

# **CLEAN TOP**



**PREQUALIFICATION**

**Nov. 2022**



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A lush green forest with tall trees and a mossy log in the foreground. The scene is vibrant with various shades of green, from the deep forest floor to the bright canopy above. A large, moss-covered log lies horizontally across the lower third of the image, adding a sense of depth and texture. The background is filled with numerous vertical tree trunks and a dense network of branches and leaves, creating a complex, layered appearance.

## INTRODUCTION

Since its established in 2003, GLOTEC Engineering has been delivering a full range of engineering services such as feasibility study, basic design, detail engineering, procurement support and field engineering with supervising works to address client needs in Oil & Gas, Energy, Power generation, Semiconductor and Industrial plant business.

Especially we are actively responding to customer needs based on the advanced engineering technology such as Smart 3D Modeling, BIM 4D & 5D design and Reverse engineering using laser scanner in the virtual spaces. GLOTEC Engineering will step forward to provide excellent engineering solutions and ensure customer satisfaction and trust.

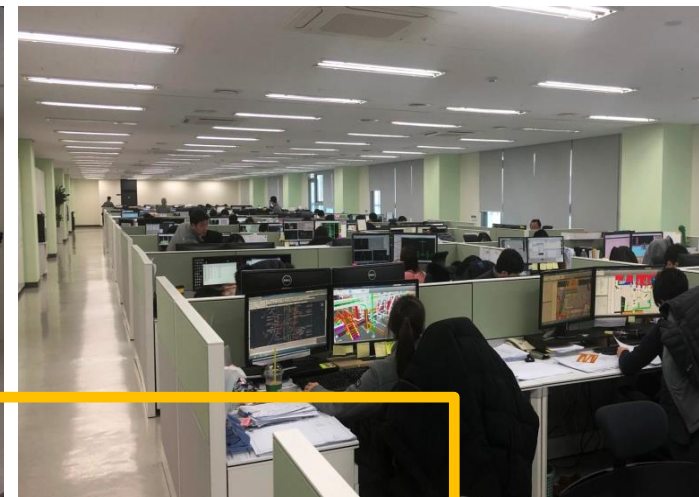
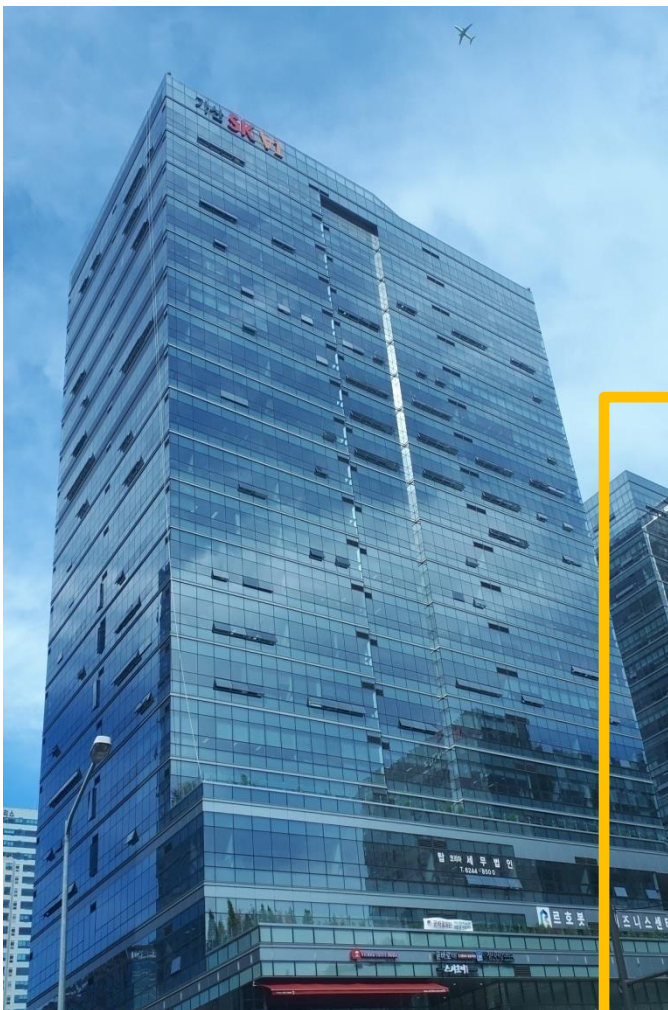


## OVERVIEW

- 
- **2022.** May. Registered at KEEA for Elec. Power Design License
  - **2021.** Sep. Certified as a Main-Biz Company from Korean Government
  - **2020.** Jun. Registered at Construction Technical Consultancy License  
Jun. Registered at Architects of KE&CA  
Api. Registered at Firefighting Supervision License
  - **2019.** Jun. Registered at the Plant Industries Association of Korea  
Jun. Certified as a Global Leading Company from KICOX
  - **2018.** Sep. Renewal of Registered ISO 9001: 2015 Certification  
Sep. Moved office to SK V1 Center, Gasan-dong, Seoul
  - **2012.** Aug. Established the affiliated research institute
  - **2011.** Mar. Registered at the International Contractors Association of Korea
  - **2009.** Dec. Obtained ISO 9001: 2009 Certification
  - **2008.** Dec. Registered at the Korea Engineering & Consulting Association (Comply with Engineering & construction law and regulation)  
May Moved office to JEI PRAZE Building, Gasan-dong, Seoul  
Feb. Company name changed to Glotec Engineering Co. Ltd.,
  - **2003.** Mar. Founded as Plantech ENG corporation

**SINCE**





## Head Office

12~14<sup>th</sup> Floor, Gasan SK V1 Center  
 171, Gasan Digital 1-ro, Geumcheon-gu, Seoul, Korea  
 TEL : 82-2-6345-7000, FAX : 82-2-6345-7020

WEB : [www.gteng.co.kr](http://www.gteng.co.kr)

EMAIL : [gteng@gteng.co.kr](mailto:gteng@gteng.co.kr)

- 8,170 M<sup>2</sup> (87,940 square feet)  
 530 Desks, 13 Meeting Rooms
- Number of Employees: 626 Persons (include 11 staffs)





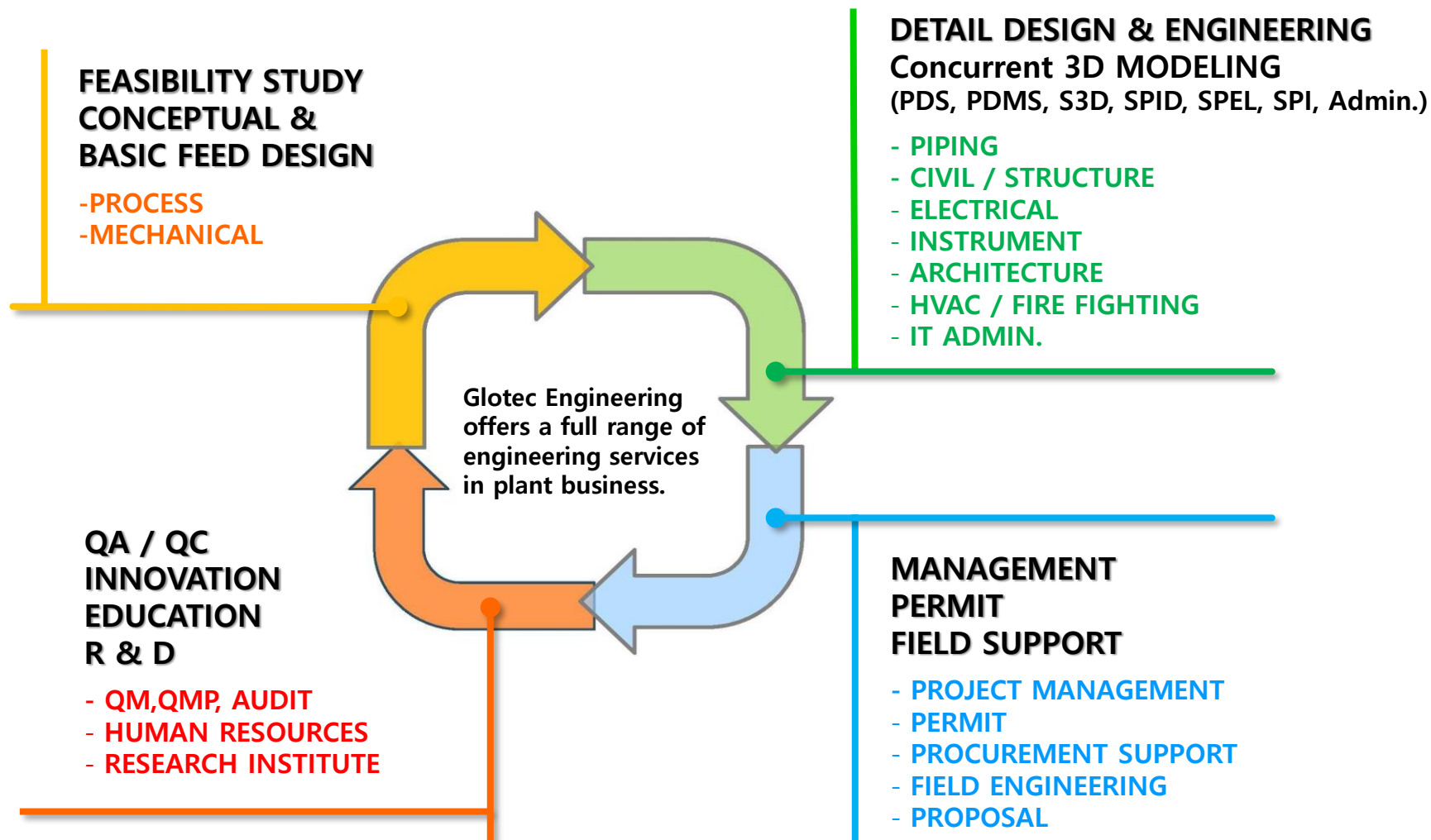
## GLOTEC Digital Center

1745-1, Gwanyang-dong Dongan-gu,  
Anyang-si, Gyeonggi-do, Korea  
1~10 Floors, Glotec Digital Center Bldg.,  
TEL : +82-2-6244-8315

