

# 福麟



**FUHBIC TOENEC**

系統整合股份有限公司

**FUHBIC TOENEC CORP.**

創新 Innovation · 智慧生活 Living Intelligent

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- 1 Company Overview
- 2 FUHBIC e-office BA System Integration Platform
- 3 Factory Facility Monitor Control System ( FMCS )
- 4 BIM 3D Electromechanical Engineering Design & Construction Drawing
- 5 Mechanical and Electrical Engineering & Weak Electricity Engineering Project

# 1 Company Overview

Established 1990

Capital TWD \$130,000,000

# of Employees Around 200 employees (GROUP Total)

Main Business

- ◆ Mechanical, Electrical & Plumbing(MEP)
- ◆ Installation and integration of weak electrical equipment in smart shopping malls and smart office buildings (BAS)
- ◆ BIM 3D Design & Drawing (BIM)

Group Companies

- ◆ Shin Kong Group
- ◆ Dayu Mechanical and Electrical Co., Ltd.
- ◆ FUHBIC Internet (Shanghai) Co., Ltd.
- ◆ FUHBIC Trading (Shanghai) Co., Ltd.
- ◆ FUDIN Electromechanical (Chengdu) Co., Ltd.
- ◆ Shangda Property Management (Chengdu) Co., Ltd.



## ■ CORE BUSINESS

### FMCS

- FMCS Monitoring System Integration
- MEP & CR Monitoring System
- GMS Monitoring System
- POWER SCADA Monitoring System

### MEP

- Electrical Equipment Installation
- Water Supply & Drainage Equipment Installation
- HVAC Installation
- Fire Protection Equipment Installation
- Weak Current Equipment Installation

### BAS

- Central Monitoring System Integration
- CCTV Monitoring System
- Telephone & Network System
- Access Control System
- Parking Management System
- Video & Broadcasting System

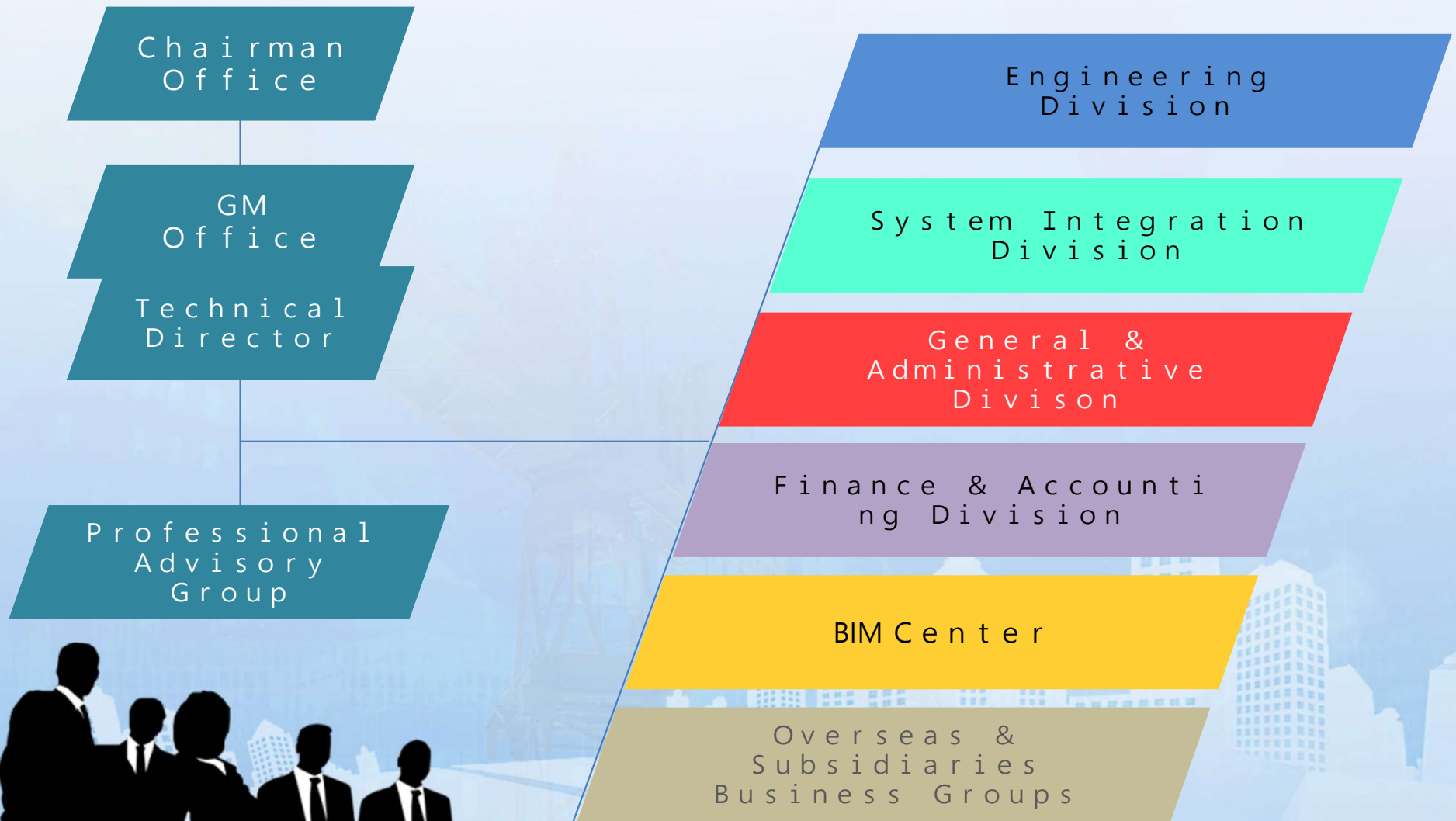
### BIM

- Visualize Communication
- Conflict Check
- Space Optimization
- Work Process Reengineering

