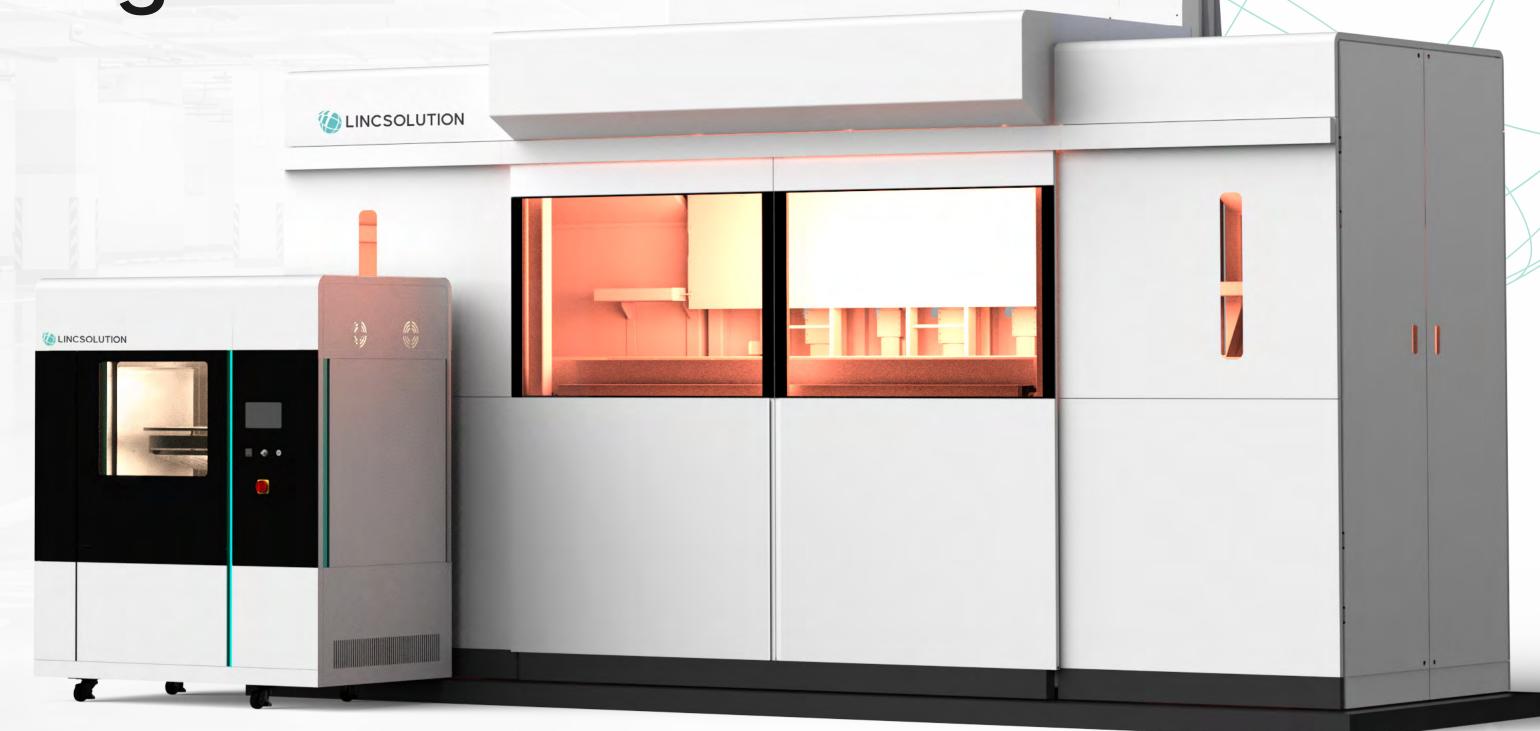
A 3D PRINTING FOUNDRY COMPANY

Leader in the Next-Generation Manufacturing Paradigm

Lincsolution Inc.





Next generation manufacturing paradigm leader Lincsolution

World's largest SLA 3D printer

Patented technologies Domestic(23) International(7)

Global certifications (2024)

lst

61+

17+

Consecutive profit (foundation ~ now)

4 47-

Employees (March 2024)

6.9%

Resignation rate (5 years average)



Company milestones

2015

Found Lincsolution

- Venture certification obtained



2018

Hyundai (Kia Motors)

- Future automobile R&D contract

Developed approx 1.6m SLA 3D printer



2020

CES 2020 Innovation Award Grand Prize



2023

Supply to Airforce logistics and Navy maintenance depot

• 2024

accumulated
22.2B KRW investment



163%

RAJPROI

Amorepacific

Exclusive contract for customized3D printed mask sheet

Samyang

- Engineering plastic 3D printing service contract

2017

Samsung/ LG Electronics

- Contract for the development of large home appliances

Certification

- Certified ISO 9001
- Certified for production quality, Q-Mark
- Certified as innovative SME, Innobiz

2019

TIME THE BEST INVENTIONS OF 2021

TIME The 100 Best Inventions of 2021 Special Mention award

2021

Certification

- Certified CE & KC
- by the Public Procurement Service (EP500, SL2300)
- Certification of Key Industrial Convergence Items (EP500)
- Selected Top 100 SME in Materials, Parts
 & Equipment

Series A achieved 10B KRW accumulated investment

2022

Investment and business status

(secured 10.5B KRW investment in 2024)

PARTNERS





















CUSTOMER





















































MOU of Lincsolution Inc.