- Total Floor Area : 16,060 M2

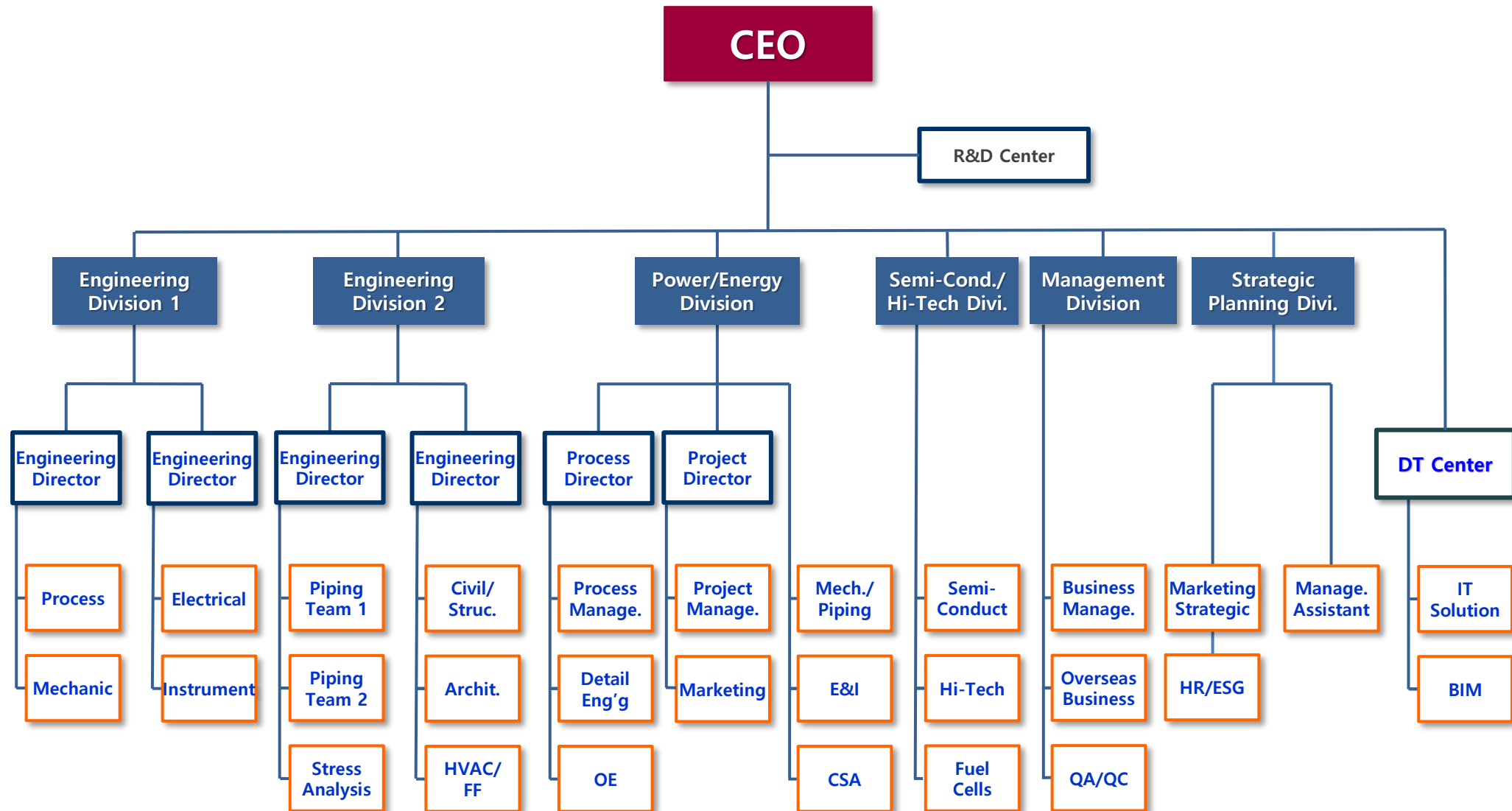


# ROLE AND RESPONSIBILITY



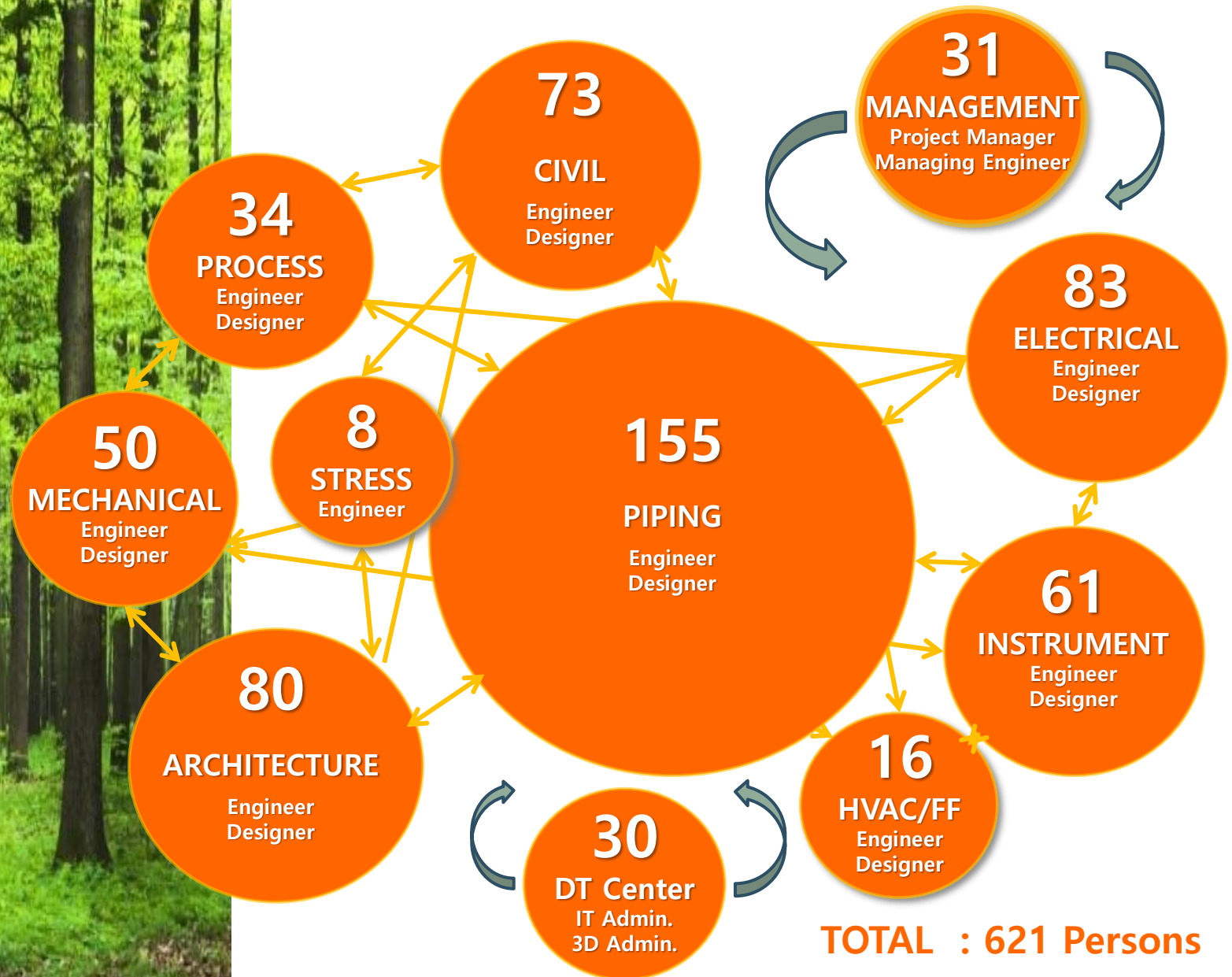


# ORGANIZATION





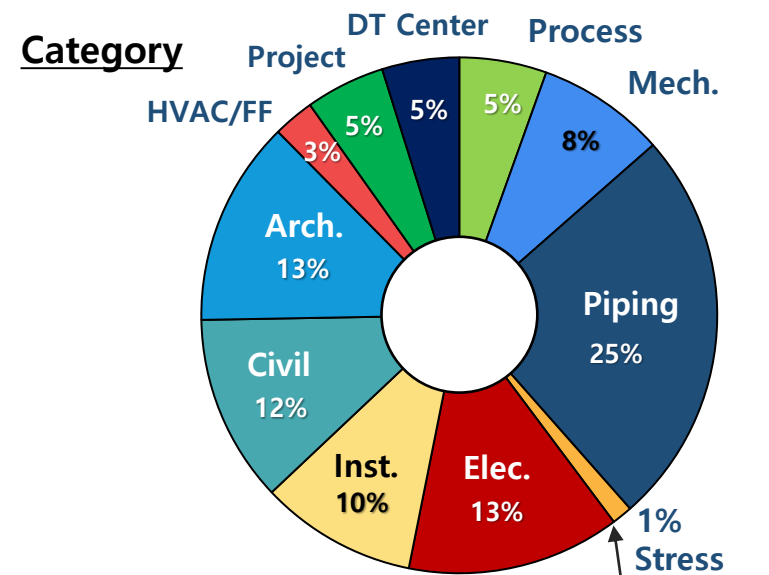
# TECHNICAL MANPOWER



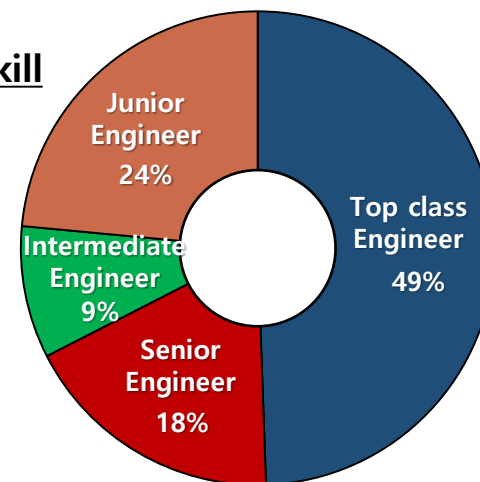


# TABLE: TECHNICAL MANPOWER

Category	Top class Engineer	Senior Engineer	Intermediate Engineer	Junior Engineer	Total (P)
Process	16	3	2	13	34
Mechanical	40	3	1	6	50
Piping	56	54	18	27	155
Stress	4	2	1	1	8
Electrical	29	12	6	36	83
Instrument	28	13	10	10	61
Civil	46	7	7	13	73
Architecture	43	10	6	21	80
HVAC & F/F	7	2		7	16
Project Management	23		2	6	31
DT Center	15	6	3	6	30
<b>Total</b>	<b>307</b>	<b>112</b>	<b>56</b>	<b>146</b>	<b>621</b>

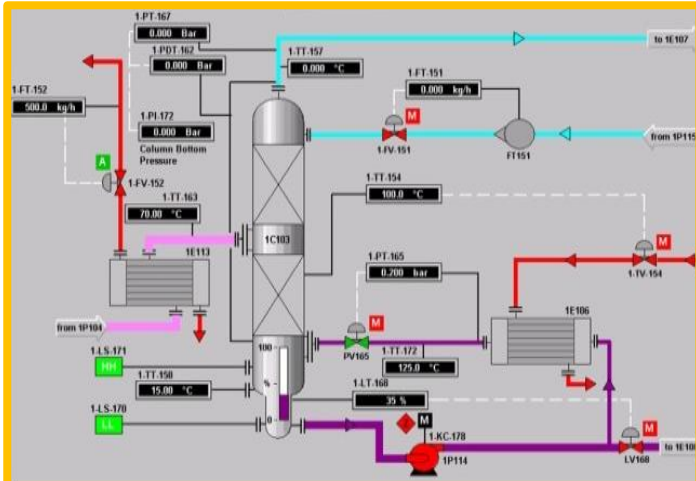


**Grades of Engineer skill**





## ENGINEERING ACTIVITIES



## PROCESS

- Feasibility study , Conceptual, Basic & FEED Design and Engineering
- PFD and P&ID for Process and Utility
- Development & Update
  - P&ID, Piping line index, Tie-in list, Vendor data, Piping & Instrument Process Data Sheet (include Mech. etc.,)
  - HAZOP Review and SIL Study
- Provide the intelligent P&ID (SPPID)

## MECHANICAL (Static & Rotating)

- Engineering drawings include calculation
- Detail design of Rotating, Stationary & Package Equipment
  - Vessels, Storage Tanks, Heat exchangers and Pumps etc.,
- Procurement services
  - Equipment data sheets
  - Material requisition (RFQ)
  - Technical clarification & Bid evaluation (TBE)
  - Review & approval of Vendor prints
  - Expediting and Schedule control
- Assistance on Fire Fighting & HVAC equipment design

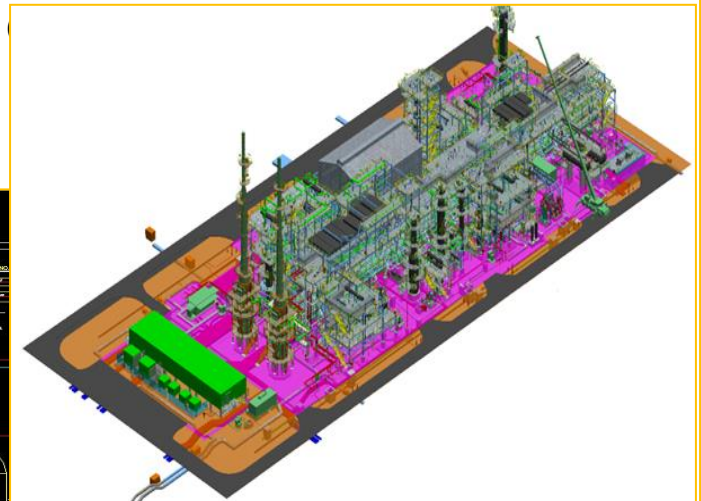
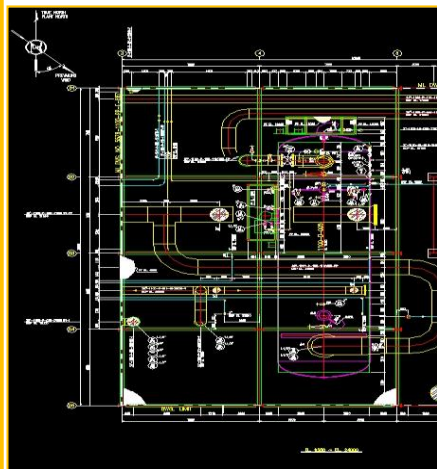






## PIPING

- Plot plan
- Equipment location plan with routing study
- Provide the General Arrangement Drawing (GAD)
- Design the Piping plans & elevations
- Procurement service for Piping materials (MR,TBE)
- Piping support drawing and piping material handling
- Piping detail drawing and information for all disciplines
- 3D Modeling with PDS, PDMS, S3D, BIM including all Equipment
- Extract Plot Plan, ELP, GAD & ISO drawing and BM take off
- Perform the Stress analysis
- Field engineering





## ELECTRICAL

- General & Specification
  - Engineering supervision & coordination
  - Electrical equipment specification
  - Electrical equipment data sheet
- Procurement service works
  - MR/TBE/PS for electrical items
  - Review and approval vendor print
- System calculation
  - Short circuit calculation
  - Load flow and voltage drop studies
  - Large motor starting study
  - Protective relay coordination
- Design & preparation of electrical drawings
  - Single line & schematic diagrams
  - Hazardous area classification
  - Power lighting, grounding layout
  - Fire alarm & telecommunication layout
  - Load analysis / cable schedule
  - 3D Modeling (PDS, PDMS, S3D, BIM, SPEL etc.,) ..)
- Field Engineering



## INSTRUMENT

- General & Specification
  - Engineering supervision & coordination
  - Instrument specification
  - Instrument data sheets
  - Engineering study & review
  - Control system design
- Procurement service works
  - MR/TBE/PS for instrument items
  - Review and approval vendor print
- Provide the instrument detailed designs
  - Instrument index
  - Instrument logic, loop & junction box wiring diagram
  - Instrument signal wiring & cable tray layout
  - 3D Modeling (PDS, PDMS, S3D, BIM, SPI etc.,)
- Field Engineering





## CIVIL / STRUCTURE

- Site preparation
- Drainage , Road & Paving
- Pipe Rack Structure design
- Equip. Structure w/ FDN. design
- Dynamic loaded foundation design
- Basin & Pond structure design
- Pile system and Soil retaining structure design
- 3D Modeling (PDS, PDMS, S3D, BIM, Tekla etc.,)
- Equipment foundation design with calculation
- Shop fabrication drawing review
- Field Engineering

## ARCHITECTURE

- Engineering for Offices, Warehouses, Control buildings, Substations and Guard houses, etc. in oil & gas plants
- Engineering for FAB, CUB, Warehouses and WWT buildings etc. in semiconductor & industrial plant
- Engineering for Turbine buildings, pump house, etc. in power plant
- Calculation and Analysis for Arch. engineering
- Construction work supervision
- Domestic project permits and reporting
- 3D Modeling (PDS, PDMS, S3D, BIM etc.,)
- Field Engineering





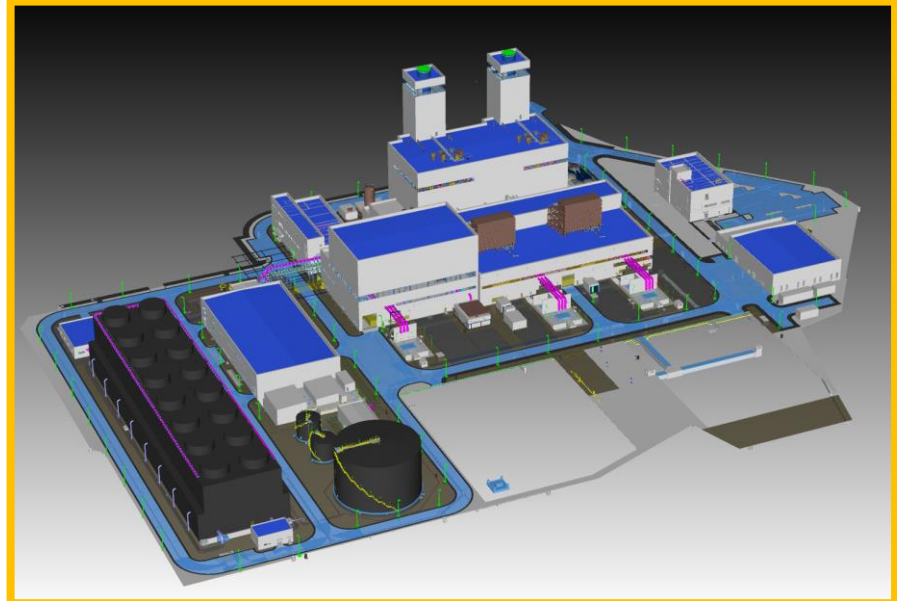


## HVAC · Fire Fighting

- Specification & Data Sheet
- HVAC, F/F & Plumbing Equipment schedule
- HVAC, F/F & Plumbing Flow Diagram
- Layout Plan & Piping Design
- HVAC, F/F & Plumbing Control System
- Bill of Materials
- Calculations
- 3D Modeling (PDS, PDMS, S3D, BIM, etc.,)
- Permits for Fire Fighting
- Procurement Support (MR, TBE)

## POWER & ENERGY (SMART ENERGY CENTER)

- Proposal, Basic Design & Environment Impact Assessment
- Process & Mechanical Design Criteria , Engineering Detail Schedule & PFD (Heat & Water Balance)
- MR, TBE, Technical Specification and Procurement Support
- Engineering & Design for GTG, HRSG, GOV, WT and WWT, Aux. Buildings, Vendor Package etc.,
- Field Engineering & Construction work supervision
- Project permits and reporting
- 3D Modeling (PDS, PDMS, S3D, BIM, etc.,)