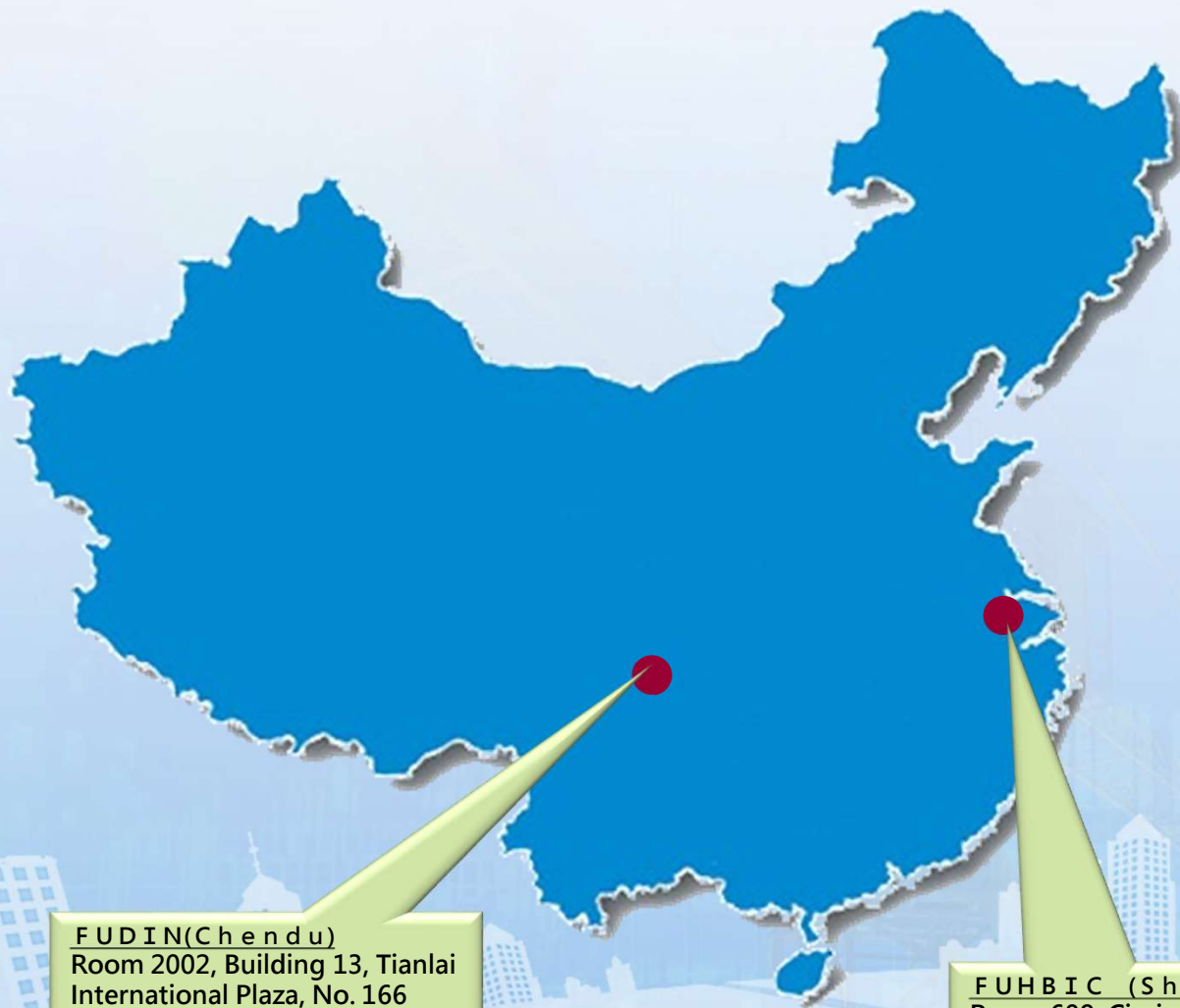




# ■ Org Chart



# ■ Operation Sites



FUDIN(Chendu)  
Room 2002, Building 13, Tianlai  
International Plaza, No. 166  
Wenquan Avenue, Wenjiang  
District, Chengdu  
Tel: +86-28-8278-2850  
<http://www.fuhdin.com>

FUHBIC (Shanghai)  
Room 608, Cimic Building, 800  
Shangcheng Road, Pudong New  
Area, Shanghai, China  
Tel: +86-21-5080-2226~29  
<http://www.fuhbic.com.cn>

Hsinchu Office  
36 Dongsheng Road,  
Hsinchu City  
Tel: 03-575-2036

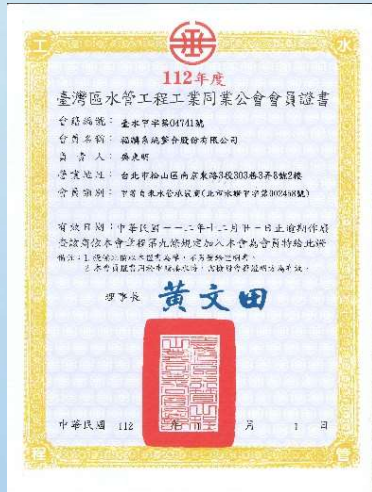
Headquarter  
5th Floor, No. 8, Lane 3, Lane 303,  
Section 3, Nanjing East Road, Taipei  
Tel: 02-2718-0707  
<http://www.fuhbic.com.tw>

Kaohsiung Office  
11F.-1, No. 198, Bo'ai 2nd  
Rd., Zuoying Dist.,  
Kaohsiung City  
Tel: 07-550-7363



# L I C E N S E S

Grade A Water Pipe Contractor Certificate



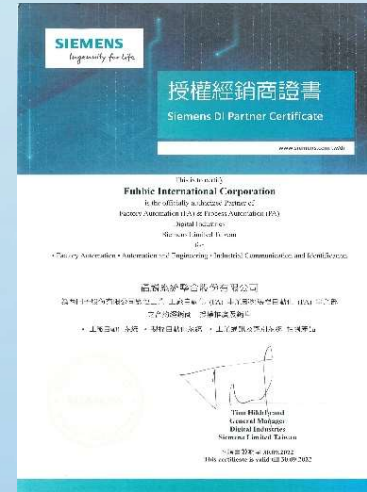
Electrical Engineering Association Certificate



HVAC Association Certificate



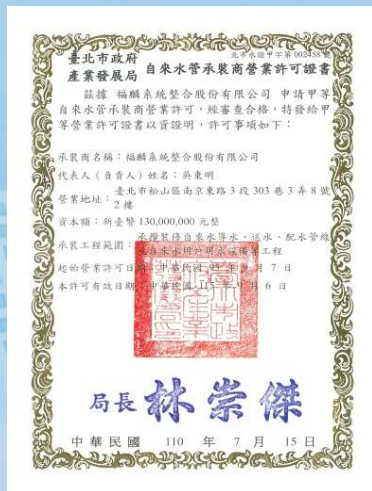
Siemens Partner Certificate



ISO 9001 : 2015



Grade A Water Pipe Contractor Certificate



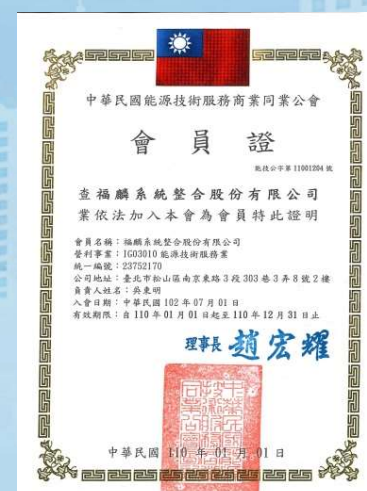
Grade A Electrical Appliances Certification



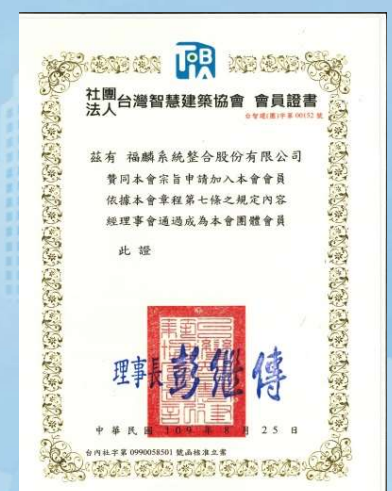
HVAC Association Certification



Energy Technology Service Association Certificate



Taiwan Intelligent Building Association





# ■ Important performance

## Corporate Headquarters & Office Building

- Shin Kong Life Insurance Skyscraper
- Shin Kong Life Insurance Nangang Software Park Building
- Transglobe Life –Taipei Headquarter
- O-BANK Headquarters building
- Quanta Computer Inc. QRDC
- The Great Taipei Gas Corporation

## High-tech Factory

- ProMOS Zhuke & Zhongke Factory
- PSMC 12-inch wafer fabs
- KINGRAY 12-inch wafer fabs
- Macronix Zhuke Factory
- MTTW 12-inch wafer fabs
- SMIC(Shanghai)
- HHGrace(Shanghai)
- UBRIGHT
- Shinkong Materials Technology Co.

