3. Company History



Foundation & Progress

2001 ~ 05

Founded Saehan Micronics
Established SEM-1 (Plant 1)
Certified as Venture Company
- Obtained ISO 9000; 2001
Established R&D center



Turning Point

2006 ~ 08

Opened HK & SC branch
Completed SEM-3 Ansong Plant2
Listed on stock exchange
Established TMS(ERP)system



Growth

2009 ~ 13

Global no.1 for INNOFLEX
FCCL products designated as
'World Best Product'
Annual sales exceeded \$100M
Established new Asan Plant



Take off

2014 ~

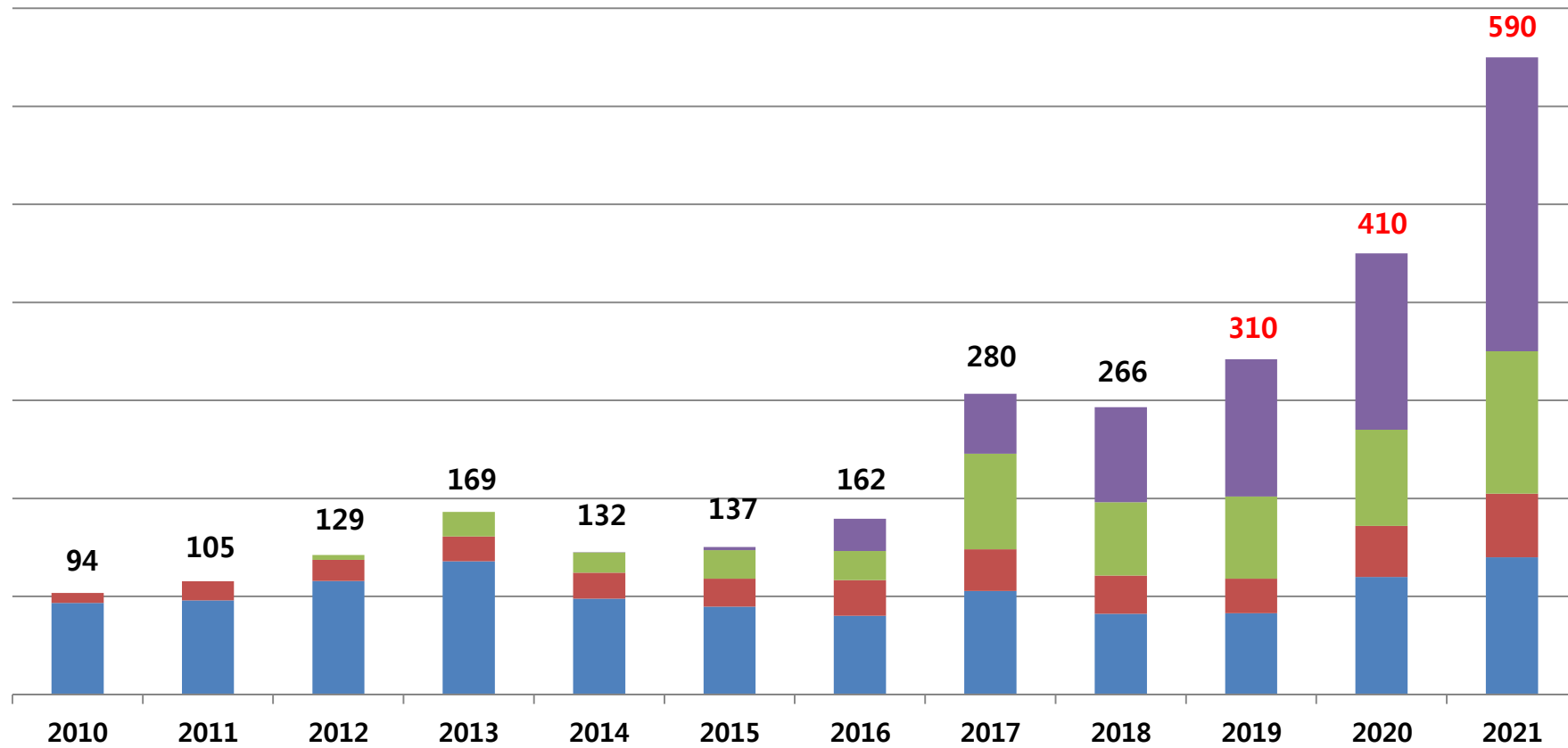
2nd-phase expansion of Asan plant
Total exports of \$70M
New business investments
Launching INNOLED
Take over Altonsports Co., Ltd.