## DT CENTER

- **Assist for Concurrent 3D (PDS,PDMS,S3D,BIM) Operation**

- ✓ Smart Plant Suite (SP3D, SPPID, SPI, SPEL, Admin.)
- ✓ 2D Extraction Set up (Plot Plan, ELP, GAD etc.,)
- ✓ Isogen. Set up & Trouble shooting
- ✓ Clash Report & Data Back up
- ✓ MTO Extraction Set up
- ✓ 3D Model Review Set up ( SPR, Navisworks)
- ✓ Tekla program (Steel Structure) Back up

- **Software & Hardware System & License Management**

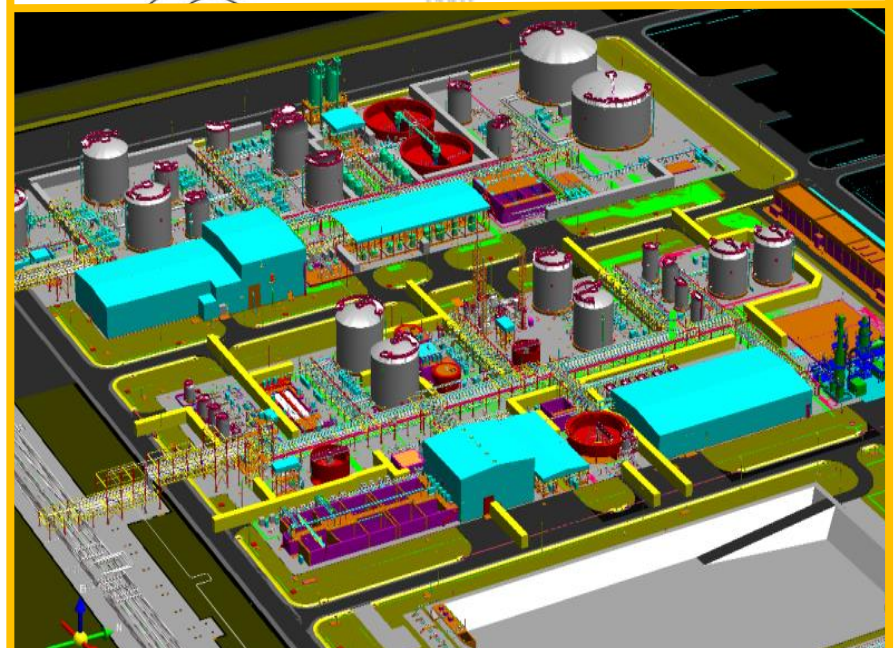
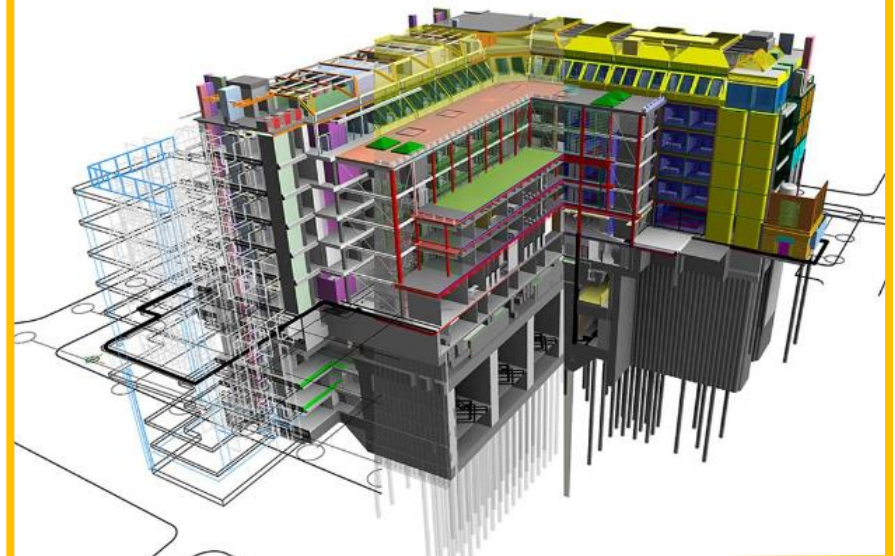
- **D/B Server Set up**

- **BIM Admin.**

- **Drawing Format Set up**

- **Support for Vendor Package 3D Model Import**

- **Assistance on As-Built 3D Model Issue**



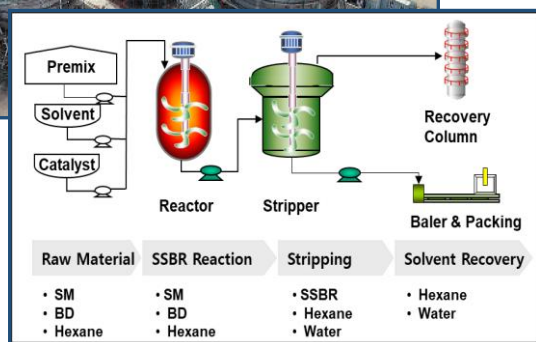
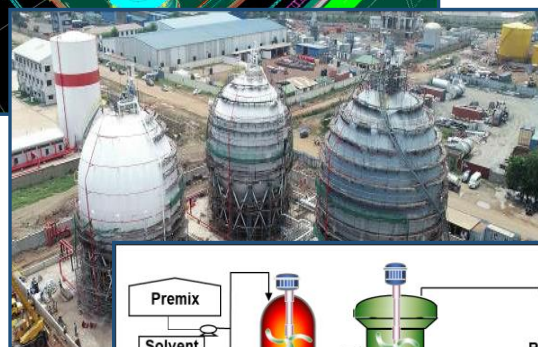
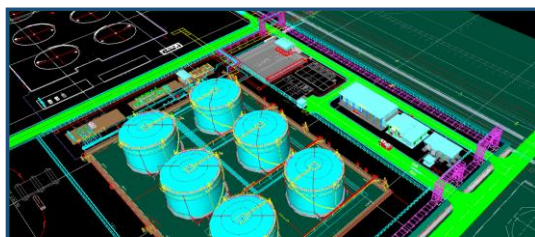


# CORE TECHNOLOGY I

## Basic Engineering

The expert engineers who have various experiences and technical skills in Refinery, Petrochemical and Fine Chemical perform design and engineering works utilizing Steady Status & Dynamic Simulation.

Glotec Engineering offer total Engineering Solution to Clients from Basic Engineering, Feasibility Study and FEED to Detail Design that considered Safety and Optimization.



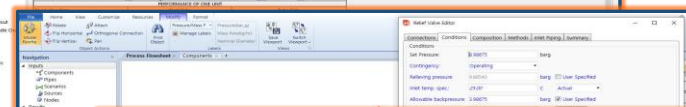
**HYSIS**

Guide Word	More	Less	Reverse	Part Of	As Well	Other	Guide Word	More	Less	Reverse	Part Of	As Well	Other
Process Variables	More	Less	Reverse	Part Of	As Well	Other	Process Variables	More	Less	Reverse	Part Of	As Well	Other
Operator's Action	More	Less	Reverse	Part Of	As Well	Other	Operator's Action	More	Less	Reverse	Part Of	As Well	Other
Abnormal Condition	More	Less	Reverse	Part Of	As Well	Other	Abnormal Condition	More	Less	Reverse	Part Of	As Well	Other
Abnormal Operation	More	Less	Reverse	Part Of	As Well	Other	Abnormal Operation	More	Less	Reverse	Part Of	As Well	Other
Circuit Breaker	More	Less	Reverse	Part Of	As Well	Other	Circuit Breaker	More	Less	Reverse	Part Of	As Well	Other
Clearly	More	Less	Reverse	Part Of	As Well	Other	Clearly	More	Less	Reverse	Part Of	As Well	Other
Contamination Change	More	Less	Reverse	Part Of	As Well	Other	Contamination Change	More	Less	Reverse	Part Of	As Well	Other
Contamination	More	Less	Reverse	Part Of	As Well	Other	Contamination	More	Less	Reverse	Part Of	As Well	Other

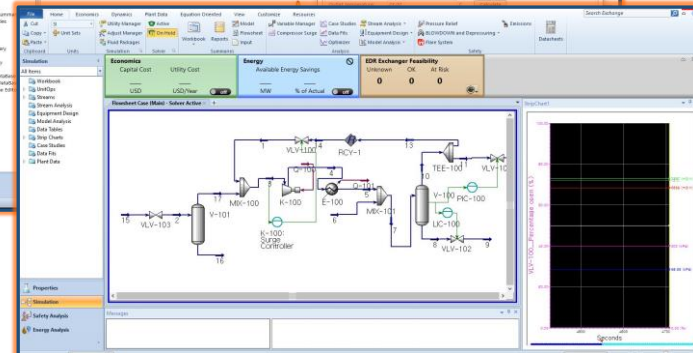
**HAZOP Review**



**HTRI/HTFS**



**SIL Development**



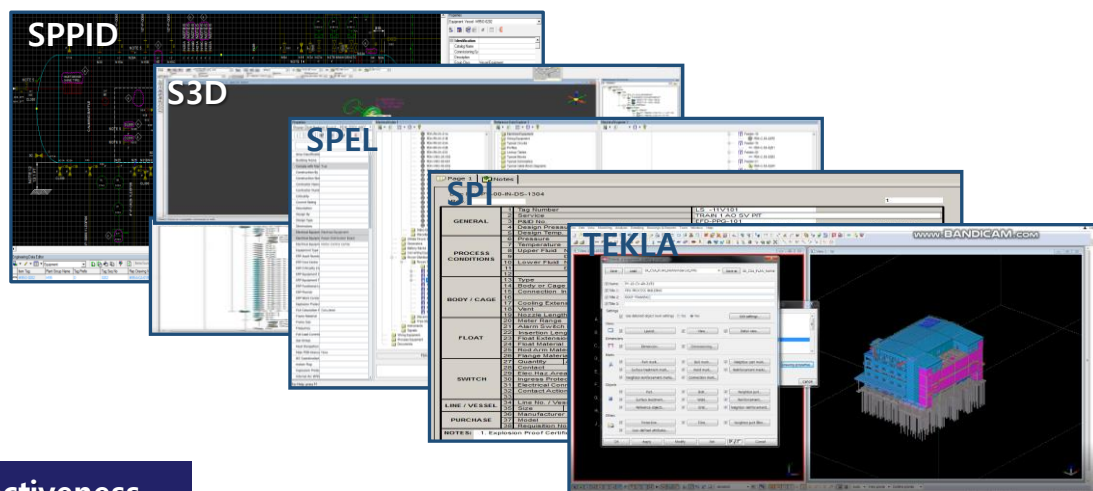
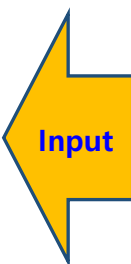
**Optimization**

# CORE TECHNOLOGY II

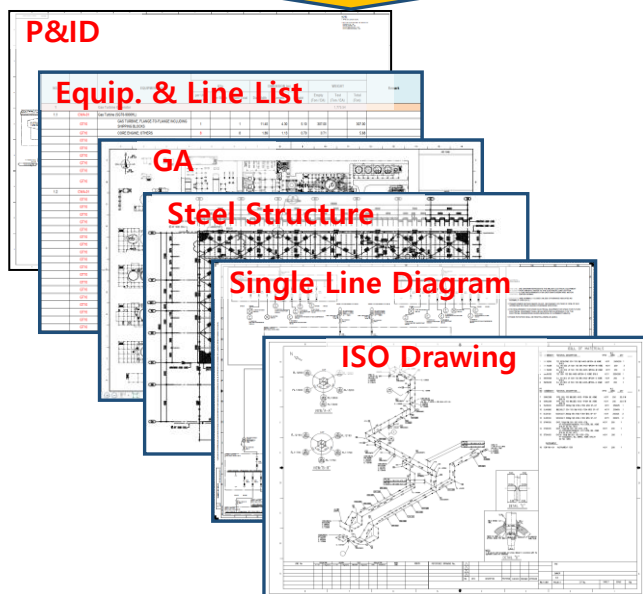
## Concurrent 3D Technology

Glotec Engineering perform Concurrent 3D design based on Smart 3D beyond existing PDS and PDMS.

To maximize the reliability and efficiency of the Design, all deliverables are produced through SPPID, S3D, SPEL, SPI and TEKLA that shared DT solutions by interactive data.

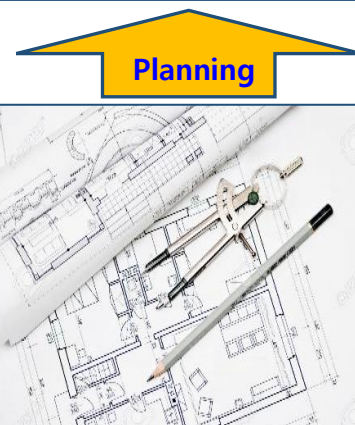


**Deliverables**



### Effectiveness

- Less & avoid re-work (3D Modeling without pre-2D work)
- Gap Filling between each steps
- Real time Clash Check
- Buildup Data base
- Reducing Delivery Schedule
- Minimize Error & Revision



**Planning**



# CORE TECHNOLOGY III

## BIM – Building Information Modeling Technology

Glotec Engineering fulfill the plant design utilizing BIM technology in the High-Tech business such as Semi-conductor and Fuel cells. As per optimized IT administration support, we apply BIM for Design, Procurement and Construction to meet customer satisfaction.