## Shopping Mall & Hotel

- Shin Kong Shopping Mall
- All branches in the province and China
- Le Meridien Taipei
- Grand MAYFULL Hotel
- Denwell Xinzhuang dinning & Wedding Banquet Building
- Taroko Park Kaohsiung

## Office Building & Hotel

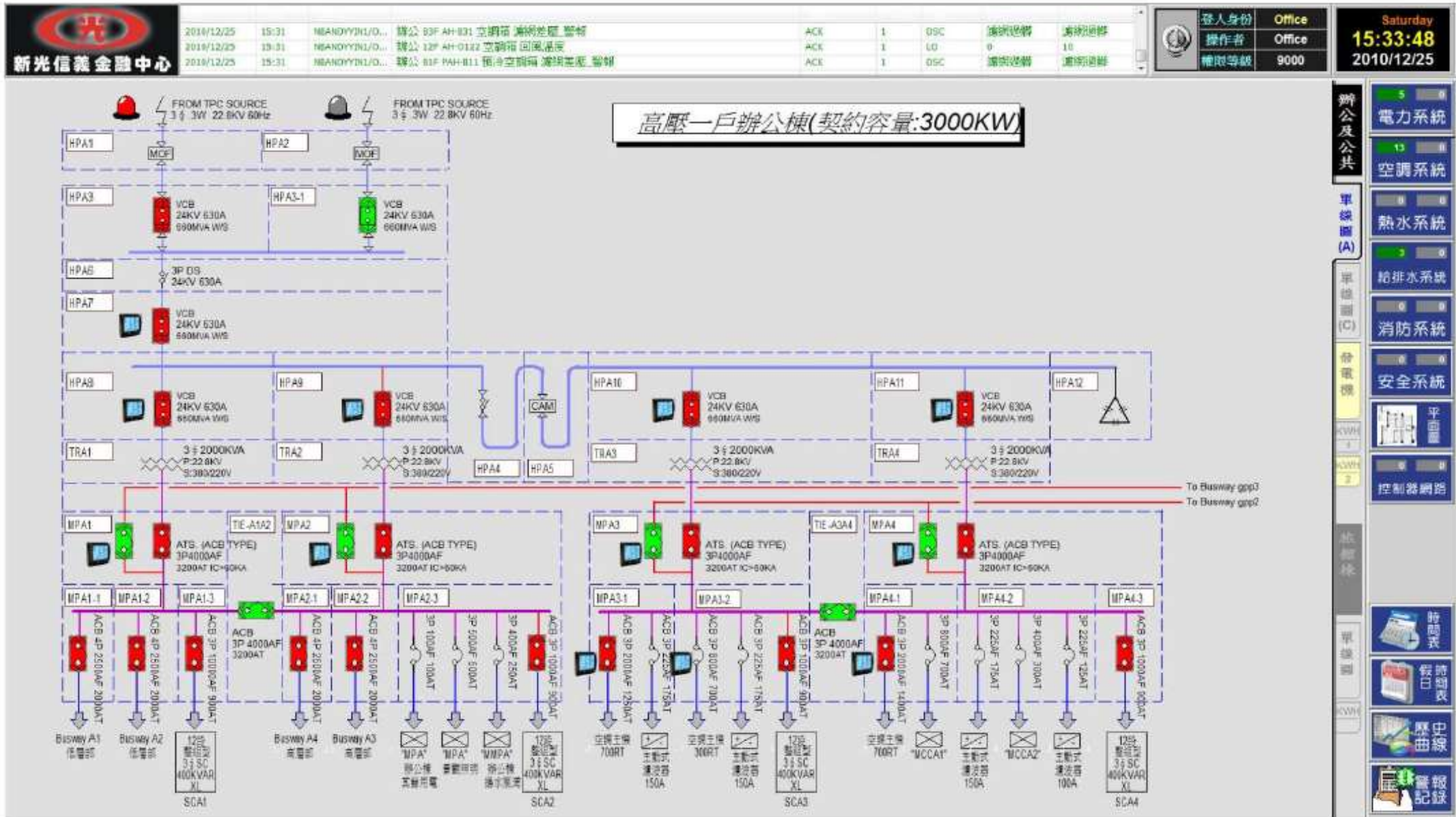
- Shin Kong Wu Ho-Su Memorial Hospital
- Shin Kong Xinyi Jing Shi Forti
- Shin Kong Rui' an Jing Shi Forti
- SciVision Biotech Inc.
- Production headquarters building
- Shin Kong Life Insurance Jieshibao base A new construction





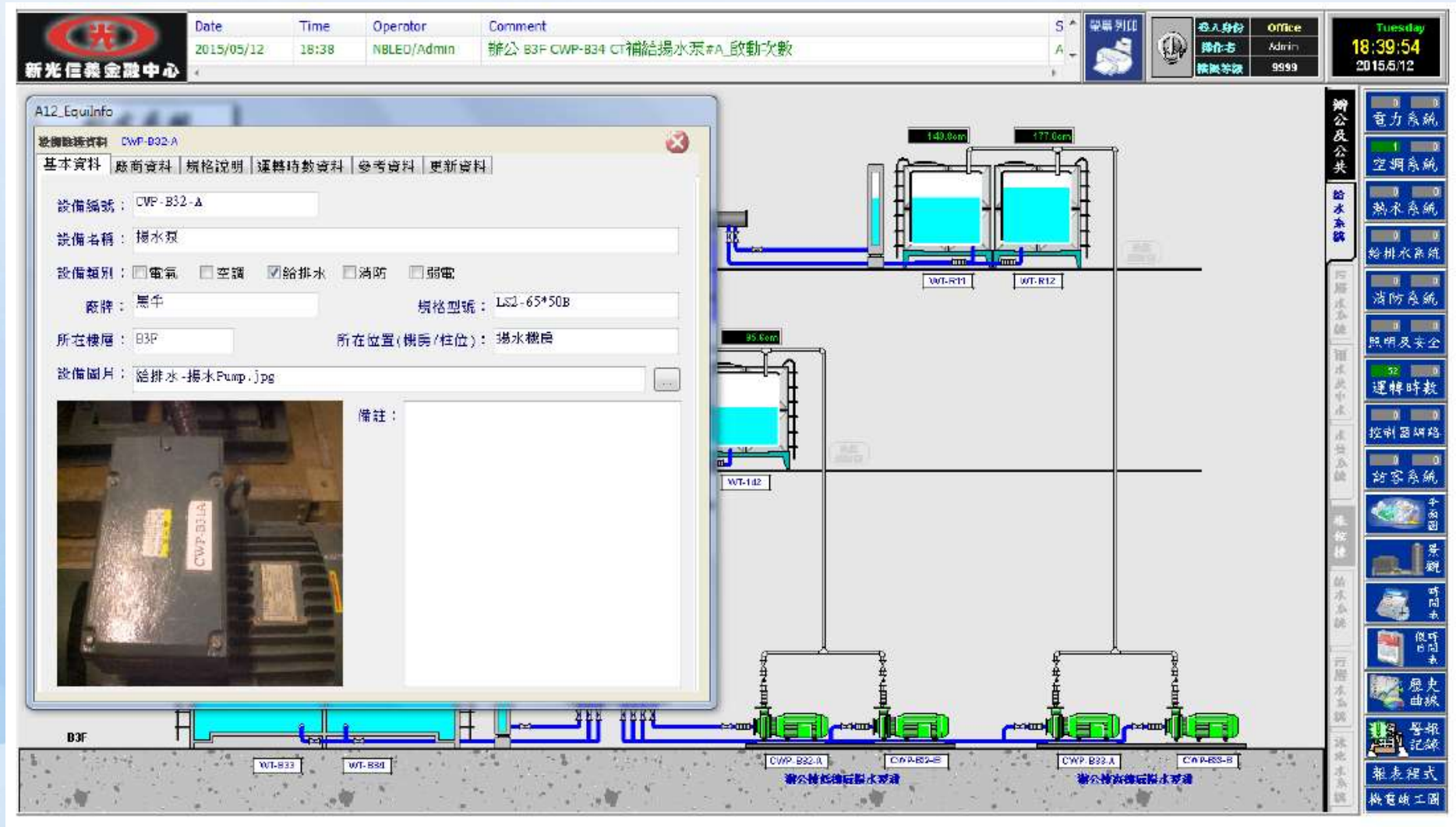


# Shin Kong Hsinyi A12 Building BA System Integration Platform






Reference Project :  
Shin Kong Hsinyi A12 Building MEP Equipment Maintenance System