Signed technological cooperation agreements with major overseas 3D printing companies for global expansion.

Belgium

Collaboration for automated processes and establishing production bases in Asia



Germany

Material research collaboration in aerospace and national defense sectors



Japan

Industrial (+ consumer goods)
Research and Global Network
Collaboration



US

Collaboration for establishing Production bases in Asia



UK

Collaboration for developing Metal 3D printers



US

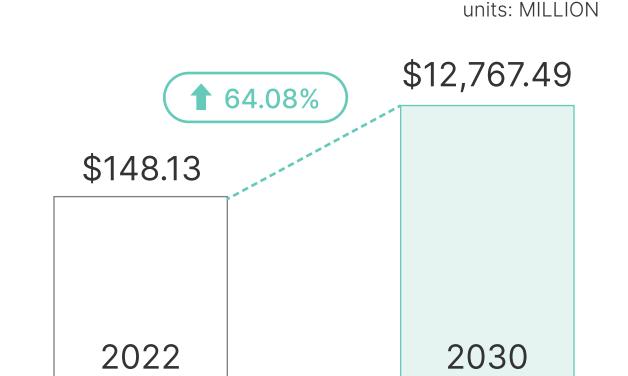
Collaboration in the 3D printer software sector

AUTODESK



Global market status and analysis

Global Automated 3D Printing Market



- By 2030, the market size is projected to reach 12,767.49 M USD with a CAGR of 64.08%
- Introducing a new concept of "3D printing factory" to expand into a large-scale and high-value service platform.

Company	2023	2024	2025	2026	2027
Lincsolution Inc. (Domestic)	11,251	14,504	18,698	26,177	36,648
3DSystems (Overseas)	22,594	31,954	37,999	45,188	53,742

Global 3D printing mass production applicable companies

(source. 2022 Verified Market Research)

1,000,000+

The world's largest
3D printing order quantity
Hanger supplied 1,000,000EA



2,000,000+

Lattice Midsole output cumulated 2,000,000 +

Carbon

30,000+

Manufactured and supplied 30,000EA Golf Putter series



100,000+

Cumulative production of 100,000 Nozzle tips



GE Additive

3D Printing Introduction Goals

Goal to introduce metal 3D printing for standard automobile production



Production of dental devices

Production of dental orthodontic devices using 3Dscanners and 3Dprinters



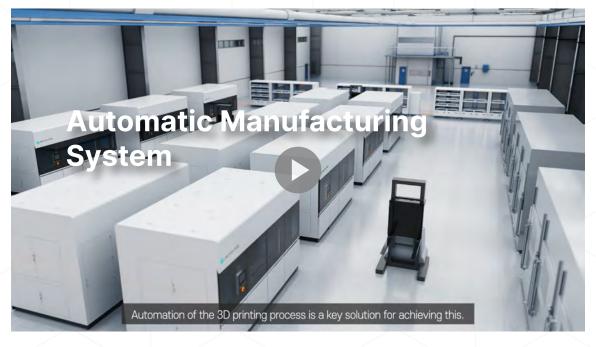
units: 100M KRW

Key technologies and characteristics of Products/Services









SLA 3D Printer

Mass productive printer utilizing the world's largest size and high-speed production technology

FDM 3D Printer

aerospace, semiconductor, national defense high value-added component producing printer

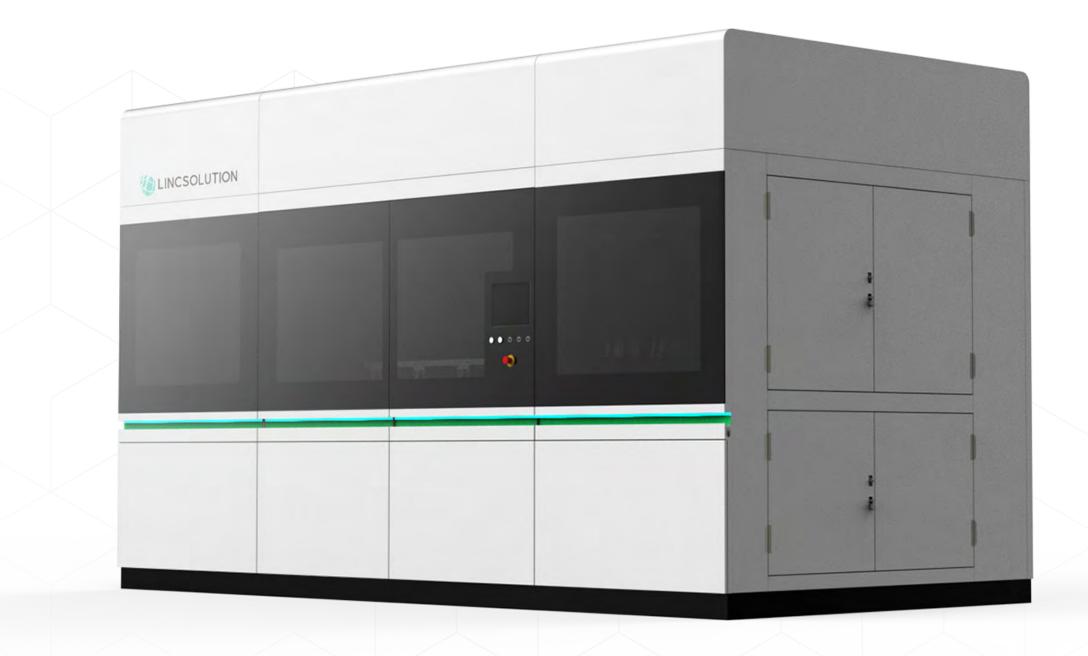
Metal 3D Printer

Ultra-small, small parts mass-producing metal 3D printer

Automatic Manufacturing System

Utilizing own equipment to reduce equipment setup and maintenance costs. High process flexibility | High material flexibility