### Power Plant

- Architecture
- Building

### Application of BIM Function

- Schedule Management
- Buildup Admin.
- QA/QC : Minimize Design Errors
- SPEC. & Module design
- Field Support & Assist

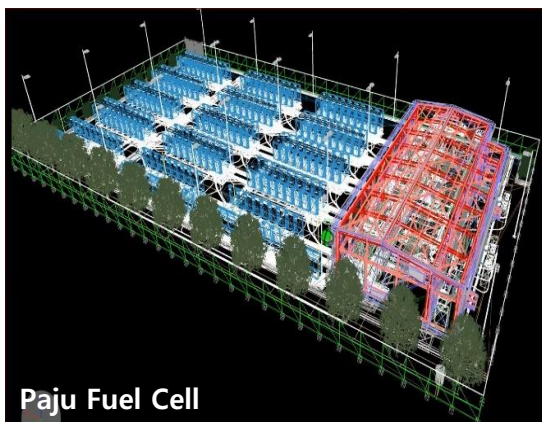
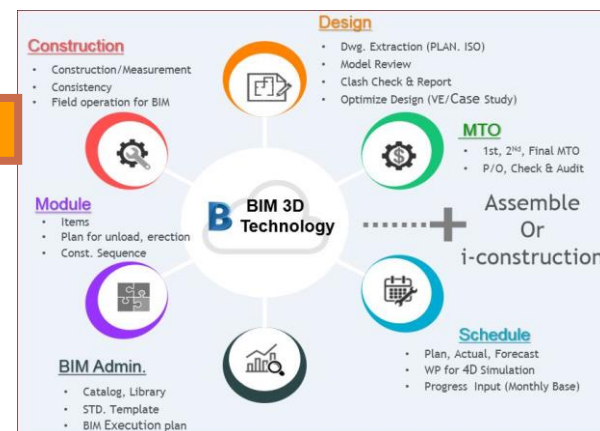
- ❖ Development & Application of BIM Admin.  
(Family Construction, Library, Specification D/B)
- ❖ Clash Check & Close out
- ❖ Project Schedule compression
- ❖ MTO Extraction
- ❖ 2D Drawing Format Set up & Extraction
- ❖ Field Construction Assistance

### Fuel Cells

- Civil, Architecture
- Piping, E&I, HVAC

### Hi- Tech

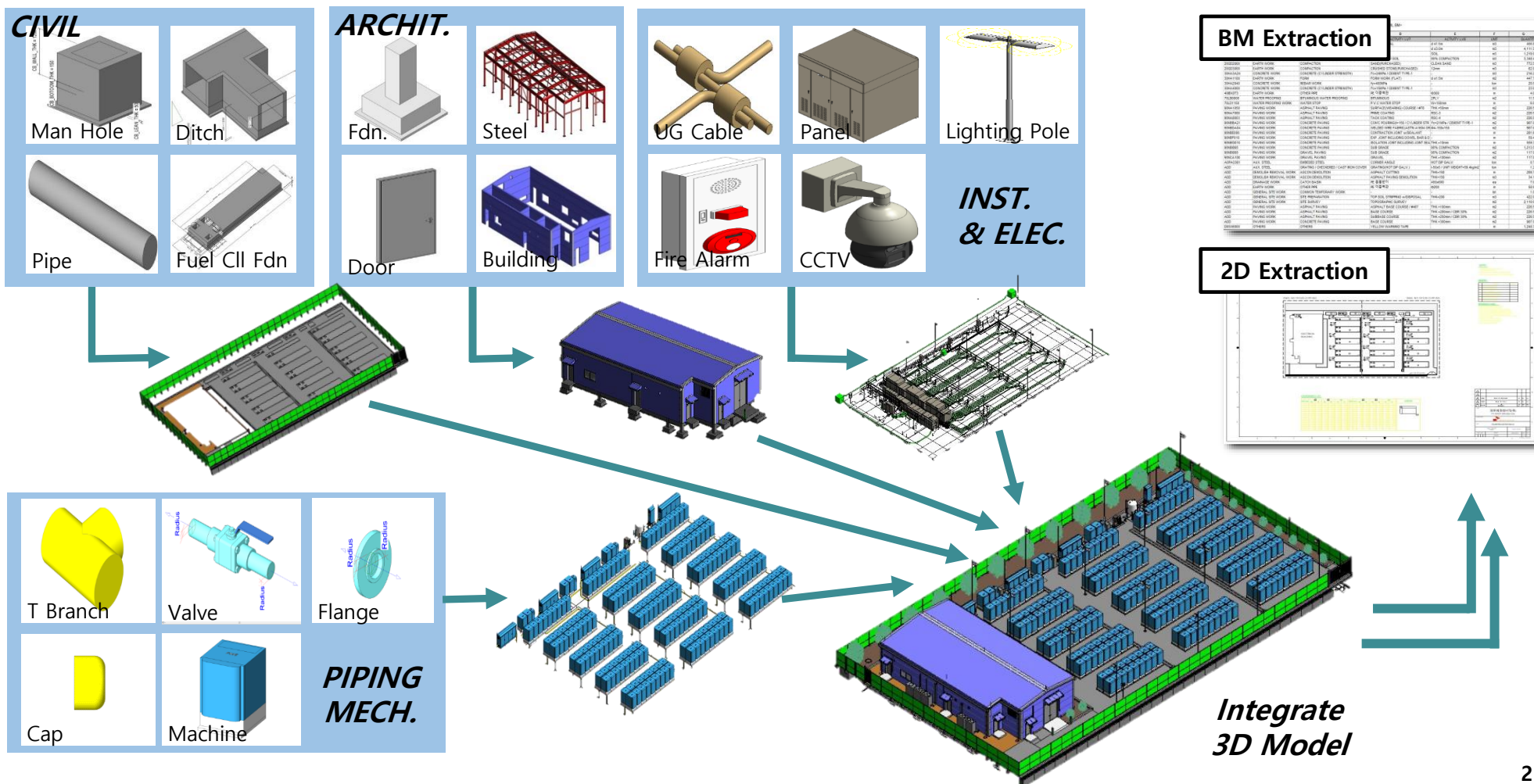
- Civil, Structure
- Piping, E&I, HVAC



# CORE TECHNOLOGY III

## BIM – Building Information Modeling Technology

Glotec Engineering developed exclusive BIM admin. Technology. For achieving more efficient design, we apply it to 3D Modeling for automatic Material Take off and 2D drawing extraction.



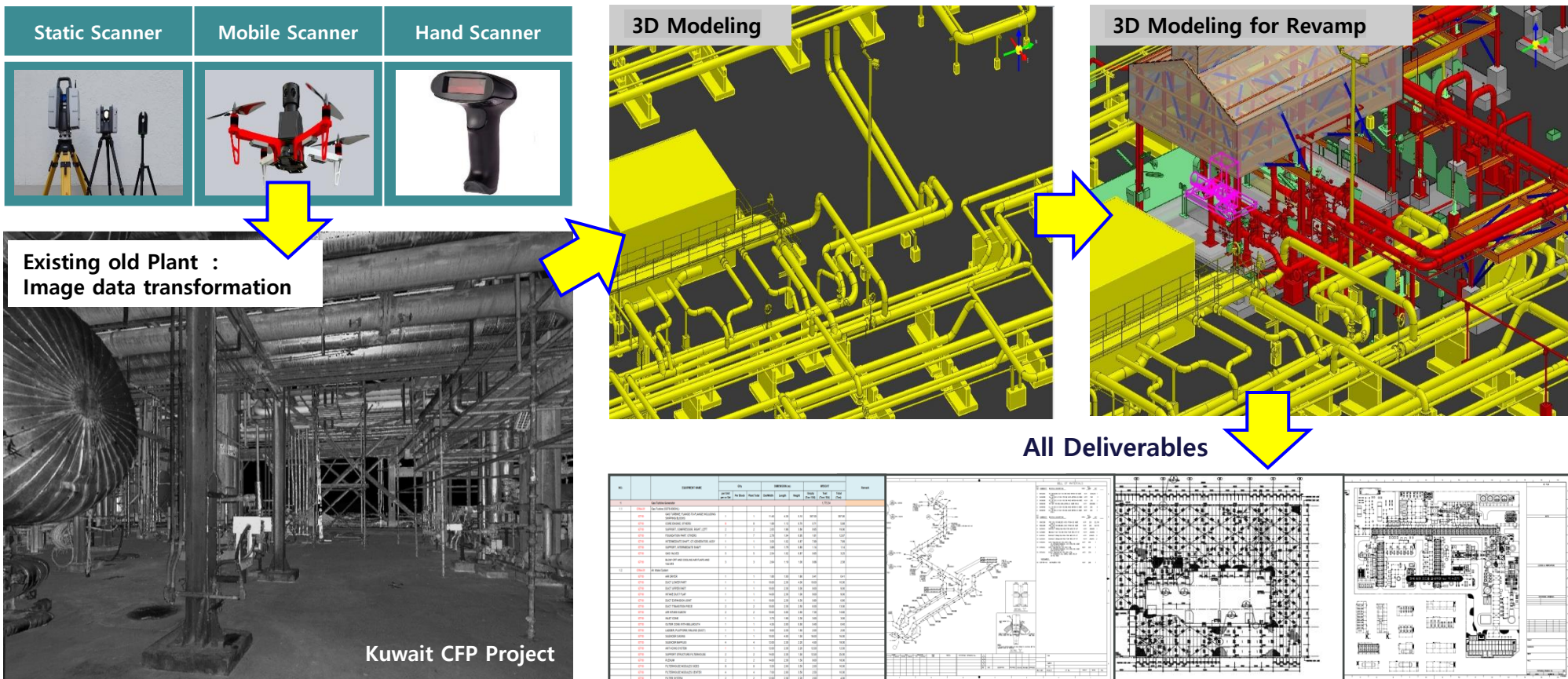


## CORE TECHNOLOGY IV

# Reverse Engineering using Laser Scanning Technology

The existing old plant has many difficulties in Maintenance, Repair and Extension that was not enough relevant drawings and data due to insufficient document management system.

Glotec Engineering hereby make the possible to Reverse engineering through image data transformation and 3D modeling used by laser scanning technology that is indeed answering customer demand.



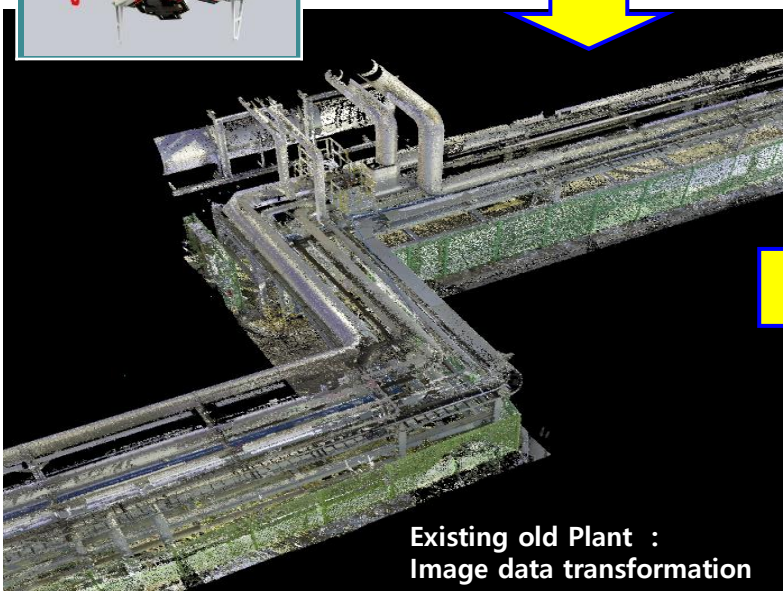
# CORE TECHNOLOGY IV

## Reverse Engineering using Laser Scanning Technology

### ► Icheon CCPP Project / OSBL Process Steam Line Revamping



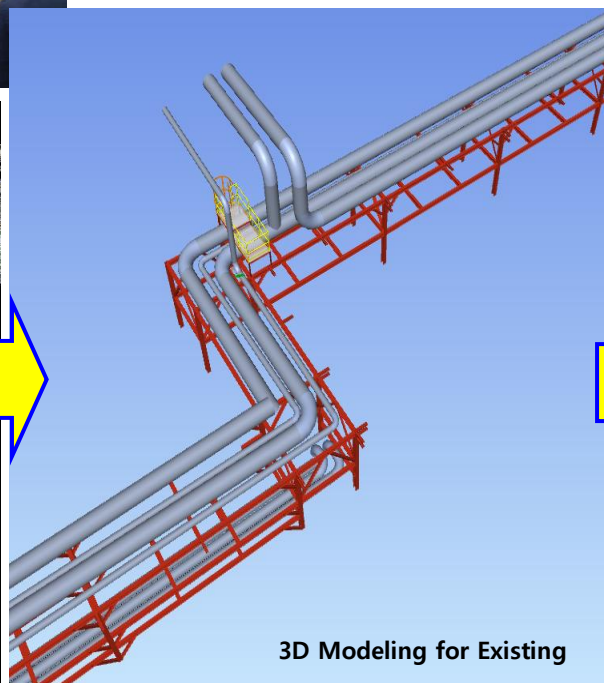
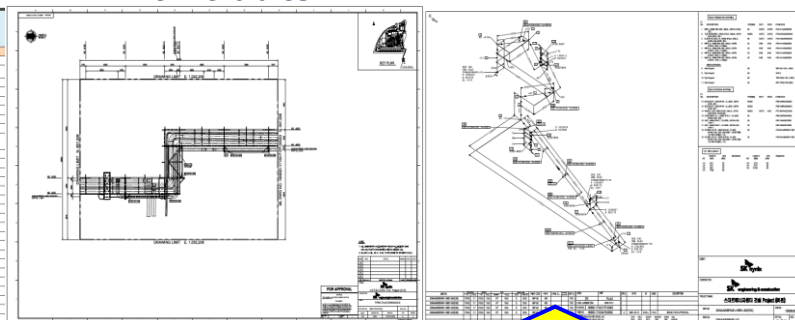
Drone Scanner



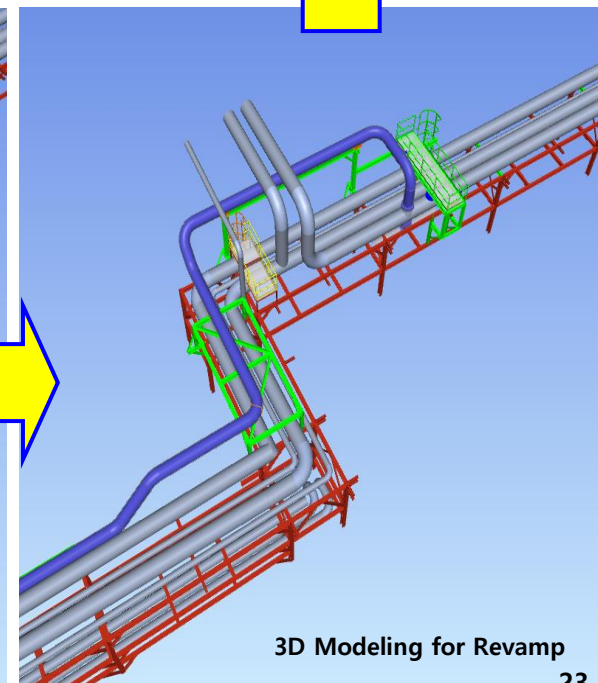
Existing old Plant :  
Image data transformation

NO.	ITEM NAME	UNIT	QTY	REMARKS	REMARKS
1	PIPELINE	1	1	100	100
2	PIPELINE	1	1	100	100
3	PIPELINE	1	1	100	100
4	PIPELINE	1	1	100	100
5	PIPELINE	1	1	100	100
6	PIPELINE	1	1	100	100
7	PIPELINE	1	1	100	100
8	PIPELINE	1	1	100	100
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97	PIPELINE	1	1	100	100
98	PIPELINE	1	1	100	100
99	PIPELINE	1	1	100	100
100	PIPELINE	1	1	100	100

All Deliverables



3D Modeling for Existing



3D Modeling for Revamp



# CORE TECHNOLOGY V

## Modularization Design

Based on Structural Design Technology through our 3D modeling ability, we apply Modularization design to Oil & Gas, Power and Energy plant to improve constructability, project schedule and P/O for long delivery equipment in order to save cost and share project risk.