4. Sales performance & forecasting



[Unit : Million USD]

■ INNOFLEX ■ INNOSEM ■ SmartFLEX ■ INNOLED



5. Vision & **INNOX DNA**



Global Leader in Advanced Materials & IT Solution



CHALLENGE

Achieved 1 trillion sales in 2020



PASSION

A challenging young enterprise



COMMUNICATION

World Class IT-Material Company



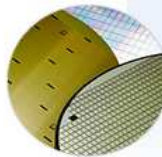
BALANCE

Companies Grow With Employees

A great company, Pleasant work environment, Efficient workplace

Core Technology

- 01 Polymer design
- 02 Polymerization
- 03 Polymer blend
- 04 Converting



Materials Technology

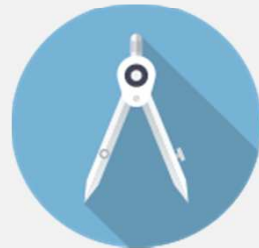
- 01 Polyimide
- 02 Polyester
- 03 Epoxy
- 04 Polyurethane
- 05 Acryl
- 06 Silicon

6. Business Portfolio



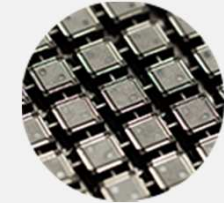
Polymer synthesis and mixing

Technology fusion

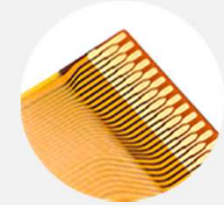


Adhesion Design

INNOSEM[®]
Semiconductor
Back-end materials



INNOFLEX[®]
SMARTFLEX[®]
Flexible
Circuit materials



INNOLED[®]
OLED materials



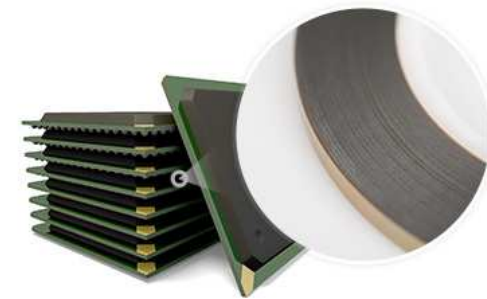
- Automobile materials
- Next-generation energy
- Nano new materials



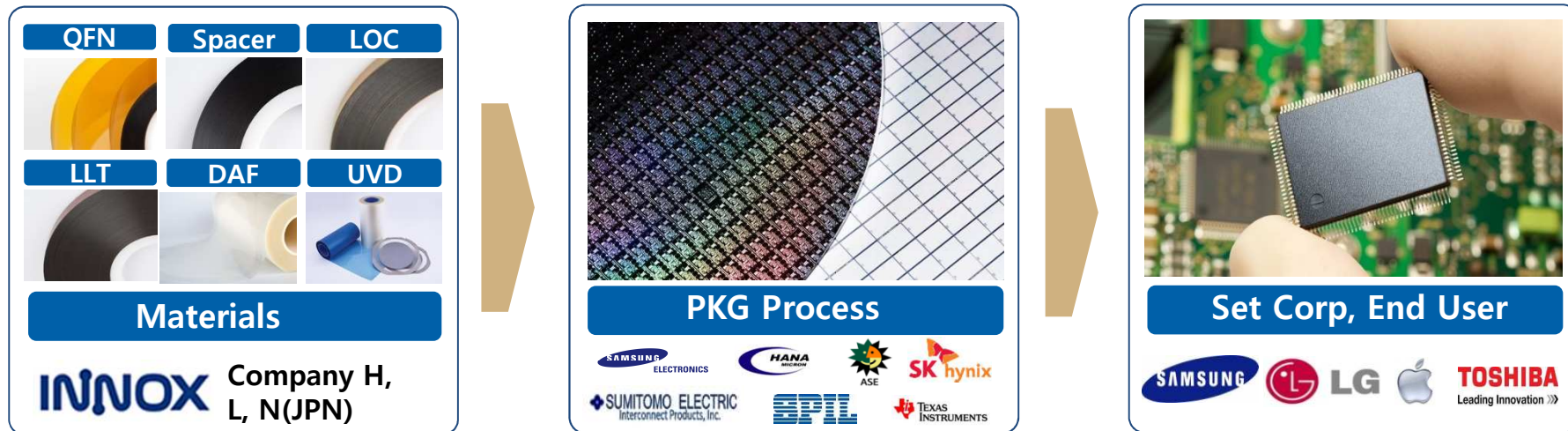
7. Semiconductor materials

INNOSEM[®]

- Used in semiconductor PKG : produce materials used between semiconductor chips and circuit boards (adhesion/insulation/fastening)
- The only domestic player with overall semiconductor packaging materials technology : Have been able to substitute Japanese products, which were forming a monopolistic market
- High value-added products requiring long-term R&D : Establishing strong entry barrier



Supply Chain



8. Flexible Circuit materials

INNOFLEX[®]

Core components of FPCBs include raw materials for PCBs and interlayer adhesive sheets

- Main applications : mobile phone, smart pad, PC, HDD, pick-ups, automobiles



SMARTFLEX[®]

Essential material for hi-tech electronics, benefitting from smart & mobile device development

- Main applications : tablet PC, high-end smart phone, etc.