Mass productive printer utilizing the world's largest size and high-speed production technology

















Multi-laser technology

- Dual Laser control technology enables to print large-size output (largest among domestic equipment)
- Triple Laser control technology allows to print up to 2.3m
 output (commercialized in 2021)



Key technology 02

Curtain coater recoating technology

- A technology for coating resin on cured resin
- Output speed more than 3 times faster than existing technology
- Maximum recoating speed (world scale) 1,000mm/s (>30mm/s)
- 2,000 layers printing time 13.3h (existing technology 28.8h)



Key technology 03

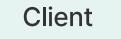
Multi-laser technology

- Developed resin-saving technology through the application of resin -floating compatible materials
- Reduced materials costs by 80% compared to existing technology
- Various customized materials can be applied
- Domestic and Overseas Patent applications completed (EU, US, JP)



aerospace, semiconductor, national defense high value-added component producing printer















Key technology 01

High-temperature dual extrusion nozzle technology

- Large-area printing with dual Nozzle control technology (temperature deliver speed doubled compared to Cartridge heater)
- Maximum nozzle temperature 510°C (equal to world's best)



Key technology 02

High temperature Chamber technology

- Maximum 250°C chamber temperature (world'-class)
- Applicate air heating and forced circulation method in the chamber:
- Temperature control using internal temperature sensor
- The use of high chamber temperatures results in High-quality outputs. With strong interlayer adhesion and excellent physical properties.



Key technology 03

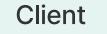
Filament material drying technology

- Developed an automatic material drying function in the material supply system
- Improved quality and physical properties of the output with the prevention of bubble generation due to moisture during output.
- Prevention of strength reduction and material breakage after output



Ultra-small, small parts mass-producing metal 3D printer















Key technology 01

High-temperature dual extrusion nozzle technology

- Maximize the spray area with multi-piezoelectric head system (enabling large area printing and increased printing speed)
- Developed head cleaning sequence to prevent binder drying
- Long-term use of binder material through print head self-recycling function



Key technology 02

High-temperature chamber technology

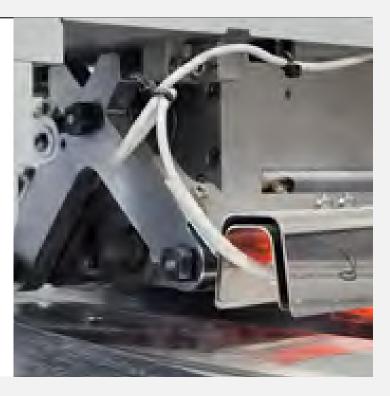
- For fixed build platforms, they are produced in a detachable manner to mitigate the risk of damage during sample collection
- Various powders can be replaced and use (material replacement time reduced by 70%)



Key technology 03

Filament material drying technology

- Minimize powder agglomeration and sieving effect through roller drive
- Application of bidirectional material coating technology to accommodate large-area and mass-production
- Increase printing speed and productivity