	Contents	Remarks												
Exp. Project	Fort Hills Suncor Project, Canada (Apr. '14~Nov.'15)	Modules (PAU 74, PAR 41)												
	INEOS PDH Project, Belgium (Jul. '19~Nov. '20)	Modules (PAU 12, PAR 32)												
	Lotte LINE Project, Indonesia(Nov.'21~ Feb.'24)	Module (PAR 59)												
Exp. Experts (Person)	<table><tr><td>Steel</td><td>Piping</td><td>Mech.</td><td>E&amp;I</td><td>PM</td><td>Total</td></tr><tr><td>11</td><td>21</td><td>3</td><td>13</td><td>4</td><td>52</td></tr></table>	Steel	Piping	Mech.	E&I	PM	Total	11	21	3	13	4	52	Experts T/F Team in operation
Steel	Piping	Mech.	E&I	PM	Total									
11	21	3	13	4	52									
Design ability	1. Basic Concept : Module Plan (Sizing)	PAR, PAU												
	2. Detail Design : - Module Lay out & Configuration - SP3D Modeling ( Inc. Analysis) - Shop Dwg. Extraction	All discipline												
	3. Field Installation Support	COG, Inspection, Test, etc.,												



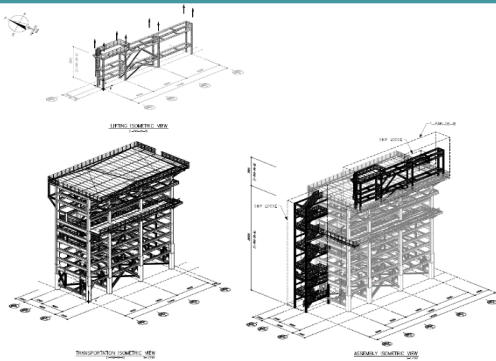
# CORE TECHNOLOGY V

## Modularization Design

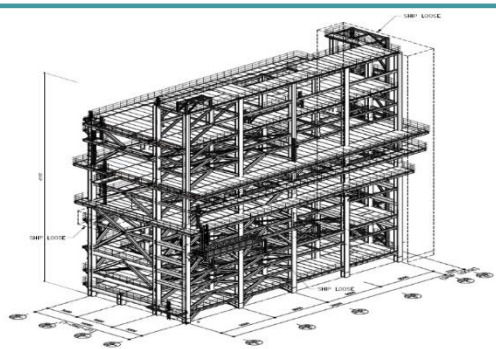
### Applicable Modularization

- Process Unit & Package (PAU)
- Main Pipe Rack (PAR)

#### PAR (Piperack)



#### PAU (Equipment Structure)



### Key Activities

#### Module design

##### PIPING

- Modularization Planning
- PAR, PAU Layout
- Temporary Support

##### STRUCTURE

- Dynamic Analysis
- COG design for SPMT
- Brace Member Connection

##### E & I

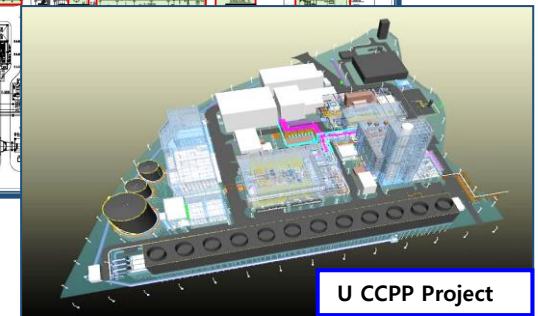
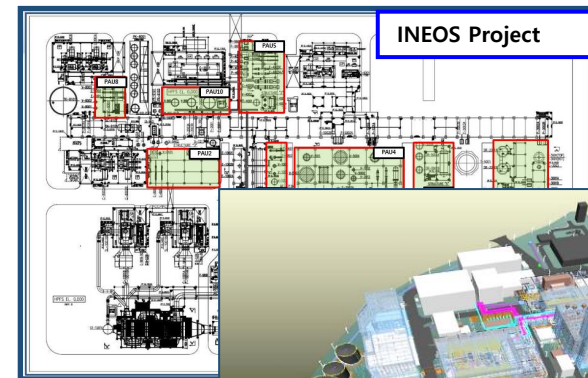
- Cable Tray ( Temp. Support )
- Lighting Pole support
- Fixed Support List
- In-Line Instrument List
- Junction Box
- Wiring installation

#### Fab./Transport./Installation

- SPMT Planning
- Land & Sea Transportation
- Packing & Fastening
- Site Stock
- Test & Inspection
- Erection

### ◆ Target Goal

- Project Cost Saving
- Project Schedule Control
- Standardization (Design, Const.)
- Early P/O for Long Delivery Items
- Minimize Construction Risk



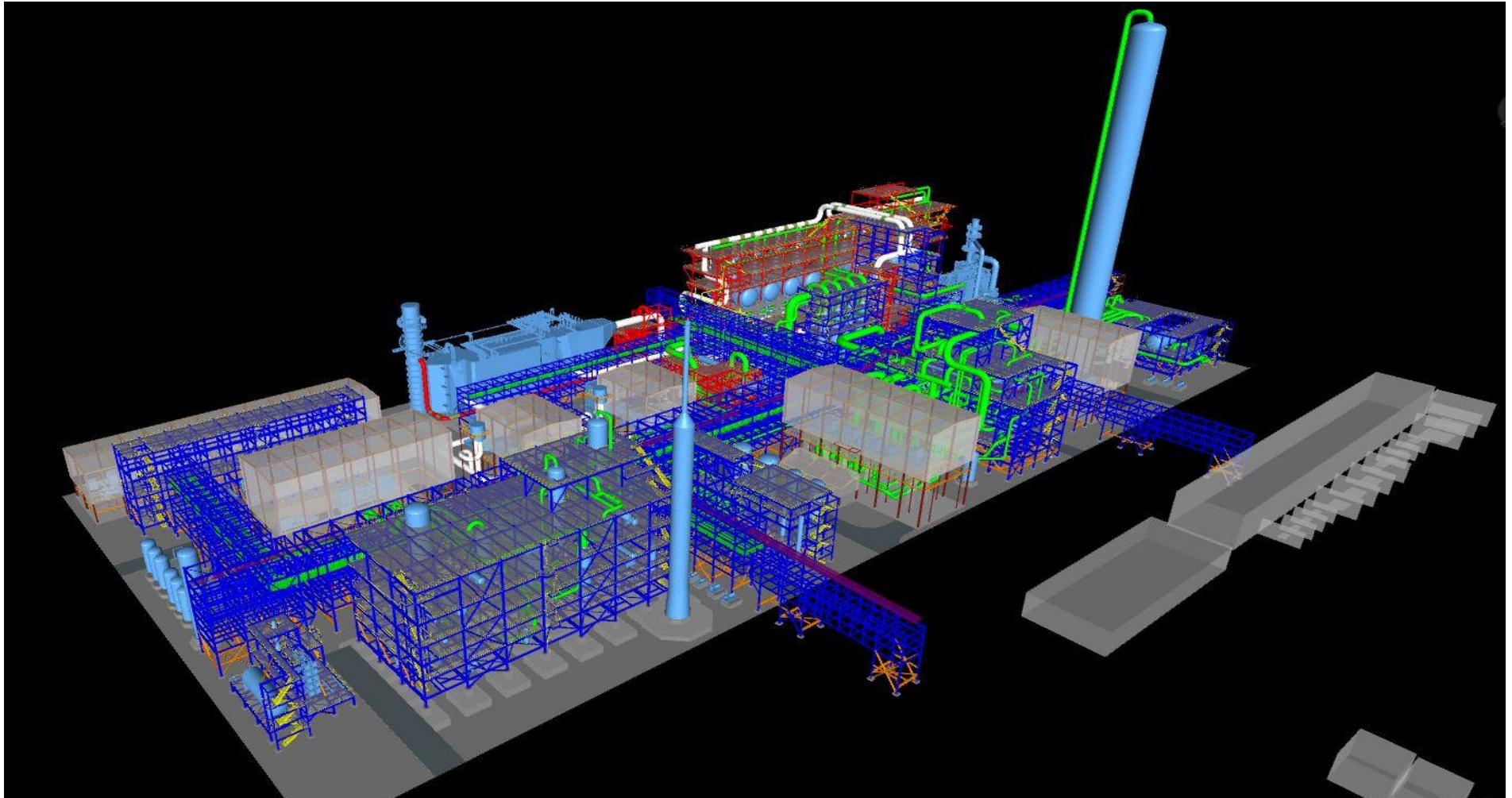
U CCPP Project



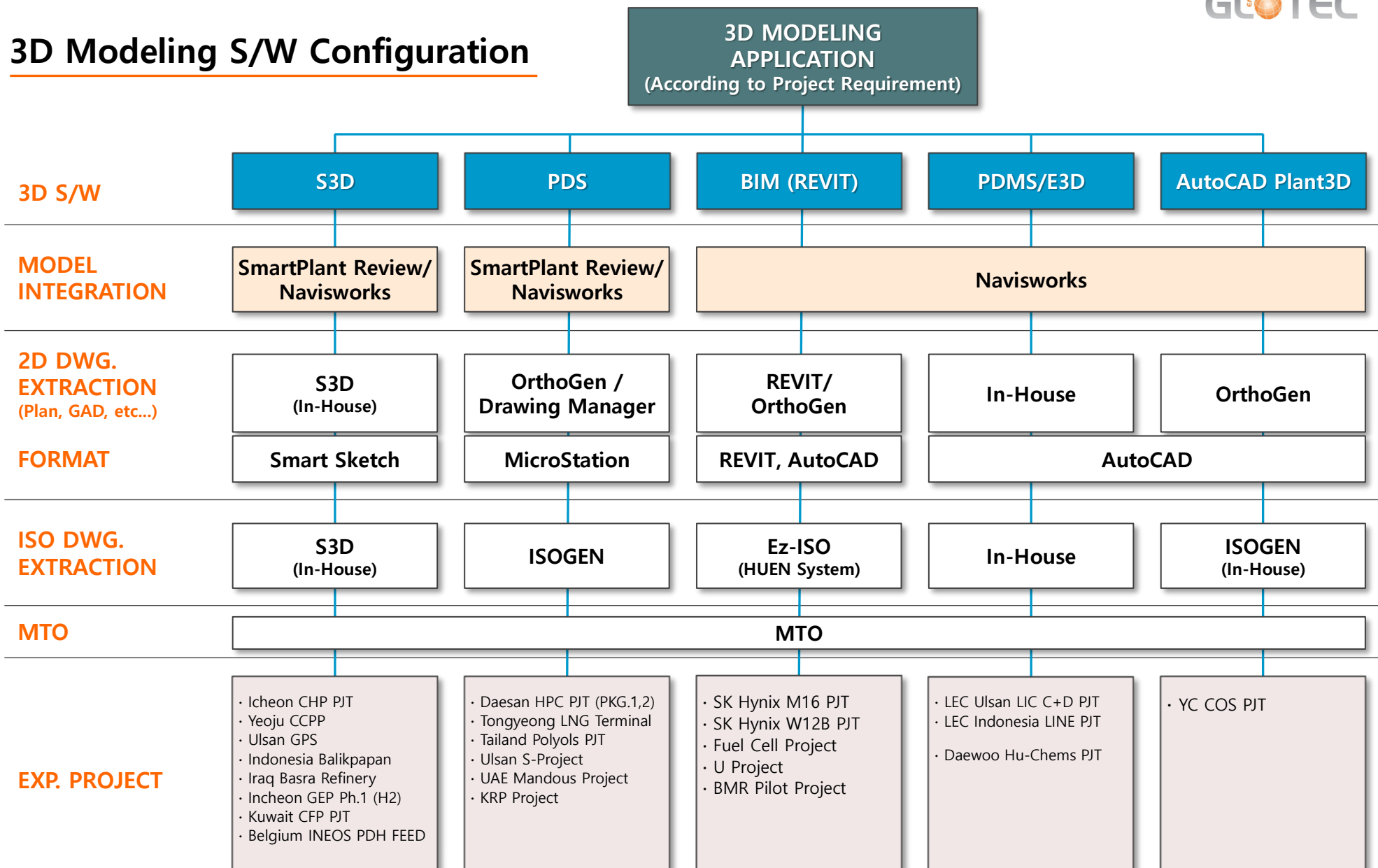
## CORE TECHNOLOGY V

### Modularization Design

3D Modularization – Belgium INEOS Project



# 3D Modeling S/W Configuration







## BUSINESS

### Extensive precision and technology

Glotec Engineering has established a competitive technology in the oil refining, gas processing, petrochemical and industrial plant engineering. It is also delivering top qualified services to our clients ranging from full basic and detail design to procurement and field engineering support.

#### Oil and Gas

- Refineries
- Oil and Gas Processing
- Petrochemicals
- Liquefied Natural Gas (LNG)

#### Power Plant

- Coal-fired Generation Plant
- Cogeneration Plant
- Renewable Energy Plant

#### Industrial Plant

- Semiconductor Plant
- Electronic Plant
- General Industrial Plant

# Major Experienced Project Summary

NO	Category	Contractor	Business Sector	Project Name	Location	Client	Period
1	Full Range*	DAEWOO E&C	Petrochemical	Yeosu TKG Huchems 6NA/2MNB Project	Korea	TKG Huchems	2022.04 ~ 2024.06
2	Inst./Elec	DL E&C	Petrochemical	Baltic PE, LAO Project	Russia	CNCEC	2022.01 ~ 2025.01
3	Electric	DL E&C	Petrochemical	Ma'aden Phosphate 3, Ph-1	Saudi	Ma'aden	2022.01 ~ 2022.03
4	Full Range*	SK ecoplant	Power Plant	Icheon Gwan-go Fuel Cell Project	Korea	Korea West Power	2021.12 ~ 2022.10
5	Full Range*	SK ecoengineering	Petrochemical	Boryeong GEP2 Hydrogen FEED Project	Korea	SK E&S	2021.12 ~ 2022.06
6	Full Range*	Lotte E&C	Petrochemical	LOTTE LINE Project	Indonesia	Lotte Chemical	2021.11 ~ 2024.02
7	Full Range*	Wonik Material	Petrochemical	YC O-Chang COS Project	Korea	Wonik Material	2021.08 ~ 2021.12
8	Full Range*	SK ecoplant	Power Plant	Daewon Fuel cells Power Plant(19.8MW)	Korea	Daewon Green Energy	2021.02 ~ 2021.12
9	Full Range*	SK ecoplant	Petrochemical (H2)	Incheon GEP 1 H2 Feed / Detail	Korea	IGE	2021.04 ~ 2021.07
10	Full Range*	SK ecoplant	Power Plant	Ulsan GPS CCPP Power (1,200MW)	Korea	Ulsan GPS	2021.03 ~ 2022.08
11	Full Range*	KOGAS_Tech	LNG	Tongyoung LNG Terminal	Korea	TEP/Hanwha	2021.04 ~ 2024.03
12	Full Range*	Lotte E&C	Petrochemical	Lotte BP C+D Project	Korea	Lotte BP Chem.	2021.02 ~ 2022.10
13	Electric	Hyundai E&C	Refinery	Iraq Barsrah Refinery Upgrading	Iraq	South Refineries Company (SRC)	2021.02 ~ 2023.05
14	Full Range*	SK ecoplant	Industrial	BMR Pilot Plant (Battery Recycle)	Korea	SK Innovation	2020.12 ~ 2021.12
15	Full Range*	SK Energy	Petrochemical	Ulsan, IPA ( Iso Propyl Alcohol) FEED	Korea	SKGC	2020.12 ~ 2021.04
16	Full Range	Wonil T&I	Petrochemical	Pyeongteak H2 Supply	Korea	KOGAS	2020.09 ~ 2021.12
17	Full Range*	SK materials	Industrial	Sejong P Project	Korea	SK MR	2020.08 ~ 2021.05