# Shin Kong Hsinyi A12 Building As-built drawing Management System



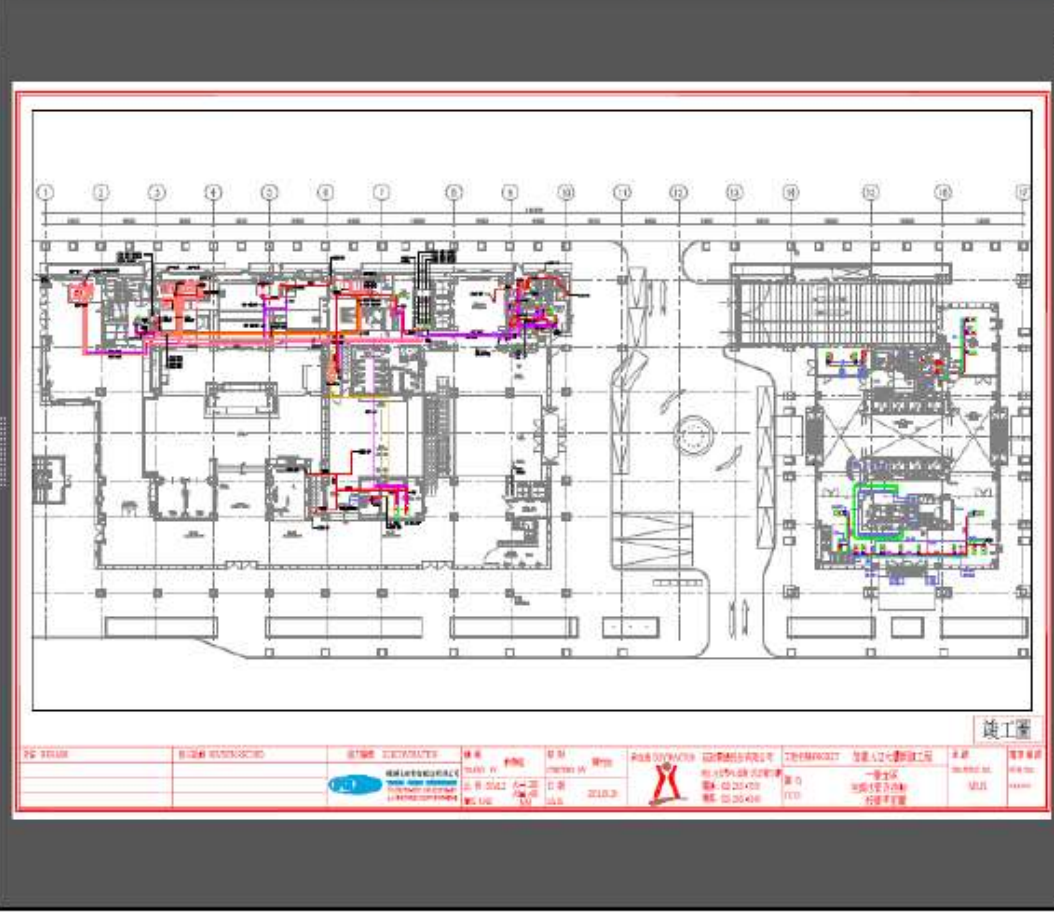
新光信義金融中心


Date	Time	Operator	Comment
2015/05/12	18:38	NBLEO/Admin	辦公 B3F CWP-B34 CT補給揚水泵 #A_啟動次數




圖層

- M3.01\_一層空調水管設備平面圖
- M3.02\_二層空調水管設備平面圖
- M3.03\_三層空調水管設備平面圖
- M3.04\_四層空調水管設備平面圖
- M3.05\_五層空調水管設備平面圖
- M3.06\_六層空調水管設備平面圖
- M3.07\_七層空調水管設備平面圖
- M3.08\_八層空調水管設備平面圖
- M3.09\_九層空調水管設備平面圖
- M3.10\_十層空調水管設備平面圖
- M3.11\_十一層空調水管設備平面圖
- M3.12\_十二層空調水管設備平面圖





圖層列印



登入身份  
操作者  
權限等級

Office  
Admin  
9999

Tuesday  
18:41:27  
2015/5/12

### 機電竣工圖面

圖面名稱	圖面狀態
M01 電力系統	0
M02 空調系統	1
M03 熱水系統	0
M04 給排水系統	0
M05 消防系統	0
M06 照明及安全	0
M07 運轉時數	32
M08 控制系統	0
M09 防盜系統	0
M10 平面圖	0
M11 景觀	0
M12 時間表	0
M13 假日表	0
M14 歷史紀錄	0
M15 警報記錄	0
M16 報表程式	0
M17 機電竣工圖	0



## Reference Project : BIM Integration Function

新光信義金融中心

Date	Time	Operator	Comment
2015/05/12	18:38	NBLEO/Admin	辦公 B3F CWP-B34 CT補給湯水泵 #A_啟動次數

變更列印

登入身份: Office  
操作者: admin  
權限等級: 9999

Tuesday 18:47:15 2015.5.12

Home Markup & Measure Tools Resources

3D 視圖 (3D)