Applicable materials and manufacturing technologies of our equipment

BLT S600

Powder type metal 3D printer PBF 600×600×600



Mid-size parts



Large parts





LINK EP-500

Developed through technological independence FFF(FDM) 500×500×500





Mid-size parts

Small parts

Titanium+alloy / tool steel / Cabalt C hrom / Inconel

Aluminium+alloys / Stainless Steel / Copper / Nikel+alloys

SiC / Hydroxyapatite / ZrO2 / Ca3P / Porcelain

Super Engineering **Plastic** Metal **Engineering** Plastic

PEEK / Carbon PEEK / CFR PEEK / PEI

NYLON / TPU / PC / ABS / PLA / POM

ABS-like / PP-like **Ceramic** Plastic

High performance high heat resistant

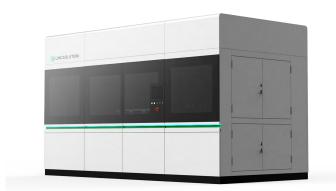
LINK MBJ

Adhesive spray for sintering powder method MBJ 500×400×300









LINK SL-2300 / 1500

World's largest size SLA 2300×800×900





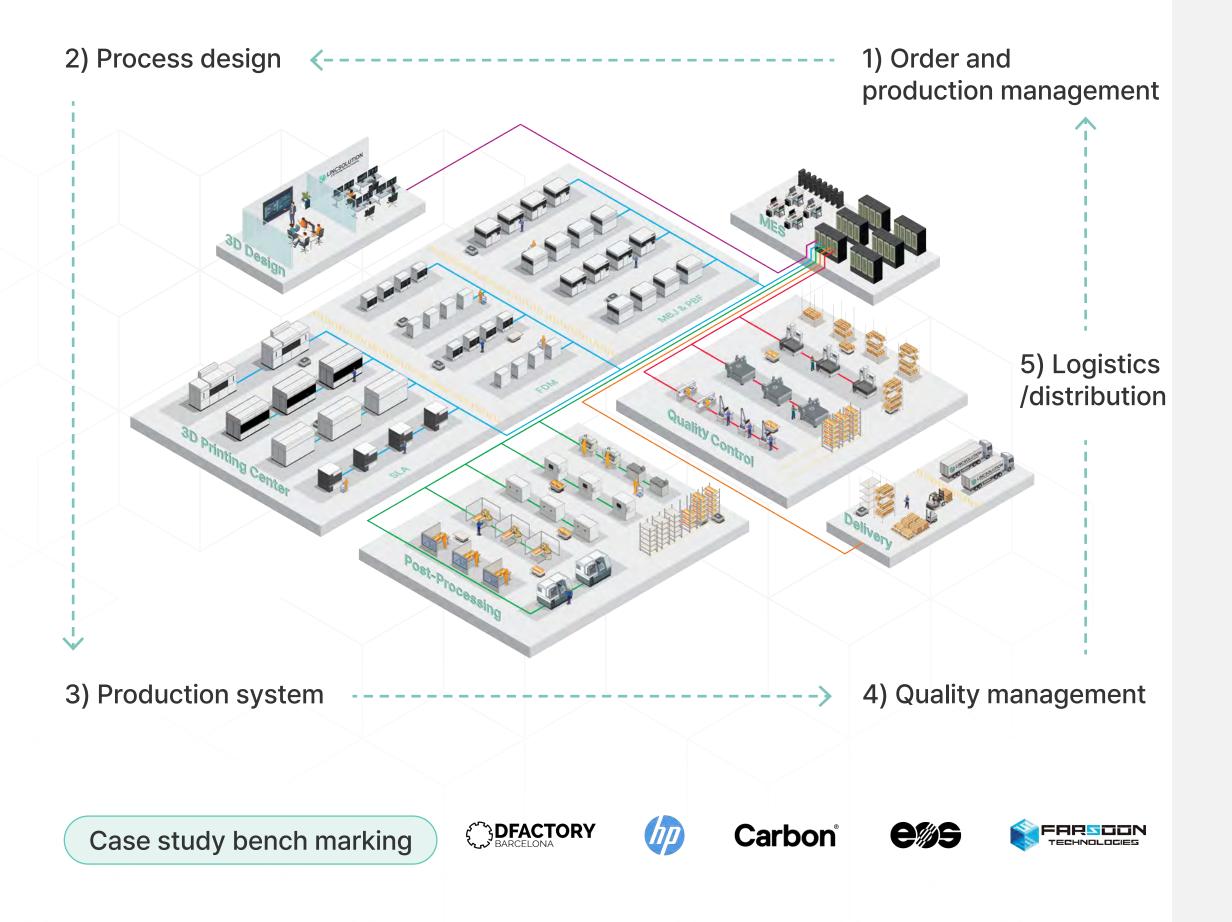
Large parts

Mass production

Mass production Small parts

Automatic Manufacturing System (FOUNDRY)

In 2026 9,000 m² Daejeon (in progress)



Key technology 01

Established an automated facilities based on in-house technology

- Building an AM Automatic Manufacturing System with self-developed equipments such as
 Mid,/Large-size SLA, Super Engineering Plastics, FDM, Adhesive spray for sintering powder MBJ etc...
- Maximizing operational efficiency through in-house maintenance and strengthening the ESG management system (reducing inventory rates and CO2 emissions)
- Establishing a scalable production process through a test bed.

Key technology 02

Cloud-based real time monitoring

- Real time data collection possible using various sensor based on IoT technology
- Protocol standardization through OPC-UA and development of a universal server device based on it.
- Developed an external monitoring system (21.10)
- Real-time alerts and immediate maintenance response possible upon detecting anomalies during data collection

Key technology 03

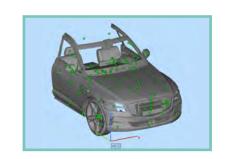
MES based automated continuous production system

- Developed MES(Manufacturing Execution System) based production management system to introduce 3d printer mass production and management system.
- AM Total Solution: Managing from product manufacturing to delivery using customer data
- AMR control and Stacker managements parts with the existing SLA system structure and expansion of new equipment

Automated continuous manufacturing

Automated process

Existing 3D printing total 18steps \rightarrow 6steps (1/3) reduced manufacturing process. continuous flexible manufacturing possible