\* NOTE : Full range of Design and Engineering service in all disciplines such a Process, Mechanical, Piping, E&I, CSA, HVAC and Fire fighting etc.,



# Major Experienced Project Summary

NO	Category	Contractor	Business Sector	Project Name	Location	Client	Period
18	Full Range*	SK ecoplant	Petrochemical	Bukhara Refinery Modernization	Uzbekistan	UOC	2020.08 ~ 2021.05
19	Full Range*	SK ecoplant	Industrial	Icheon M16 Ph-2 W12b Project	Korea	SK Hynix	2020.08 ~ 2022.10
20	Full Range*	SK ecoplant	LNG	Icheon SK Hynix UG LNG Supply	Korea	SK Hynix	2020.06 ~ 2022.10
21	Full Range*	SK ecoplant	Petrochemical	AGIC PDH & complex U&O FEED	Saudi	SK ecoplant	2020.04 ~ 2020.07
22	Full Range*	SK ecoplant	Power Plant	Paju Fuel cells Power Plant(8.1MW)	Korea	Paju Ecoenergy	2020.03 ~ 2020.12
23	DT	SK ecoplant	Power Plant	Yeoju LNG Power (1,000MW, CCPP)	Korea	SK Hynix	2020.01 ~ 2022.08
24	Mech.	Samsung Eng'g	Petrochemical	Sarawak Methanol Project	Malaysia	Sarawak, Malay	2019.12 ~ 2020.03
25	Full Range*	SK ecoplant	Combined Heat Power Plant	Icheon Smart Energy (570MW, CHP)	Korea	SK Hynix	2019.11 ~ 2022.08
26	Full Range*	Lotte E&C	Petrochemical	HPC Project / HDPE & Tankage unit	Daesan, Korea	Hyundai Chem.	2019.07 ~ 2021.12
27	Piping	Hyundai Eng'g	Petrochemical	HPC Project / ECU & DFU unit	Daesan, Korea	Hyundai Chem.	2019.07 ~ 2021.12
28	Full Range*	SK ecoplant	Petrochemical	INEOS PDH FEED Project	Belgium	INEOS	2019.07 ~ 2020.11
29	Process Stress	Hyundai E&C	Petrochemical	Marjan Increment PKG 6	Saudi Arabia	Aramco	2019.07 ~ 2022.10
30	Full Range*	SK ecoplant	Refinery	RDMP RU-V Balikpapan Project	Indonesia	PT PERTAMINA	2019.04 ~ 2023.07
31	Piping, Elec., Inst. Civil	SK ecoplant	Revamping	MARS Proposal Project	Thai, Rayong	IRPC	2019.02 ~ 2019.04
32	Full Range*	SK ecoplant	Refinery	Ulsan S - Project	Korea	SK Energy	2018.11 ~ 2020.04
33	Full Range*	SK Innovation	Lithium-ion battery Separator	Jiang-su LIBS Ph-1 Project	China	SK Innovation	2018.10 ~ 2020.12
34	Full Range*	SK ecoplant	Crude Oil Cavern & Pipeline	ADNOC-Mandous Project	UAE	ADNOC	2018.07 ~ 2022.01

\* NOTE : Full range of Design and Engineering service in all disciplines such a Process, Mechanical, Piping, E&I, CSA, HVAC and Fire fighting etc.,

# Major Experienced Project Summary

NO	Category	Contractor	Business Sector	Project Name	Location	Client	Period
35	Full Range*	SK ecoplant	Petrochemical (PP)	PPTGC Polyols Project	Thai, Rayong	Global Chemical	2018.02 ~ 2020.08
36	Full Range*	SK Innovation	Industrial	LIBS #12,13 PROJECT	Korea	SK Innovation	2018.01 ~ 2019.12
37	Full Range*	LG Chemical	Revamping	Daesan ATS BRU Revamping Project	Korea	LG Chemical	2018.07 ~ 2019.07
38	Full Range*	SK ecoplant	Industrial	Wuxi Hynix Project	Wuxi, China	SK Hynix	2017.01 ~ 2019.01
39	Full Range*	SK ecoplant	Industrial	Jungpyeong LIBS #10, 11 Project	Korea	SK Innovation	2016.08 ~ 2017.12
40	Full Range*	Hyundai Oil bank	Refinery	Daesan Hyundai Oil bank Tank Plant	Korea	Hyundai Oil bank	2016.06 ~ 2019.02
41	Elec. & Inst.	Hyundai Heavy Industrial	Refinery	KIPIC AL-ZOR Project	Kuwait	KNPC	2016.01 ~ 2019.06
42	Full Range*	G-TEC	Gas Terminal	Ghana LPG Gas Terminal Project	Ghana, Africa	Ghana Accra	2015.05 ~ 2020.03
43	Full Range*	SK ecoplant	Refinery	CFP Project	Kuwait	KNPC	2014.07 ~ 2020.12
44	Full Range*	SK ecoplant	Refinery including WWT, Power Plant	KARBALA Refinery Project	Iraq	SCOP	2014.06 ~ 2021.12
45	Full Range*	SK ecoplant	Gas Plant	Ulsan P- Project (PDH)	Korea	SK Gas	2014.01 ~ 2017.11
46	Full Range*	SK ecoplant	Refinery Inc. Power Plant	NSRP Complex Project	Vietnam	NSRP	2013.08 ~ 2016.12
47	Full Range*	SK ecoplant	Petrochemical	Ulsan New PX Project (ISBL, OSBL)	Korea	SK Energy	2012.09 ~ 2014.10
48	Full Range*	Daewoo E&C	Gas Plant	HOUT Onshore Gas Project	Saudi Arabia	KJO (Aramco & KNPC)	2012.05 ~ 2014.03

\* NOTE : Full range of Design and Engineering service in all disciplines such a Process, Mechanical, Piping, E&I, CSA, HVAC and Fire fighting etc.,



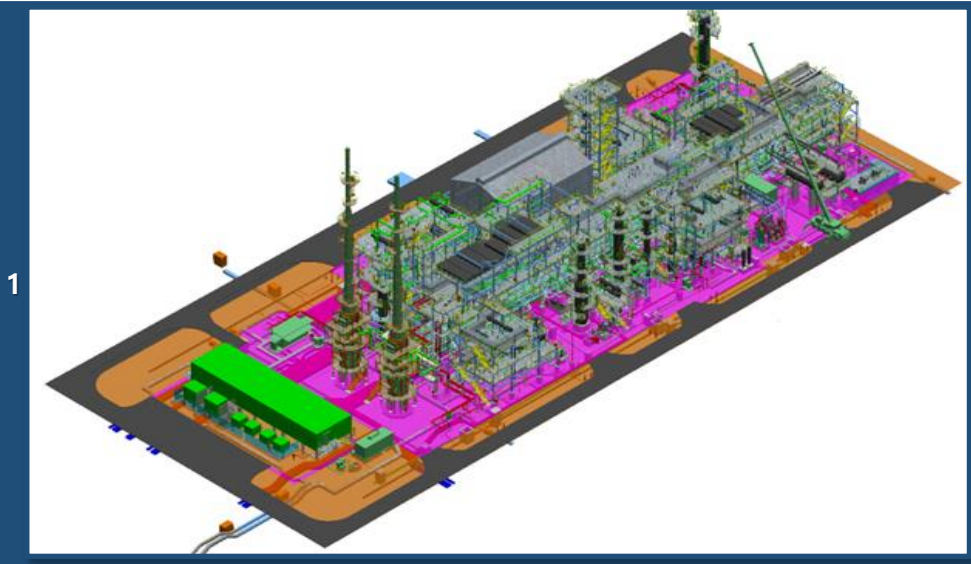
## OIL & GAS

Since Glotec Engineering first advanced into an oil & gas plant in 2003, we performed more than 100 projects in worldwide, growing as a full range of engineering company. Glotec Engineering has achieved success in the petrochemical plant Engineering by completing various kinds of large-scale project from basic and detail design to field engineering support.

- HPC Project (July. 2019 – Dec. 2021)  
ECU 800,000 T/Y, HDPE 300,000 T/Y, Tankage, Warehouse / Hyundai Chemical (HEC, LEC)
- RDMP RU-V Balikpapan Project (Apr. 2019 – Jul. 2023)  
RFCC 90 kBSD, Indonesia/PT PERTAMINA (SKEC)
- ADNOC M-Project (Dec. 2017 – Sep. 2019)  
Crude oil Cavern, 14,000Mbbl x 3ea, Fujairah, UAE / ADNOC(SKEC)
- 1 S Project (Sep. 2017 – Jun. 2019)  
VRDS 30,000 B/D, Ulsan, Korea / SKE(SKEC)
- 2 ATS Project (Jun. 2018 – Jul. 2019)  
Butadiene Rubber Revamping, Daesan, Korea / LG Chemical
- 3 Polyols Project (Oct. 2017 – Apr. 2019)  
PPTGC Petrochemical, 130,000 T/y, Thailand/ PPTGC(SKEC)







Al-Zor Refinery Project (Jan. 2016 – Jun. 2019)  
Detail for Electric & Instrument, Kuwait / KNPC(HHI)

1 CFP Refinery Project (Jul. 2014 – Dec. 2017)  
Clean Fuels Refining, Kuwait / KNPC (SKEC)

2 P (PDH) Project (Jan. 2014 – Nov. 2015)  
Propylene 600,000ton, Ulsan, Korea / SK Gas(SKEC)

3 NSRP complex Project (Aug. 2013 – Dec. 2016)  
Aromatics and Utility, Nghi Son Refinery, Vietnam / SKEC & JGCS

JZR & TP Project (Jun. 2012 – Dec. 2017)  
J05 Process, J70 P/R, J77 Flare, Saudi Arabia / SKEC & ARAMCO



1



IRPC UHV Project (Nov. 2012 – Feb. 2014)  
Tankage and Utilities, Thailand / SKEC & IRPC

V (V-4) Project (Oct. 2012 – Jun. 2014)  
TAU, ORU, SUL process, Ulsan / POSCO ENG.

1 New PX Plant Project (Sep. 2012 – Mar. 2014)  
Para-Xylene 1,000Kmta, benzene 600Kmta, WWT, Ulsan / SKEC

HOUT Onshore Gas Project (May. 2012 – Mar. 2015)  
Gas process, Flare, Utility, Saudi Arabia / DW E&C

2 V Project (Apr. 2012 – Apr. 2014)  
ISBL, OSBL, Utility for Propane & Butane, Incheon / SK Energy(SKEC)

3 WASIT Gas Plant (#1,3,4) Project (Feb. 2011 – Mar. 2014)  
Gas Processing, Utility, WWT, Saudi Arabia/ Aramco(SKEC)

2



3



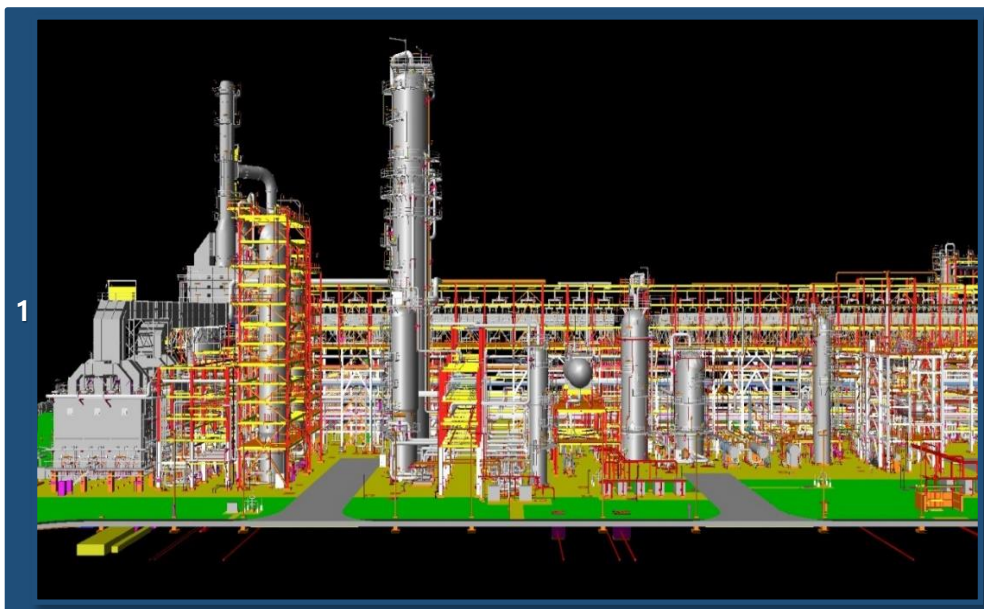
LO Tank Terminal Project (Jan. 2011 – Aug. 2012)  
Lube oil for UCO, LBO, HBO, NBO, Ulsan, Korea / SK Gas

1 RRE (Area #1,2,3) Project (Jan. 2010 – Apr. 2013)  
Ruwais refinery expansion, 417,000BPSD, UAE/ Takreer (SKEC)

Jubail Export Refinery Project (Oct. 2009 – Sep. 2012)  
Utility facilities, Saudi Arabia / SKEC & ARAMCO

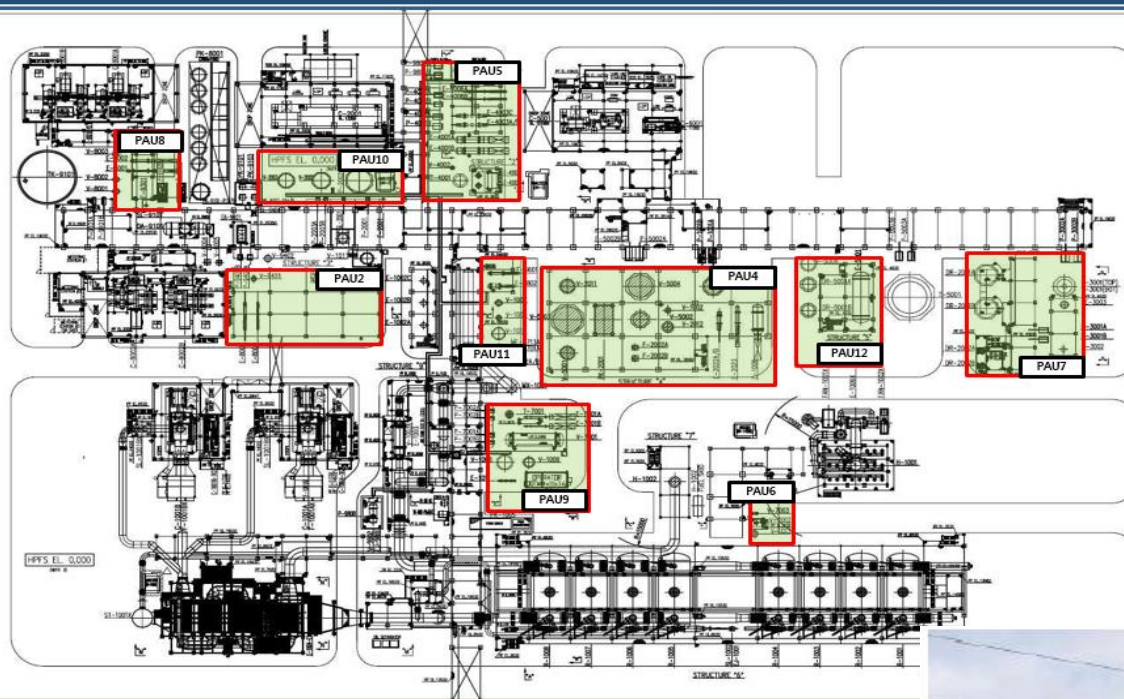
2 New FCC Project (Jun. 2006 – May. 2008)  
Refinery 60,000 BPSD, Ulsan, Korea / SK Energy (SKEC)

3 RPMAA Project (Jan. 2003 – Oct. 2004)  
Gas gathering & Processing, Mina Al Ahmadi, Kuwait / KNPC(SKEC)





1 INEOS PDH FEED Project / Module (Jul. 2019 – Jun. 2020)  
750KTA Propane Dehydrogenation Plant FEED, Module Design, Antwerp, Belgium / INEOS(SKEC)





## POWER PLANT

Based on high technical excellence, Glotec Engineering has been conducting a CCPP power plant successfully such as the gas-turbine, steam-turbine generation, power transmission and substation plant including re-use energy plant.