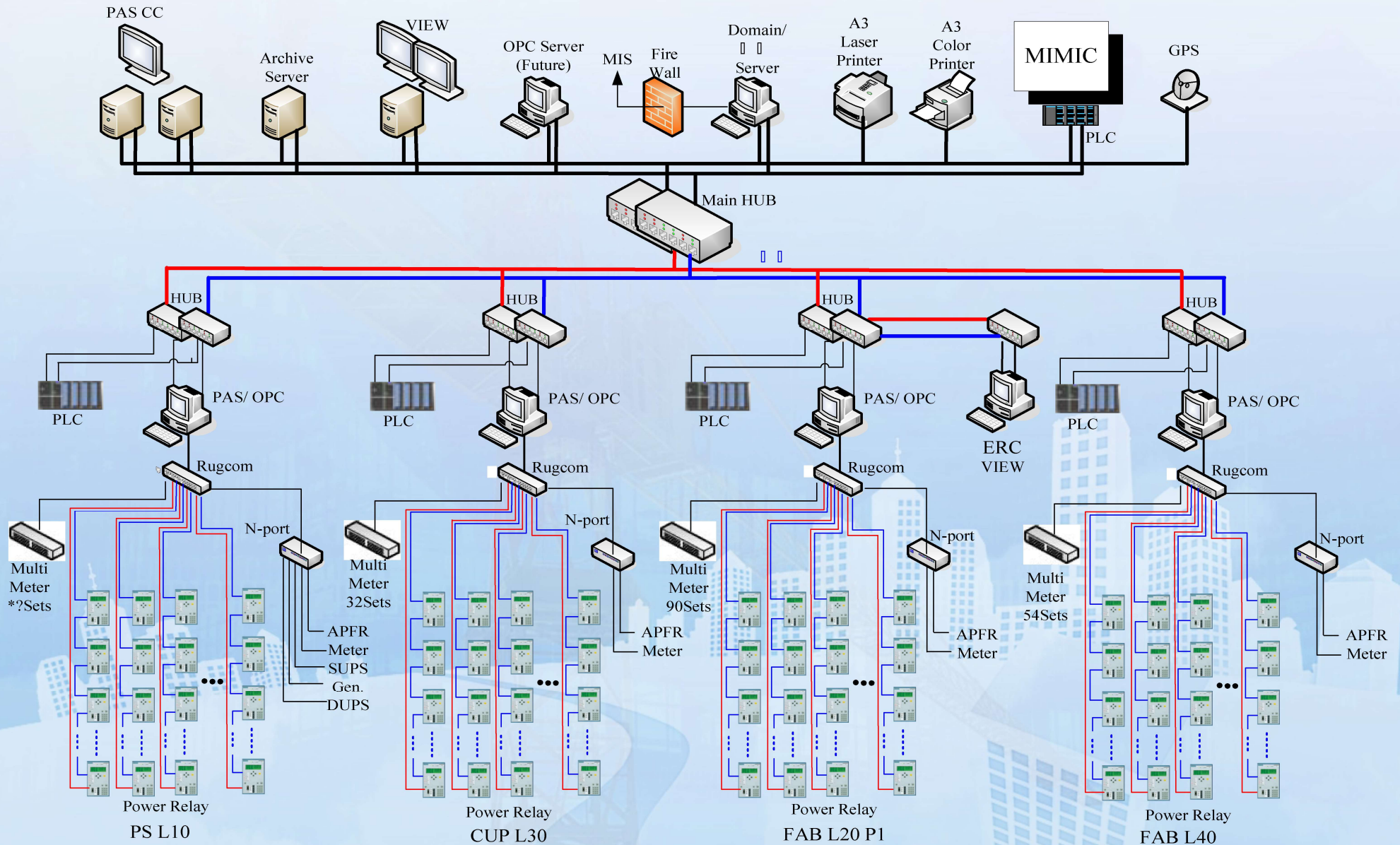
105

1 of 1

建築資訊模型

電力系統  
空調系統  
熱水系統  
給排水系統  
消防系統  
照明及安全  
運轉呼數  
控制室網絡  
防盜系統  
平面圖  
景觀  
時間表  
假時日表  
歷史曲線  
警報記錄  
報表格式  
機電竣工圖

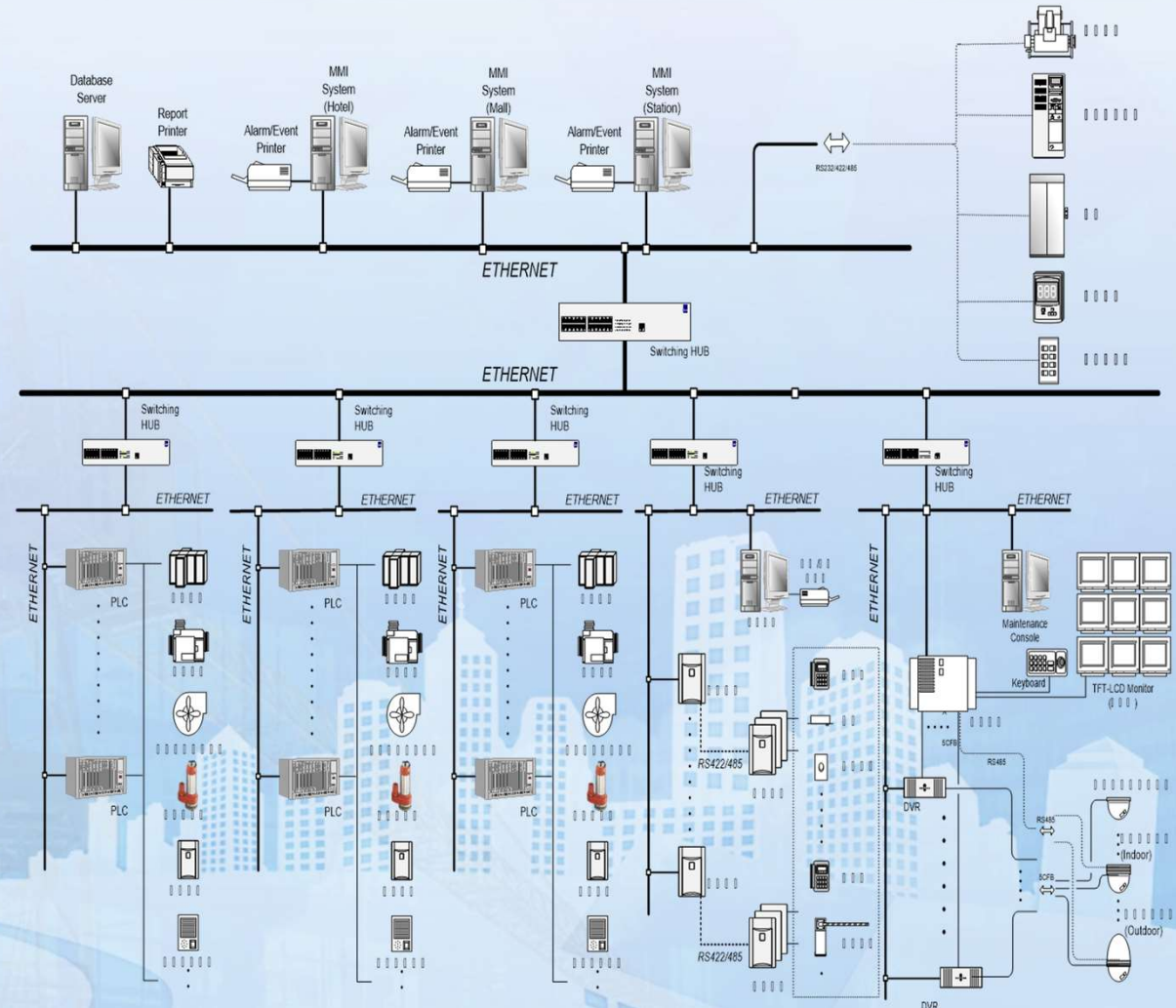
# Factory Facility Monitor Control System (FMCS)