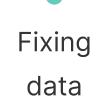










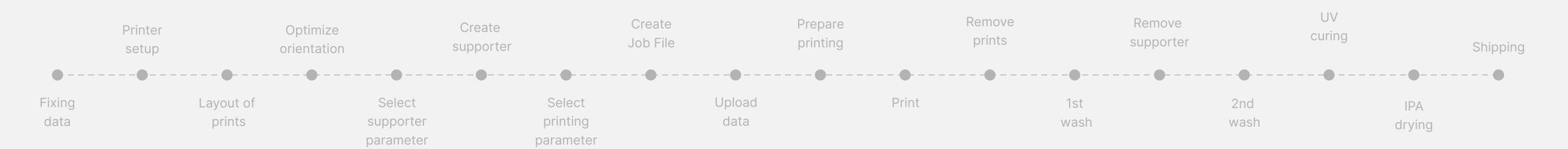


Select supporter parameter

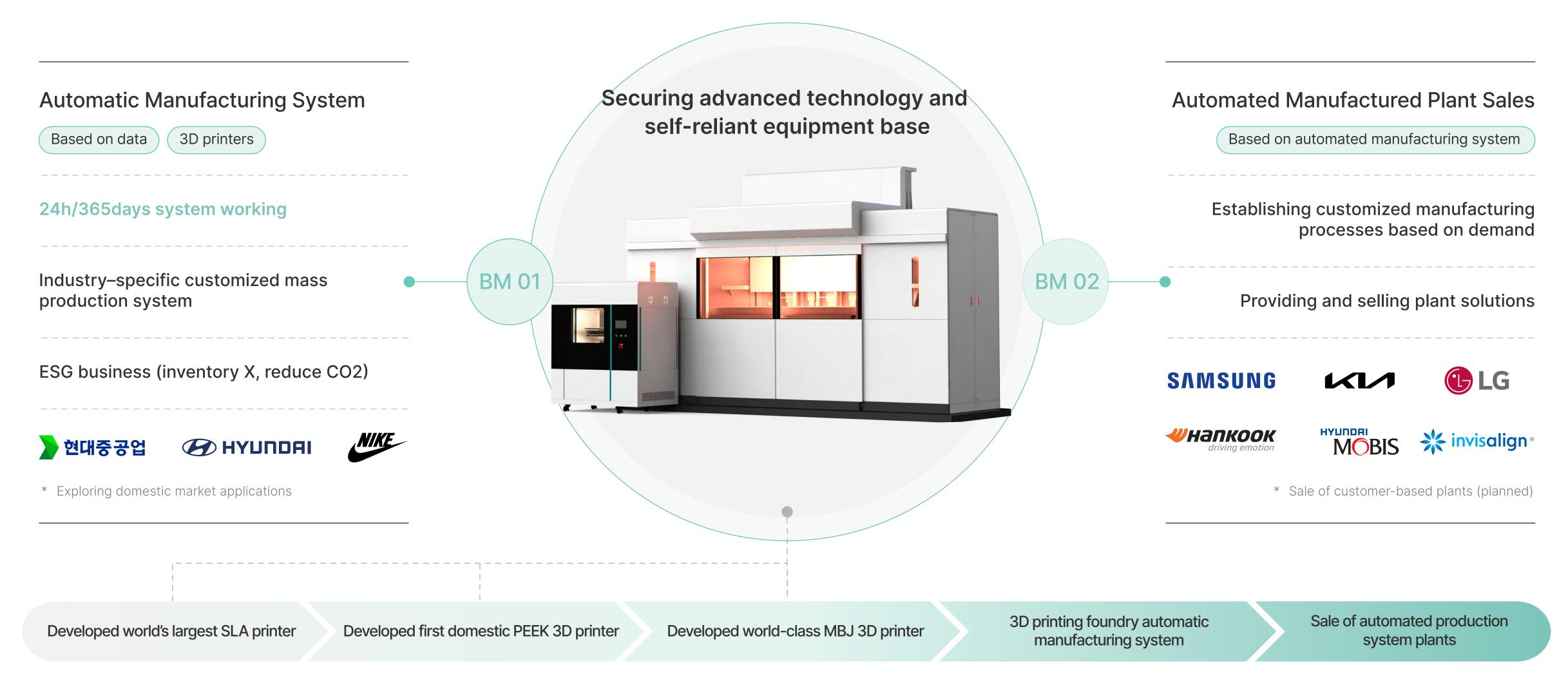
Select printing parameter Print

Remove supporter

Existing 3D printing



BM of LINCSOLUTION Inc.



Competitiveness of LINCSOLUTION Inc.

Automation technology necessary for expanding application beyond prototype production to mass production

Printing foundational technology

AS-IS

Overseas dependance, High initial investment

TO-BE

Securing independence through development of domestic equipment self-reliance technology and ensuring price rationality



Maintenance

AS-IS

High operating costs and production costs

TO-BE

In house maintenance (24h response) and ongoing development of high-quality materials



Materials variety

AS-IS

Low production, high production costs

TO-BE

Utilizing high-speed, multi-product, mass production equipment for automated design of pre- and post-processing



Development goal

Successful cases

HP/ Carbon (US), EOS(Germany), Farsoon (China)

Customer benefit



90% reduced

Reduced customer equipment setup costst hrough in-house equipment and maintenance



50% reduced

Halved total production time of the product



99.9% quality

Standardization of output quality through the development of web-based real-time monitoring technology.