■ Ulsan GPS CCPP Project (Mar. 2021 – Aug. 2022)  
Power Generation, Ulsan, Korea / SK ecoplant & GPS

1 ■ SK Hynix Smart Energy Center Project (Nov. 2019 – Aug. 2022)  
570MW(1+1+1) Combined Heat Power Plant, Icheon, Korea / SKEC

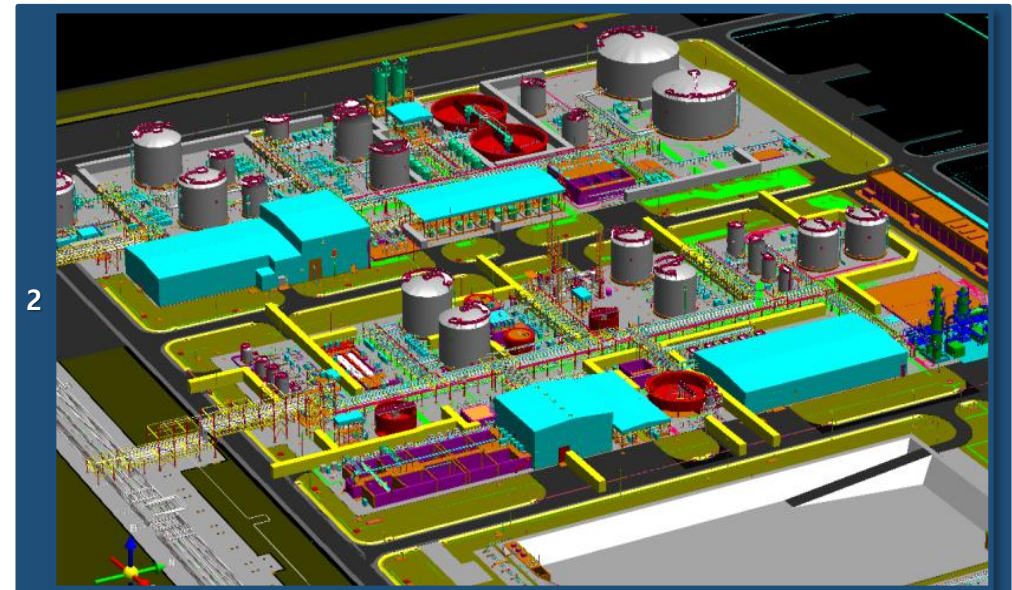
■ Yeosu Natural Gas Power Plant Project (Jan. 2020 – Apr. 2021)  
Power Generation 1,000MW, Yeosu, Korea / SKEC & SK Hynix

2 ■ KARBALA Power Plant Project (Jun. 2014 – Apr. 2016)  
Power Generation 30+20MW, Iraq / SKEC & SCOP

■ Chile Coal Power Project (Jun. 2008 – Jul. 2011)  
240Mw Coal Power Plant, Chile / HEC

■ Hyundai Green Power Project (Oct. 2007 – Dec. 2010)  
400Mw(100Mwx4), Dang-jin, Korea / Daelim E&C

■ LNG combined Power Plant Project (May. 2004 – Oct. 2005)  
1,070 Mw LNG, Gwang-yang, Korea / Daelim Energy





## FUEL CELLS

GLOTEC Engineering not only performs numerous fuel cell projects based on advanced BIM technology and secured competitiveness, but also continues to grow as a best engineering company through constant participation in fuel cell business.

1 Bundang Fuel Cell Power BIM Standardization (Sep.2019 ~ Dec.2019)  
- 8MW Fuel Cell (accumulated data standardization), Pilot Modeling

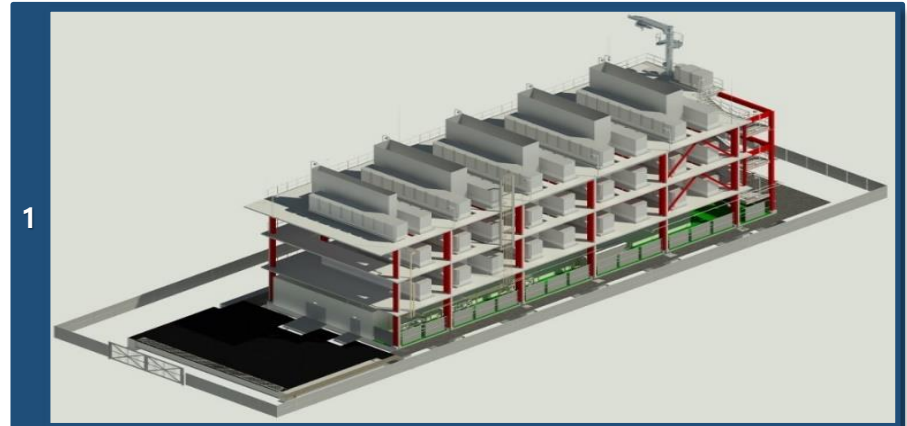
2 Paju Eco Energy Project (Feb. 2020 – Oct. 2020)  
- 9.8MW Fuel Cell, Paju, Korea / SKEC

Uiwang Fuel Cell Power Generation Project (Aug. 2020 – Jun. 2021)  
- 9.9MW Fuel Cell, Uiwang, Korea / SKEC

3 Honam Fuel Cell Power Generation Project (Sep. 2020 – Sep. 2021)  
- 15MW Fuel Cell, Yeosu, Korea / SKEC

Ulsan Daewon Green Energy Project (Oct. 2020 – Aug. 2021)  
- 19.8MW Fuel Cell, Ulsan, Korea / SKEC

Paju Eco Energy 2 Stage Project (Dec. 2020 ~ Nov. 2021)  
- 16.2MW Fuel Cell, Paju, Korea / SKEC



## SEMICONDUCTOR & INDUSTRIAL

Glotec Engineering has carried out industrial plant project that require high technologies involved with semiconductors, lithium-ion battery separators and ultra-pure water treatment facilities.

'M' China Ph-1 Project (Oct. 2018 – Dec. 2020)  
Lithium-ion battery separator, China / SKI

1 LiBS #12, 13 project (Aug. 2017 – Jan. 2019)  
Lithium-ion battery separator, Jeung-pyeong, Korea / SKI

2 SK Hynix M15 Ph-2 Project (Aug. 2021 – Dec. 2022)  
FAB & Wafer test C/R, UPW, PCW, WWT, Cheongju, Korea/SK Hynix(SKEP)

LiBS #10, 11 project (Aug. 2016 – Dec. 2017)  
Lithium-ion battery separator, Jeung-pyeong, Korea / SKEC

3 SK Hynix M16 Ph-2 FAB project (May. 2020 – Oct. 2022)  
FAB & Wafer test C/R, UT/OS, WWT, Icheon, Korea / SK Hynix (SKEP)





## SEMICONDUCTOR & INDUSTRIAL

### ■ Wuxi hynix project (Jan. 2017 – Jan. 2019)

FAB, Utility facility, CUB, WWT/WT Shop, Clean room extension,  
 Total floor space (new) : 294,990 M<sup>2</sup> ( 29.49 ha),  
 Building area(new) : 93,660 M<sup>2</sup> ( 9.36 ha),  
 Wuxi, China / SK Hynix (SKEC)



## SEMICONDUCTOR & INDUSTRIAL

### SKMR R&D Center Project (Oct. 2020 – Aug. 2021)

DIW, IA, Scrubber, N2, Vacuum System, Clean Room, WWT

Total floor space (new) : 8,560 M<sup>2</sup>

Floor : A/G 5<sup>th</sup> Floor, U/G 1st Floor

Sejong City, Korea / SK Materials





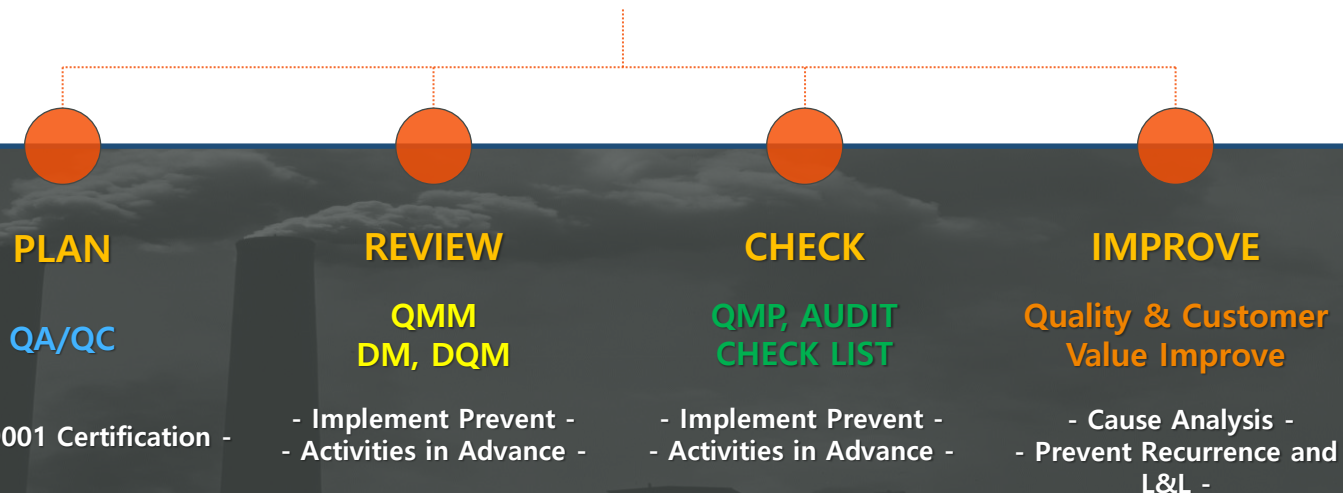
# QUALITY AND VALUE MANAGEMENT



Glotec Engineering move forward to improve design quality and project management in order to minimize errors and maximize customer values.

## Quality Control

Since 2009, Glotec Engineering has held ISO 9001 quality management certification and implementing in order to operate a faultless quality management and quality control assurance in all projects. It's also approaching its zero-defect design by quality control in each work steps as well as field engineering support through quality expert team.

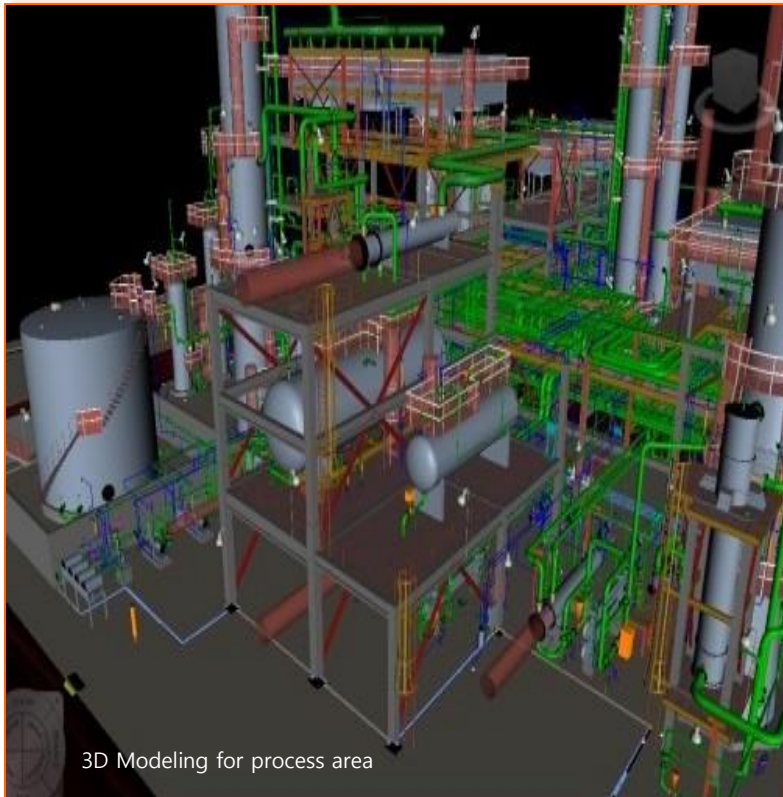


### Certifications

- ISO 9001 : 2015 /renewal
- Registered at International contractors association of Korea
- Registered at Korea engineering and consulting association

# DESIGN SOFTWARE & TOOLS

Glotec Engineering provides the optimal design and engineering tools, including latest design software. It uses the up-grade techniques such as concurrent 3D modeling with much more accuracy.



## COMMON

- AUTO CAD ADT Network Version  
PDMS, PDS/Micro-Station,  
SP-3D, BIM (RAVIT),  
SPR (Smart Plant Review)

## PROCESS

- ASPEN HYSYS : Process Simulation  
HTRI : Thermal Rating

## MECHANICAL

- Compress : Tower / Vessel Strength calculation  
B-JAC : Heat exchanger calculation

## PIPING

- CAESAR II : Piping Stress Analysis

## ELECTRICAL

- SPEL : Smart Plant / Electrical  
ETAP : Electrical transient analysis program

## INSTRUMENT

- Intools : Instrument data base & design  
SPI : Smart Plant / Instrumentation

## CIVIL STRUCTURE

- SAP2000 : Finite Element Analysis of Structures  
STADD Pro : Finite Element Analysis of Structures  
MIDAS GEN : Finite Element Analysis of Structures  
InLOAD : Site Grading  
iAFES : Foundation Analysis  
PEDAS : Foundation Analysis  
TEKLA : 3D Modeling



## Business license

**사업자등록증**  
(법인사업자)  
등록번호 : 108-81-59497

법인명 (단체명) : (주) 글로텍엔지니어링  
대표자 : 김균

개업연월일 : 2003년 03월 07일 법인등록번호 : 110111-2733213  
사업장소재지 : 서울특별시 금천구 가산디지털1로 171, 12층 1201호-1218호, 13층 1301호-1318호(가산동, 가산 에스케이 브이원 센터)  
본점소재지 : 서울특별시 금천구 가산디지털1로 171, 12층 1201호-1218호, 13층 1301호-1318호(가산동, 가산 에스케이 브이원 센터)  
사업의종류 : ☒ 정보통신업 ☒ 컴퓨터프로그래밍 및 시스템 통합구축

발급사유 : 정정

2020년 04월 24일

금천세무서장

## Declaration of engineering business

발급번호 : 20210707-SG-00000178924

**엔지니어링사업자 신고증**

명칭	(주)글로텍엔지니어링		
대표자성명	김균	생년월일	
소재지	서울특별시 금천구 가산디지털1로 171 가산 에스케이 브이원센터 12,13층	전화번호 (FAX, E-Mail)	02-6345-7000 02-6345-7040
엔지니어링업	신고번호	제 E-01-000259 호	
	기술부문	화학 등	6 개 부문
엔지니어링 컨설팅업	전문분야	화학 등	9 개 분야
	신고번호		
엔지니어링 컨설팅업	기술부문	등	개 부문
	전문분야	등	개 분야
신고연월일	2008-12-17		

「엔지니어링산업 진흥법」 제21조제1항 및 같은 법 시행규칙 제7조에 따라 위와 같이 신고하였음을 증명합니다.