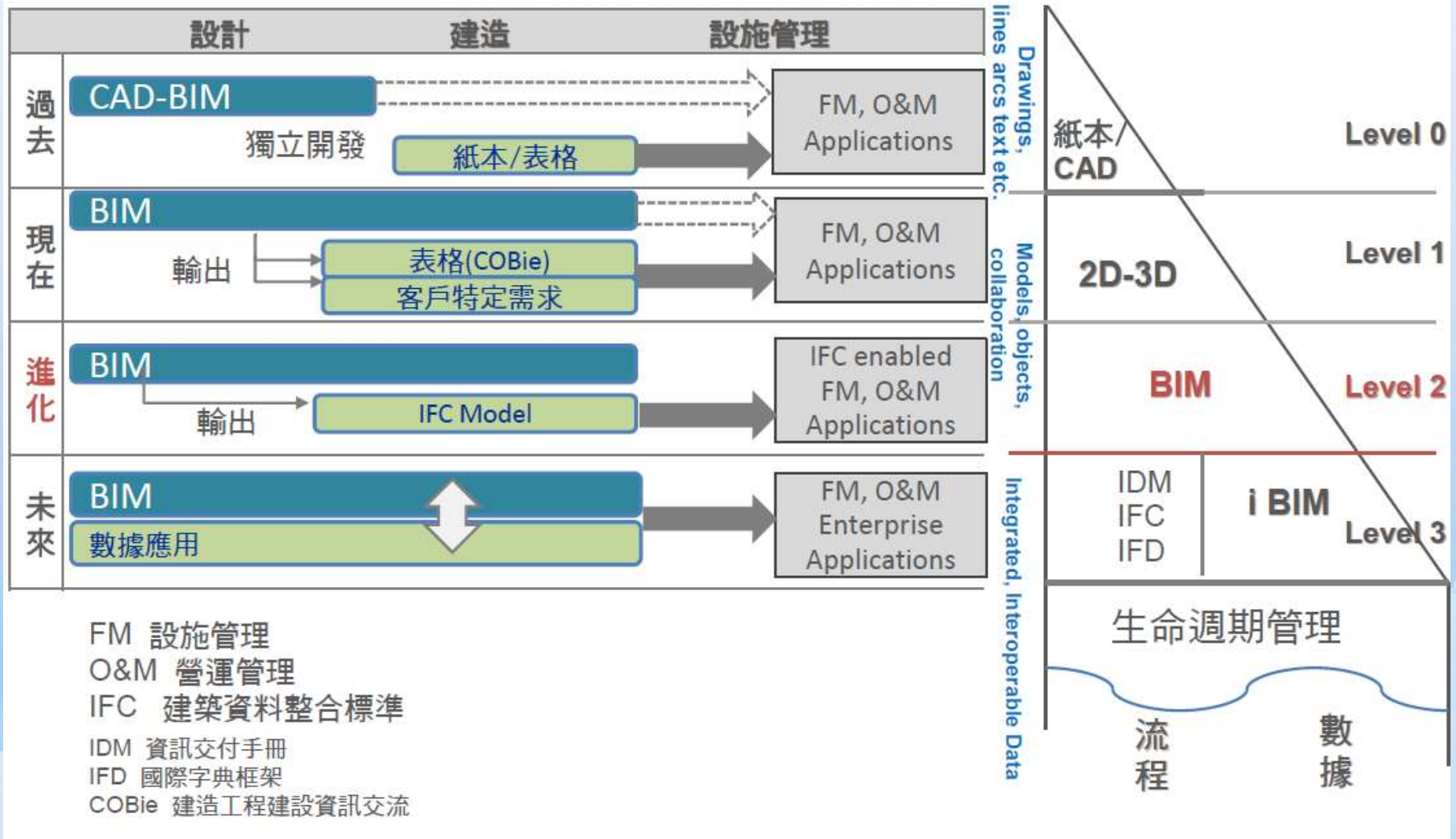
# FMCS Central Monitor System Scope

- Process Monitoring System
- POWER SCADA Monitoring System
- Emergency generator Monitoring System
- D-UPS & S-UPS Continuous Power Monitoring System
- Clean Room Monitoring System
- Ultra Pure Water Room Monitoring System
- MEP Room Monitoring System
- Chemical Room Monitoring System
- Gas Safety (GMS) Monitoring System
- Sewage Treatment Monitoring System
- Fire Alarm & Smoke detection Monitoring System
- Sanitary Water supply & Drainage System
- Report System
- Maintenance Support
- MIS Support System



# BIM 3D Electromechanical Engineering Design & Construction Drawing

**2D CAD → 3D → BIM (應用於設施全生命週期管理) → i BIM**







Creativity Design • Image Formation • Analog Analysis • Intelligent Control

## Using BIM as a building integration management tool to greatly improve manamement efficiency and quality

The electromechanical pipeline design is the most complicated part of the construction project. Through the BIM construction and software inspection, the conflict between the building and the structure and the electromechanical pipeline can be checked. The visualized method can also be used to review the better-conceived configuration plan and further improve the space. Net height and room for improvement.





Creativity Design • Image Formation • Analog Analysis • Intelligent Control

## Create 3Dimensions

Using Digital information to simulate and synchronize integration, to complete detailed design drawing