Current address

Advantages of automated manufacturing system printing foundry

9000m²(45x) 3rd generation automated digital 3D printing foundry

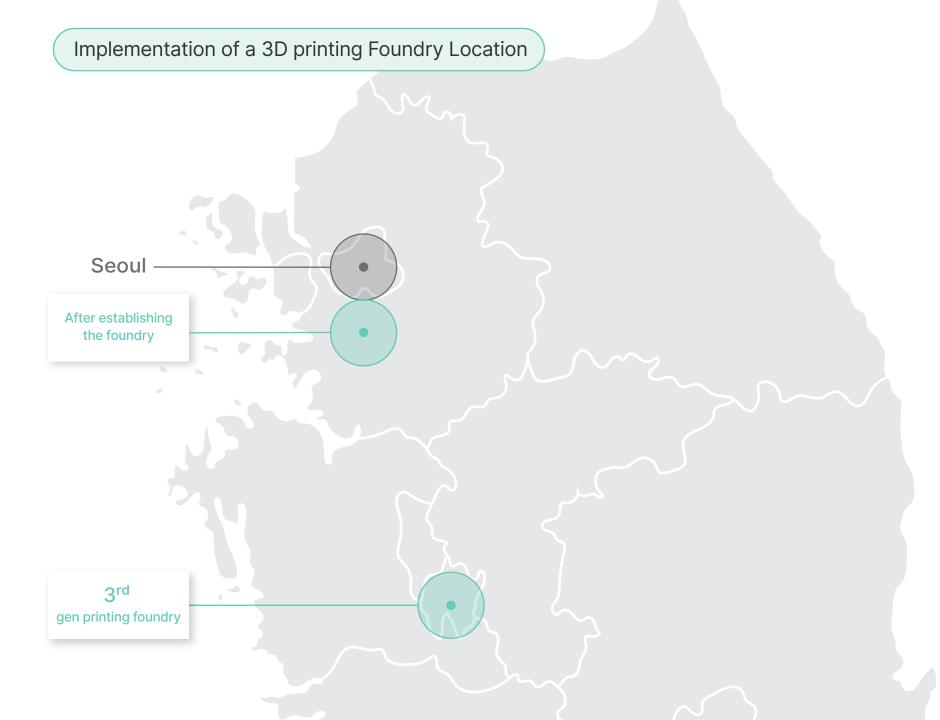
	2020 1 st gen printing center	2023 2 ^{ed} gen testbed	> 2026 3 rd gen printing foundry
area	230m² 305% ▲	704m² 2,817% ▲	19,834m²
sales	800M 487% ▲	30B~ 1,794% ▲	150B
R&D labor force	8 people 200% ▲	16 people 188% ▲	30 people~
Owned equipment	10 220% 🛦	15 182% ▲	50

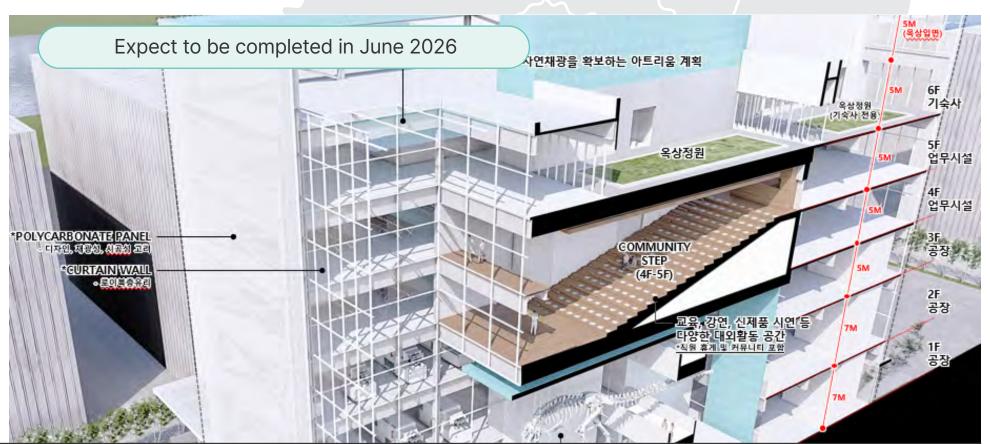












Comparison of Manufacturing costs: current all-round industry vs Lincsolution's 3D printing vs Automated Manufacturing Systems

After establishing the Daejeon Foundry, it is possible to achieve yield and scale productivity. We are conducting over 100 Proof of concept (POCs) and discovering new applications.

Main mass production application		Production model	Number of annual Current all-round industry price production (EA) (KRwon/EA)		Lincsolution current price (KRwon/EA)		Automobile manufacturing system price (KRwon/EA) / Reduction rate	Note
	TEST EXT.	Sewing jig	6,588	251,085	SLA	74,157 (▼70%)	61,180 (▼ 76%)	
CSG		Spray jig	264	490,222	MJF	262,513 (▼46%)	217,886 (▼56%)	
** invisalign®	E E E E E E E E E E E E E E E E E E E	Dental care brace Mast Model	9,375	76,398	SLA	52,714 (▼31%)	42,171 (▼45%)	
WHANKOOK driving emotion		Racing car Brake air duct	150	3,713,120	SLA	2,673,446 (▼28%)	2,058,553 (▼45%)	
HYUNDAI MOTOR GROUP		Master model	584	1,830,000	FDM	1,281,000 (▼30%)	1,037,610 (▼43%)	
HD HYUNDAI XITESOLUTION		Bearing bushing	5,000	3,713,120	PBF	352,360 (▼28%)	285,412 (▼42%)	

Growth into 3rd Gen., 3D Printing Foundry Metal 3D printer



Printer Type

Metal Binder Jet

LINK MBJ - 12 EA

Build Dimension
500×400×300mm (W×D×H)



BLT S400 - 12 EA

Printer Type
Power Bed Fusion

Build Dimension
400×300×400mm (W×D×H)

Laser Power 500W×6



BLT S450 - 2 EA

Printer Type
Power Bed Fusion

Build Dimension
450×450×500mm (W×D×H)

Laser Power 500W×8



BLT S600 - 2 EA

Printer Type
Power Bed Fusion

Build Dimension
600×600×600mm (W×D×H)

Laser Power 500W×8



BLT S800 - 3 EA

Printer Type
Power Bed Fusion

Build Dimension 800×800×650mm (W×D×H)

Laser Power 500W×10

Growth into 3rd Gen., 3D Printing Foundry Polymer 3D Printer



SL-1500 - 10 EA

Printer Type
Stereolithography Apparatus

Build Dimension 1540×790×550mm (W×D×H)