2021년 07월 07일

한국엔지니어링협회장

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## Certificate of membership (Korea Plant Industries Association)

**KOPIA** KOREA PLANT INDUSTRIES ASSOCIATION

**CERTIFICATE OF MEMBERSHIP**

**회원증**

회원번호: 플협 제 19-417호  
Register No.

업체명: (주)글로텍엔지니어링 / Glotec Engineering co., Ltd  
Name of Member

대표자: 김균 / Kim Gyun  
President

상기 업체는 본회 회원이므로 이 증서를 드립니다.  
The membership is granted in accordance with the act and articles of this association.

2019년 06월 14일

한국플랜트산업협회장

## Certification of international contractor

## KS Q ISO 9001

## Certificate of R&D center

■ 해외건설촉진법 시행규칙 [별지 제3호서식] <개정 2014. 2. 14> (양식)

제 645 호  
No. 645

**해외건설업 신고확인증**  
(Certification of International Contractor)

상 호 : (주)글로벌엔지니어링  
(Name of Company)

대 표 자 : 김군  
(Name of Company Representative)

법 인 등 록 번 호 ( 생 년 월 일 ) : [ 110111-2733213 ]  
[Corporation registration number(date of Birth)]

신 고 업 종 : 건설엔지니어링업  
(Type of Business) (Engineering)

주된 사무소의 소재지 : 서울특별시 금천구 가산디지털1로 171, 12층13층  
(가산동, 가산에스케이비원센터)  
(171 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea)

「해외건설촉진법」 제6조 제1항에 따라 해외건설업의 신고를 하였음을 증명합니다.  
This is to certify that the above mentioned company is an enrolled international contractor in compliance with Clause 1 under Article 6 of Overseas Construction Promotion Act.

2011년 03월 11일

**해외건설협회장**  
(Chairman of International Contractors Association of Korea)

해외건설업신고사항(상호, 대표자, 영업소소재지)이 변경된 경우 사유발생일로부터 30일 이내 반드시 변경신고를 하시기 바랍니다.

210mmx297mm [포트용지(1종) 120g/㎡]



Registration no. KQ 091243 IAF Code 34  
First issue date 2009-12-21 Issue date 2021-12-21  
Expiry date 2024-12-20 Reissue date 2021-12-17

Quality Management System Certificate

**KS Q ISO 9001:2015/ISO 9001:2015**

We certify that the Quality Management System of the Organization:

**Glotec Engineering Co., Ltd.**

Is in compliance with the standard KS Q ISO 9001:2015/ISO 9001:2015 for the following products/services:

**Design, development and engineering service of civil, building, plant(refinery, petrochemistry, general chemistry, power plant, environmental and industrial equipment) at overseas and domestic site and electrical works**

General Manager  
Seung-Chan Lee

Maintenance of the certification is subject to continual surveillance audit and dependent upon the observance of Kiwa Korea's certification criteria.

**Kiwa Korea Ltd.**  
411, SJ Technoville,  
278, Beotkkot-ro,  
Geumcheon-gu,  
Seoul, Korea  
Tel +82.2.3397.0101  
Fax +82.2.3397.0105  
URL: www.kiwa.kr

**Certified Sites**  
12-13 F. Gasan SK V1center, 171, Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea



[등록번호: vlpB-mmAN-OFCE-cYLy] [발급일자: 2018년 10월 31일]

제 2012112475 호

## 기업부설연구소 인정서

- 연구소명: (주)글로벌엔지니어링 R&D Center  
[소속기업명: (주)글로벌엔지니어링]
  - 소재지: 서울특별시 금천구 가산디지털1로 171  
1201호 ~ 1218호 (가산동) 회실 중 1218호 위치
  - 신고 연월일: 2018년 10월 29일  
(최초인정일: 2012년 8월 17일)
- ※ 변경내역: 소재지 변경

과학기술정보통신부

「기초연구진흥 및 기술개발지원에 관한 법률」 제14조의  
2제1항 및 같은 법 시행령 제27조제1항에 따라 위와 같이  
기업부설연구소로 인정합니다.






2018년 10월 30일

**한국산업기술진흥협회장**




※ 한국산업기술진흥협회에서 발급되었으며 "http://www.RND.or.kr"에서 "문서번호"를 입력하면 등록코드 및 유효성을 확인할 수 있습니다.



Construction technical consultancy license	Certification of licensed architect	Firefighting supervision license											
<p>등록번호 : 서울-2-653호</p> <p><b>건설기술용역업 등록증</b></p> <p>상호 또는 법인명 : (주)글로벌엔지니어링</p> <p>서울특별시 금천구 가산디지털1로 171, 12층</p> <p>영업소의 소재지 : 1201~1218호, 13층 1301호~1318호(가산동, 가산 에스케이 브이원 센터)</p> <p>소속 국가명 : 대한민국</p> <p>성명 (대표자) : 김균 생년월일 : 19 1년 1월 1일</p> <p>전문분야(세부분야) : 설계·사업관리 (건설사업관리)</p> <p>등록연월일 : 2020년 6월 10일</p> <p>「건설기술 진흥법」 제26조제1항에 따라 건설기술용역업자로 등록하였음을 증명합니다.</p> <p>2020년 6월 10일</p> <p>서울특별시 </p>	<p>■ 건축사법 시행규칙[별지 제39호서식] &lt;개정 2020. 6. 18&gt; (양 쪽)</p> <p>제 2022-금천구-엔지니어링사업자소속건축사-2 호</p> <p><input checked="" type="checkbox"/> 엔지니어링사업자 소속 건축사 신고확인증</p> <p><input type="checkbox"/> 건설사업자 소속 건축사 신고확인증</p> <table border="1"> <tr> <td>상호 또는 명칭</td> <td colspan="2">(주)글로벌엔지니어링</td> </tr> <tr> <td>소재지</td> <td colspan="2">서울특별시 금천구 가산디지털1로 171 SKV1센터 12~13층</td> </tr> <tr> <td rowspan="2">신고인 (건축사)</td> <td>성명</td> <td>생년월일 19 년 월 일</td> </tr> <tr> <td>황순태</td> <td>자격번호 제 6521호</td> </tr> </table> <p><input checked="" type="checkbox"/> 「엔지니어링산업 진흥법」 제21조제1항에 따라 신고한 엔지니어링사업자 위 건축사는</p> <p><input type="checkbox"/> 「건설산업기본법」 제2조제7호에 따른 건설사업자</p> <p>에 소속한 건축사로서 「건축사법 시행규칙」 제16조1항에 따라 신고를 하였음을 확인합니다.</p> <p>2022년08월01일</p> <p>서울특별시 금천구청장 (인) </p>	상호 또는 명칭	(주)글로벌엔지니어링		소재지	서울특별시 금천구 가산디지털1로 171 SKV1센터 12~13층		신고인 (건축사)	성명	생년월일 19 년 월 일	황순태	자격번호 제 6521호	<p>제 2020-01-00060 호</p> <p><b>소 방 시 설 업 등 록 증</b></p> <p>업 종 : 일반소방시설설계업(전기, 기계)</p> <p>상 호(명칭) : 주식회사 글로벌엔지니어링</p> <p>대 표 자 : 김균 생년월일 : 19</p> <p>영업소 소재지 : 서울특별시 금천구 가산디지털1로 171, 12층 1201호~1218호, 13층 1301호~1318호(가산동, 가산 에스케이 브이원 센터)</p> <p>「소방시설공사업법」 제4조 제1항에 따라 소방시설설계업이 위와 같이 등록되었음을 증명합니다.</p> <p>2020년 4월 17일</p> <p>서울특별시 </p>
상호 또는 명칭	(주)글로벌엔지니어링												
소재지	서울특별시 금천구 가산디지털1로 171 SKV1센터 12~13층												
신고인 (건축사)	성명	생년월일 19 년 월 일											
	황순태	자격번호 제 6521호											

210mm× 297mm(보존용지(1종) 120g/m)

## License of Elec. Power Design & Engineering



제 서울B-2-585호

특허 (R)


### 설 계 업 등 록 증

- 회 사 명 : (주)글로텍엔지니어링
- 소 재 지 : 서울시 금천구 가산디지털1로 171, 12층, 13층  
(가산동, 가산에스케이브이원센터)
- 대 표 자 명 : 김균
- 법인등록번호 : 110111-2733213
- 설계업의종류 : 전문1종 설계업
- 등록연월일 : 2022년 5월 20일
- 영 업 범 위 : 전력시설물의 설계도서 작성

「전력기술관리법」 제14조 제1항 같은 법 시행규칙 제25조 제3항에 따라 설계업 등록을 하였음을 증명합니다.

2022년 5월 20일

서울특별시



## Certification of Excellent ESG



NO 2022-137

### Certificate of Excellent ESG

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Company GLOTEC ENGINEERING CO.,LTD.

Representative Kim Gyun

Expiration August, 22, 2024

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We hereby certify that the company named above is a SME(Small and Medium Enterprise) that fulfills corporate social responsibility of the global standard, based on the 2021 ESG implementation of examination conducted by KCCP(Korea Commission for Corporate Partnership).



KCCP  
Korea Commission for Corporate Partnership



# ※ Certified as a Main-Biz Company from Korean Ministry of SMEs



제 210104-02110 호

## 경영혁신형 중소기업(Main-Biz) 확인서

업 체 명 : (주)글로텍엔지니어링

대표자명 : 김균

주 소 : 서울 금천구 가산디지털1로 171  
1201-1218호, 1301-1318호 (가산동)

유효기간 : 2021.09.09 ~ 2024.09.08

위 업체는 경영혁신형 중소기업 육성사업에 의해  
선정된 경영혁신형 중소기업(Main-Biz)임을 확인  
합니다.



2021 년 09 월 09 일

중소벤처기업부장



# ※ Company Credit Rating



## CREDIT RATING

DNA PLUS  
(주)글로텍엔지니어링 | 108-81-59497 | 김균 | ECC202204005350

### 기업정보

기업체명	(주)글로텍엔지니어링 (Glotec Engineering Co.,Ltd.)		
사업자등록번호	108-81-59497	법인번호	110111-2733213
본사주소	macn서울특별시 금천구 가산디지털1로 171, 12층, 13층 (가산동)		
대표자			
전화번호	02-6345-7015		
산업분류	기타 엔지니어링 서비스업		
설립일	2003년 03월 07일		
재무결산일	2021년 12월 31일	보고서 최종수정일	2022년 04월 12일
신용등급 유효기간	2022년 04월 12일~2023년 04월 11일		

신용등급
<b>BBB+</b>
현금흐름등급

### 신용등급이력

결산기준일	정기평가			하반기평가			Watch 등급
	평가일	신용등급	현금흐름등급	평가일	신용등급	현금흐름등급	
2021/12/31	2022/04/12	BBB+	C+	-	-	-	<b>정상</b> 2022년04월10일 현재
2020/12/31	2021/04/12	BBB-	A	2021/08/18	BBB-	A	
2019/12/31	2020/04/10	BBB-	A	2020/08/26	BBB-	A	

### 주요 경영 현황

주요제품	경영정보	판매처(%)	주요주주(%)
산업플랜트설계용역	종업원 468 명	에스케이건설(주) 70	
반도체설계용역	기업규모 중기업	롯데건설(주) 6	
발전에너지설계용역	기업형태 외감	현대엔지니어링(주) 5	
임대수입	자본금 350 백만원	(주)한국가스기술공사 3	
	주거래은행 KEB하나은행 구로디지털단지점	(주)원익머트리얼즈 2	

### 주요 재무 현황

결산기준일	총자산	매출성장률	이익성장률	영업이익	순이익	영업이익률	순이익률
2021/12/31		-6.7					
2020/12/31	1.3		7.7	5.4	84.5	229.9	60.1
2019/12/31	24.2		8.6	6.5	166.5	252.8	59.9

### ■ Report of E-Credible (2022)

- Credit Rating : BBB+

- Watch Rating : Normal

( Based on Apr. 13<sup>th</sup> , 2022)

## ※ Great Culture Built with our Customers



We, Glotec Engineering aim to cultivate a customer – centered corporate culture where the top priority is placed on our customers and employees.





## SUSTAINABLE GROWTH

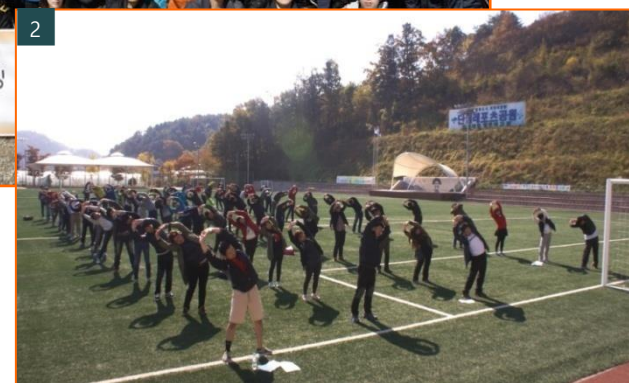
Glotec engineering pursues sustainable growth through strong corporate culture with customers to build great work place, great life.



- 1 Awarded a Presidential Commendation for Korea Engineering and Consulting Association (Oct. 2013)
- 2 Team presentation to kick off with technical review for a project.
- 3 Technical Service (MOU) signing ceremony ( July. 2020 Korea Gas Technology Corporation)

# SUSTAINABLE GROWTH

- 1 An outdoor activity like a hiking to communicate closely.  
(April, 2010)
- 2 Strengthened the teamwork through the company track meet.  
(October, 2013)
- 3 Promoted strong fellowship in the year-end party.  
(December, 2013)
- 4 Event for the 15<sup>th</sup> anniversary of the founding.  
(May, 2018)





## CHALLENGE AND ACHIEVEMENT

With our challenge, innovation and passion,  
we are creating a better world, better future.