Supply Chain

Coverlay	B/S	FCCL
DIGITIZER	EMI	Stiffener
Materials		
Company H,D,C (KOR) Company T (JPN)		



FPC Manufacturing



Set Corp, End User

9. OLED materials

INNOLED[®]

- New growth potential : Display materials (OLED, Flexible Display, Transparent Display...)
- To produce substrate materials and supplementary materials to ensure display quality
- On-going R&D since 2010 and co-development underway.



Supply Chain

PSPI	B/M	F/S
B/P	TCF	OCA
Materials		
INNOX S社,L社(KOR), T社,H社,N社(JPN)		



OLED Module
SAMSUNG LG



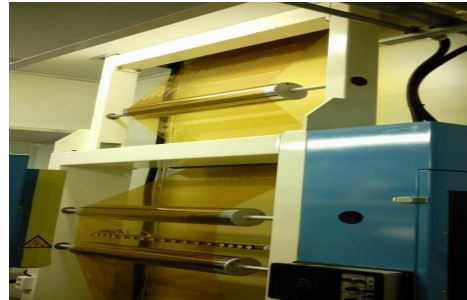
Set Corp, End User
SAMSUNG LG SONY AUO

10. Manufacturing Process



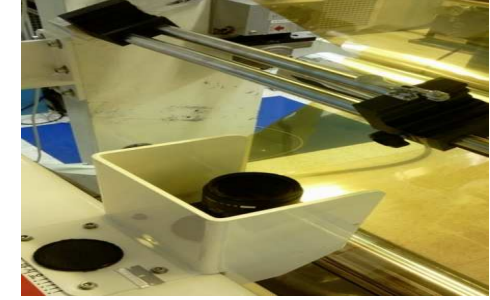
Formulation

< Step 1 >



Coating

< Step 2 >



Auto Detecting

< Step 3 >



Packaging / Delivery

< Step 6 >



Slitting

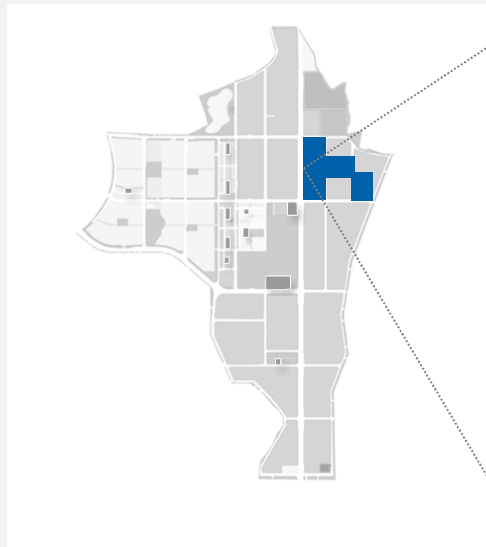
< Step 5 >



Aging / Hardening

< Step 4 >

11. Master plan of Asan plant



Lay-out

	A Main building	Production facilities, Office, etc
	B AX building	Production facilities, auditorium, Fitness center, etc
	C IB Center	Information desk, Security & Reception Facilities
	D Welfare building	Restaurant, in-house shop, refresh center
	E Warehouse	Logistics Center
	F Future area	New Business(Start construction)



12. Global Network

3 Plant & 7 Sales Network



Bắc Ninh

- 2018.08
- 30Employees
- Main Product
 - M.P material



A-san

- 2001.11
- 630Employees
- Main Product
 - Semiconductor
 - FPCB
 - OLED

Japan

Korea
A-san

Vietnam
Bắc Ninh

Thailand

Taiwan

Plant
 Sales Network

Malaysia

Philippines

China
Guangzhou

Singapore

Shenzhen



Guangzhou

- 2018.06
- 60Employees
- Main Product
 - Display / OLED

13. Pan-gyo Site



- Location : Pan-gyo Second Techno Valley
- Land Area : 2,767 Square yard
- Building Area: 19,770 Square yard (13th Floor)
- Completion Schedule: Feb. 2022 (Scheduled)
- Purpose : Holding company, Subsidiary Office, Start-up Incubation