SL-2300 - 6 EA

Printer Type
Stereolithography Apparatus

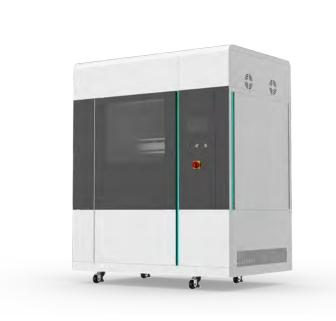
Build Dimension 2300×850×1000mm (W×D×H)



SLA - 28 EA

Printer Type
Stereolithography Apparatus

Build Dimension 800×8000×500mm (W×D×H)



EP-500 - 10 EA

Printer Type
Fused Filament Fabrication

Build Dimension
500×500×500mm (W×D×H)



HP - 20 EA

Printer Type
Multi Jet Fusion

Build Dimension
380×284×380mm (W×D×H)

Plan to Establish the Largest Automated Production Facility in Korea

Completing in June 2026 with integrated facilities and automated additive manufacturing.

Location 461-1 Daehwa-dong, Daedeok-gu, Daejeon, South Korea

Site Area 6,600 m²

Building Size 13,200 m² (approx. 4,000 pyeong, floor area ratio 400%)

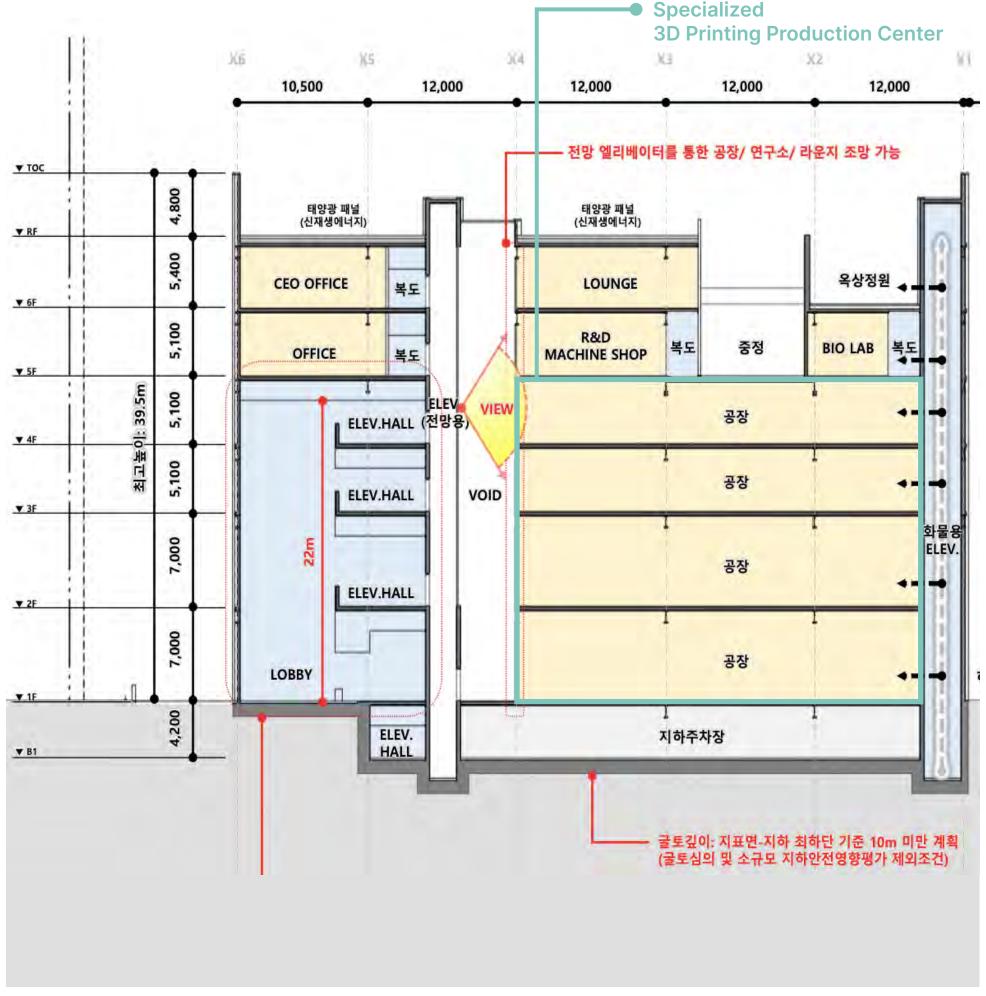
Investment Approx. KRW 50 billion for facility construction

Enhancing efficiency through Korea's largest smart factory and digital manufacturing





Expanding from a 200 m² center to a 9,000 m² next-gen automated 3D printing foundry, enabling scalable, customized production.



Business model and expansion roadmap to penetrate target markets

Current Business Model and Future Expansion Roadmap

STEP 3 - 27.01 ~

Automation system setup, autonomous plant sales, and mass production upgrade

STEP 2 - 26.06 ~

3D Printer Hardware & Automation System
/ 3D Printing Production Services

STEP 1 - 23.01 ~

Proprietary 3D Printer Development & Sales

STEP 1 - Tech-Based Product Sales & Mass Production Launch

Proprietary 3D Printer Development & Sales

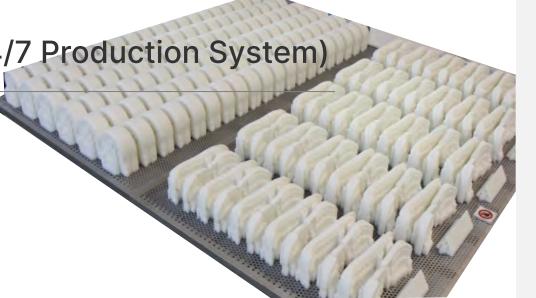
- World Largest SLA Printer Developed & Launched
- "Top-Tier MBJ Metal Printer Development"
- Korea's First PEEK FDM Printer Developed & Launched