Reference legend





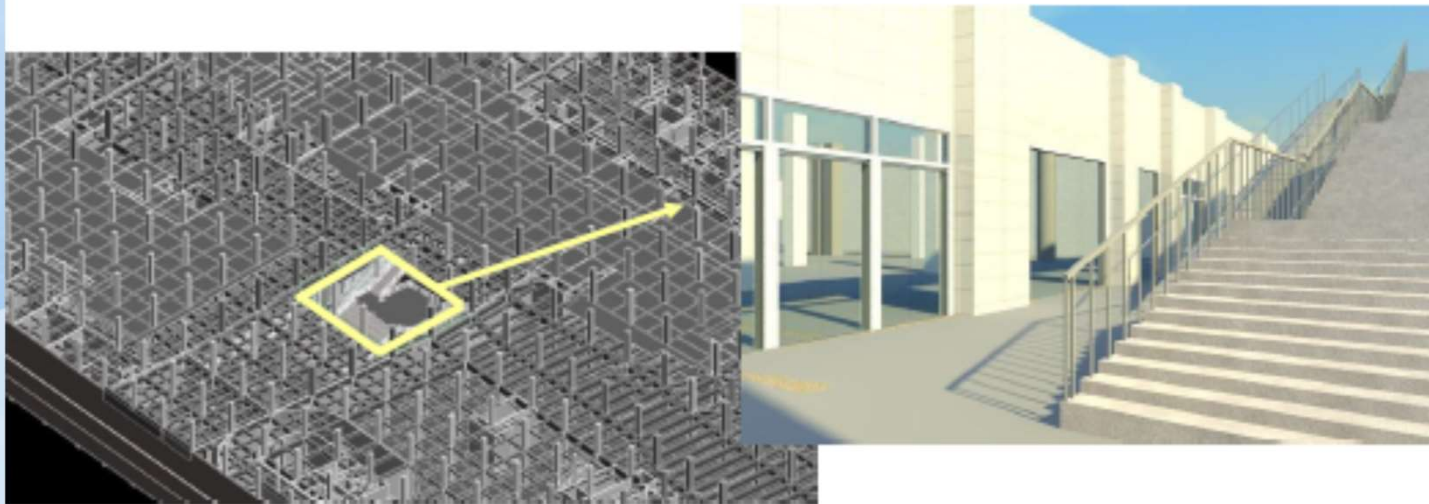


Creativity Design • Image Formation • Analog Analysis • Intelligent Control

## Visualize

Using 3D Simulation to determine material use and appearance

### 實際案例：新光三越溫江商業大樓1F BIM模擬圖

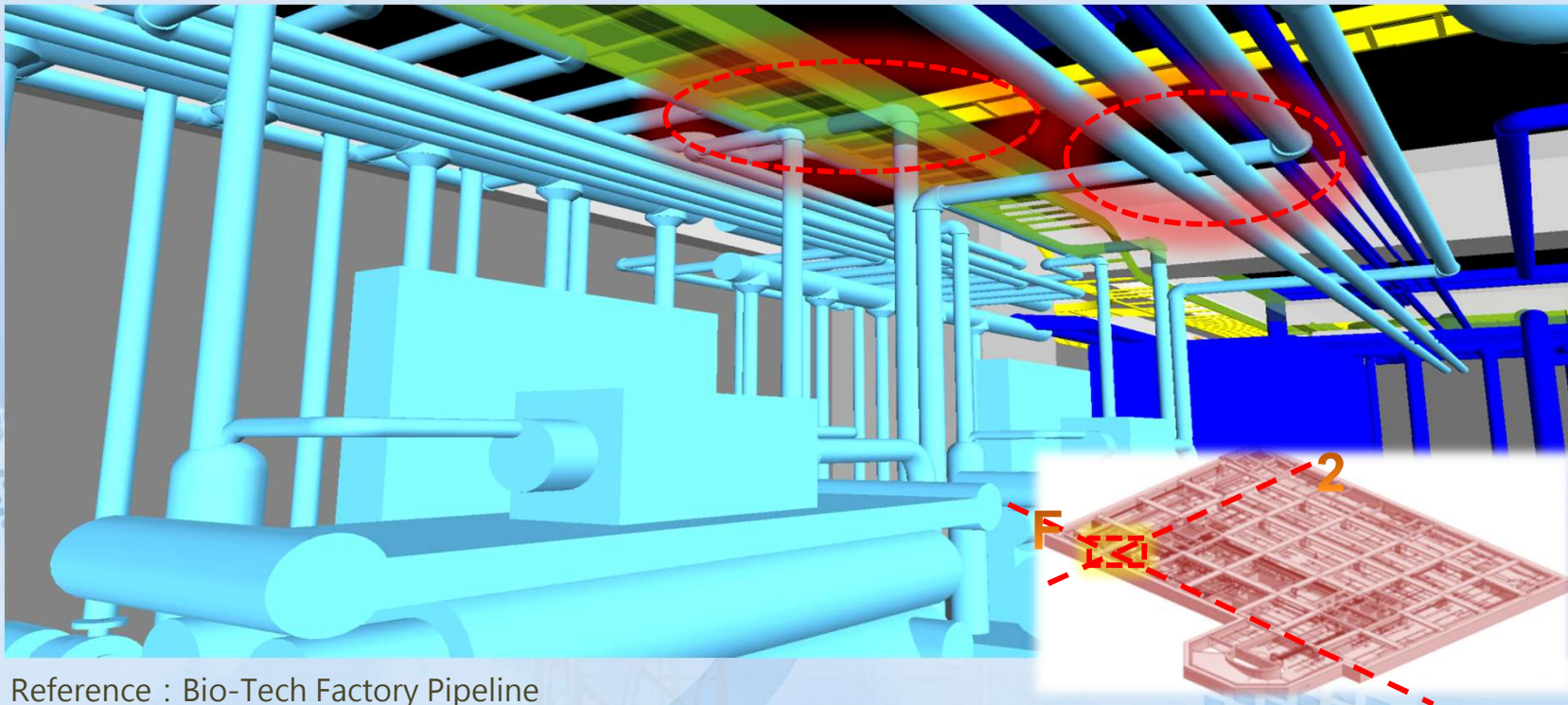




Creativity Design • Image Formation • Analog Analysis • Intelligent Control

## Simulate & Analysis

Pipeline conflict review with 3D simulation



Reference : Bio-Tech Factory Pipeline





Creativity Design • Image Formation • Analog Analysis • Intelligent Control

## Deliver High Quality Engineering Project Planning

After completing the BIM model, we provide the 2D construction drawing

**Deliver 高品質工程計畫**

**BIM 模型建置完成後，輸出2D施工圖說。**

**實際案例：東遠精技華亞企業總部園區地下四樓**

地下四樓平面圖 (1:50)

地下四樓剖面圖 (1:50)

地下四樓剖面圖 (1:50)

地下四樓剖面圖 (1:50)

地下四樓剖面圖 (1:50)

地下四樓剖面圖 (1:50)



# Electrical, Mechanical and low-current Electrical Engineering References



Taipei area







Taipei Nangang Transfer Station BOT Project

■ Owner	Feng Yu Construction Co., Ltd.
■ Location	A short section of Taipei City Chenggong Section
■ Building Type	A building with 19-storey above the ground and 4-storey underground. Steel structure reverse drilling method · The total area is 55,493.67m <sup>2</sup>
■ Service	Electrical, air conditioning system engineering
■ Construction Period	2023~2026
■ Contract Amount	NT\$1,252 million
■ Scheduled operation	2026



New construction of TAIPEI SKY TOWER commercial building

■ Owner	Grand River D. Limited
■ Location	Songshou Road, Xinyi District, Taipei City
■ Building Type	Commercial building new construction with 47-storey above the ground and 5-storey underground. The total area is 26,293m <sup>2</sup> .
■ Service	Electromechanical air conditioning turnkey project
■ Construction Period	2022~2024
■ Contract Amount	NT\$1,894 million
■ Scheduled operation	2024



**Liangmao Construction Company HQ Building Project**

■ Owner	Liangmao Construction CO., LTD.
■ Location	Jingye 1st Road, Zhongshan District, Taipei City
■ Building Type	New construction of corporate headquarters building with 15-storey above the ground and 4-storey underground. The total area is 7,928m <sup>2</sup> .
■ Service	Electromechanical air conditioning turnkey project
■ Construction Period	2021~2024
■ Contract Amount	NT\$238 million
■ Scheduled operation	2024



**New Taipei City Zhonghe District police and firefighting social housing**

■ Owner	Reiju Construction CO., LTD.
■ Location	Zhonghe District, New Taipei City
■ Building Type	The total area is 13,269m <sup>2</sup>
■ Service	Mechanical and electrical engineering project
■ Construction Period	2020~2025
■ Contract Amount	NT\$320 million
■ Scheduled operation	2025





**Hon Hui Si Yuan co.,LTD i-Tower office Building Construction Project**

■ Owner	Hon Hui Si Yuan CO., LTD.
■ Location	Intersection of Siyuan Road and Zhongyang Road, Xinzhuang District, New Taipei City
■ Building Type	An office building with approximate 13,113m <sup>2</sup> of floor area and 39-storey above the ground and 3-storey underground.
■ Service	Electrical, fire protection, water supply and drainage, low-current electricity system engineering
■ Construction Period	2019
■ Contract Amount	NT\$294 million
■ Scheduled operation	2021



**TransGlobe Life Taipei city Cheng-gong Section Construction Project**

■ Owner	RUENTEX ENGINEERING & CONSTRUCTION CO., LTD
■ Location	Chang-gong section of Taipei city
■ Building Type	A building with 9-storey above the ground and 4-storey underground. The foundation area and total space area is 6,808 and 43,789 m <sup>2</sup> respectively. Floor arrangement B2-B4F: Parking lot and facility area, B1F-4F: Mall floor, 5F-9F: Office floor, R1F-R3F: MEP room
■ Service	Electrical, air conditioning, water supply and drainage system engineering
■ Construction Period	2019
■ Contract Amount	NT\$258 million
■ Scheduled operation	2021





## New construction of Pancontinental Construction and Lu Residence and Nikko Hotel

■ Owner	pan continent construction industrial co., ltd.
■ Location	Qianzhen District, Kaohsiung City
■ Building Type	New construction of Helu Residence and Nikko Hotel building with 29/21-storey above the ground and 4-storey underground. The total area is 19,779m <sup>2</sup> .
■ Service	Electrical and Mechanical Engineering of Residential and Hotel Buildings
■ Construction Period	2021~2023
■ Contract Amount	NT\$521 million
■ Scheduled operation	2023



## Reiju Construction CO., LTD. Taoyuan Turnkey Project-Mechanical, Electrical and Fire Protection Engineering

■ Owner	Reiju Construction CO., LTD.
■ Location	Intersection of Section 1, Guangfu Road and International Road, Bade District, Taoyuan City
■ Building Type	Bade District Sports Center, Taoyuan Fire Department-Daban Branch, Civil Activity center & Public Daily care center.
■ Service	Electrical, fire, low-current electricity system engineering
■ Construction Period	2019
■ Contract Amount	NT\$153 million
■ Scheduled operation	2021





## Nanshan Life Insurance Taipei Plaza

■ Owner	Nanshan Life Insurance Co., Ltd.
■ Location	Xinyi Project Area, Taipei city
■ Building Type	This project consists of two buildings which are commercial building and office building; the total building floor area is around 198,360m <sup>2</sup> .
■ Service	Electrical engineering
■ Construction Period	2015~2017
■ Contract Amount	NT\$630 million
■ Scheduled operation	2018



## Shin Kong Life Insurance Taichung Jieshibao

■ Client	Feng Yu Construction Co., Ltd.
■ Location	Jianxing Road, Wuri District, Taichung City
■ Building Type	The buildings under construction are divided into 4 districts, which are the hotel district, the Guild district, the VIP district and the VILLA district. The total floor area of the building is 25,614.47m <sup>2</sup> .
■ Service	Mechanical and electrical engineering general contract (excluding air conditioning and central monitoring engineering)
■ Construction Period	2018~2020
■ Contract Amount	NT\$296 million
■ Scheduled operation	2020