STEP 2 - High-Performance Parts & Mass Production POC

3D Printing Services: Sales and Growth (24/7 Production System)

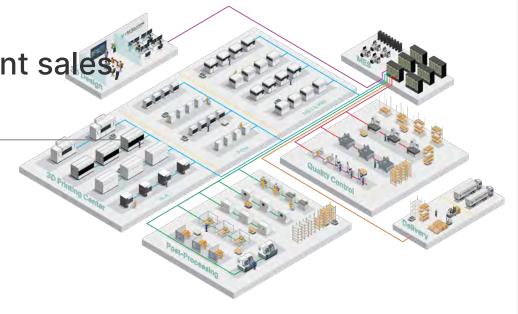
- Industry-Specific Parts with Proven POC
- 24/7 System Enables Mass Production
- Tech-Driven High-Value Equipment Sales



STEP 3 - Autonomous Plant Sales & Scalable Growth

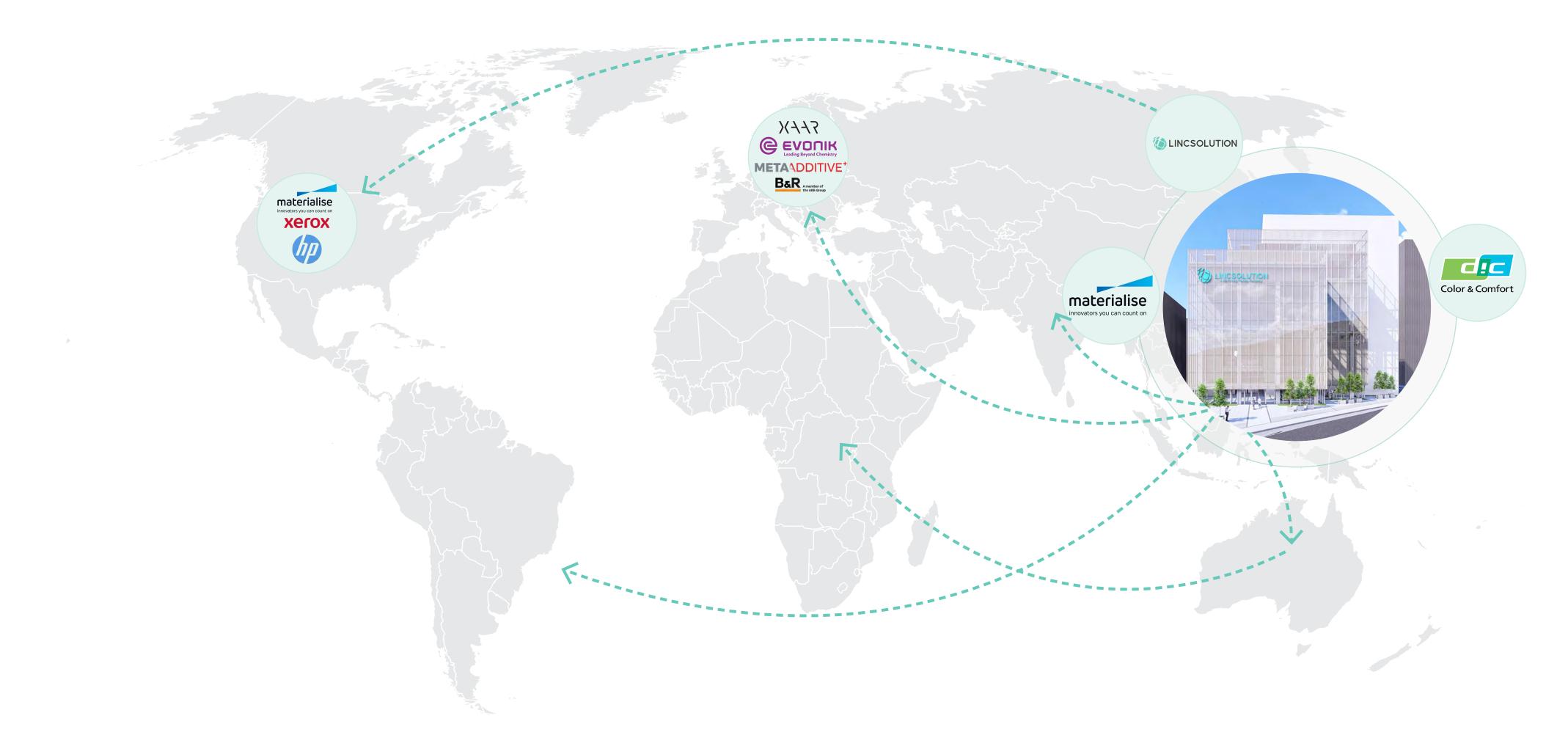
Automation system setup, autonomous plant sales and mass production upgrade

- Autonomous Manufacturing with Stable Yield
- Plant Sales for Scaled Revenue Growth
- Application Expansion for Production Growth



Building Global Collaboration & Partnerships to Become Korea's Leading 3D Printing Solution Provider with Global Reach.

Lincsolution is committed to making Korea a global 3D printing leader in Asia and a pioneer in next-gen manufacturing





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