SciVision Biotech Inc.  
Production headquarters building

■ Owner	SciVision Biotech Inc.
■ Location	Kaohsiung Processing Export Zone
■ Building Type	Biotech headquarter complies with FDA cGMP, PIC/S cGMP and medical device manufacturing practice. A building with 7-storey on the ground and 1-storey underground.
■ Service	Clean room, electrical, mechanical, civil engineering and cGMP validation turnkey project
■ Construction Period	2014~2017
■ Contract Amount	NT\$800 million
■ Scheduled operation	2017



Shin Kong Life Insurance  
Jieshibao base A new construction

■ Owner	Shin Kong Life Insurance Co., Ltd.
■ Location	Banqiao District, New Taipei City
■ Building Type	A new construction building with total floor area around 15,531.6m <sup>2</sup> .
■ Service	Mechanical and electrical engineering project
■ Construction Period	2016~2018
■ Contract Amount	NT\$240 million
■ Scheduled operation	2018





**Shin Kong Life Insurance  
Nangang Software Park Building**

■ Owner	Shin Kong Life Insurance Co., Ltd.
■ Location	Nangang District, Taipei City
■ Building Type	A new construction building with total floor area around 33,985.7m <sup>2</sup> .
■ Service	Mechanical and electrical engineering project
■ Construction Period	2014~2018
■ Contract Amount	NT\$530 million
■ Scheduled operation	2018



**Taroko Park Kaohsiung**

■ Owner	Taroko Development Co., Ltd.
■ Location	Caojing Road MRT Station, Qianzhen Town, Kaohsiung City
■ Building Type	This project includes 3 buildings which are shopping mall, kading area and sports center. The total building floor area is around 109,098m <sup>2</sup> .
■ Service	Telecom information, telephone exchange systems, security monitoring, central monitoring, air quality monitoring, containment systems and fire emergency radio engineering
■ Construction Period	2014~2015
■ Contract Amount	NT\$122 million
■ Scheduled operation	2016





Le Meridien Taipei & Shin Kong Office Building

■ Owner	Shin Kong Life Insurance Co., Ltd.
■ Location	Xinyi Project Area, Taipei city
■ Building Type	The five-star Le Meridien Hotel and the Shin Kong luxury Office building are 12 and 21-storey on the ground and 3-storey underground ; The total building floor area is around 80,402m <sup>2</sup> .
■ Service	Electrical, fire, air conditioning, water supply and drainage, low-current electricity, monitoring system turnkey project
■ Construction Period	2008~2011
■ Contract Amount	NT\$1.5 billion



Transglobe Life –Taipei Headquarter

■ Owner	Global Life Insurance Co., Ltd.
■ Location	Neihu District, Taipei City
■ Building Type	The project consists of five steel-structure office buildings with 11~15-storey on the ground and 3-storey underground. The foundation area is around 66,120m <sup>2</sup> and building floor area is around 251,256m <sup>2</sup> .
■ Service	Low-current system engineering: electrical, water supply and drainage and air conditioning engineering
■ Construction Period	2012~2015
■ Contract Amount	NT\$695 million





Grand MAYFULL Hotel & Office Building

■ Owner	MAYFULL Enterprise Co., Ltd.
■ Location	Zhongshan District, Taipei City
■ project costs	NT\$5 billion
■ Building Type	The Grand MAYFULL Hotel and Office building is 21-story on the ground and 5-storey underground with SRC structure. The foundation area is 11,895m <sup>2</sup> and building floor area is around 79,959m <sup>2</sup> .
■ Service	Mechanical and electrical engineering project
■ Construction Period	2011~2015
■ Contract Amount	NT\$987 million



Denwell Xinzhuang dining & Wedding Banquet Building

■ Owner	Denwell Wedding Banquet Co., Ltd.
■ Location	Xinzhuang District, New Taipei City
■ project costs	NT\$5 billion
■ Building Type	The Denwell Xinzhuang dining & Wedding Banquet Building is 10-story on the ground and 2-storey underground with SRC structure, The foundation area is around 10,563m <sup>2</sup> and building floor area is around 59,129.2m <sup>2</sup> .
■ Service	Electrical, fire protection, water supply and drainage system engineering
■ Construction Period	2012~2014
■ Contract Amount	NT\$170 million





## Platinum Hotel

■ Owner	New Guobin Co., Ltd.
■ Location	Xindian District, New Taipei
■ Building Type	The foundation area of Platinum Hotel is around 2,977m <sup>2</sup> and building floor area is around 25,628m <sup>2</sup> .
■ Service	High and low voltage equipment engineering, electrical engineering, low-current electricity engineering, water supply and drainage engineering and fire protection engineering.
■ Construction Period	2013~2015
■ Contract Amount	NT\$117 million



## Shin Kong Shopping Mall

■ Owner	Xinguang Sanyue Department Store Co., Ltd.
■ Location	Zuoying District, Kaohsiung City
■ project costs	NT\$5 billion
■ Building Type	Shin Kong Mitsukoshi Department Store Zuoying Store, 11-story on the ground and 4-story underground, business area is around 73,968.444m <sup>2</sup> and total floor area is around 97,731.972m <sup>2</sup> .
■ Service	Electrical, low-current, monitoring system engineering
■ Construction Period	2009~2011
■ Contract Amount	NT\$380 million





## Shin Kong Life Insurance Jiantan Jieshibao New Construction Project

■ Owner	Shin Kong Life Insurance Co., Ltd.
■ Location	Shilin District, Taipei City
■ Building Type	New hotel construction with 13,782.04m <sup>2</sup> floor area and total number of 233 room.
■ Service	Hydropower fire protection package project
■ Construction Period	2017~2019
■ Contract Amount	NT\$187 million
■ Scheduled operation	2019



## Dongyuan Jingji Huaya Enterprise Headquarter Building

■ Owner	Dongyuan Jingji Industry Co., Ltd.
■ Location	Taoyuan County Huaya Science and Technology Park
■ Building Type	An Enterprise Headquarter with 8-story on the ground and 4-storey underground; Total floor area is 61,046.42m <sup>2</sup> .
■ Service	Electrical, fire, air conditioning, water supply and drainage, low-current electricity system engineering
■ Construction Period	2014~2016
■ Contract Amount	NT\$390 million
■ Scheduled operation	2017





## SHIN KONG MITSUKOSHI-Chongqing

■ Owner	Shin Kong Mitsukoshi Department Store (Chongqing) Co., Ltd.
■ Location	Chongqing, China
■ Building Type	Shin Kong Mitsukoshi Department Store Chongqing Commercial Building, the main building floor area is around 240,098.25m <sup>2</sup> .
■ Service	Building Intelligent System Integration Engineering
■ Construction Period	2016~2017
■ Contract Amount	RMB 35 million
■ Scheduled operation	2017



## SHIN KONG MITSUKOSHI-Wen Jiang

■ Owner	Shin Kong Mitsukoshi Department Store (Chengdu) Co., Ltd.
■ Location	Chengdu, Sichuan, China
■ project costs	RMB 2 billion
■ Building Type	Shin Kong Mitsukoshi Department Store Wenjiang Commercial Building floor area is around 42,353.166m <sup>2</sup> . The group building is for commercial use and the tower is for office use. The building 22-story on the ground and 3-story underground. The floor area is around 323,085.462m <sup>2</sup> .
■ Service	Electrical Engineering and Building Intelligence System Integration Engineering
■ Construction Period	2013~2016
■ Contract Amount	RMB 160 million
■ Scheduled operation	2017



# Smart Building - Shopping Mall Performance

China



Jinan



Taozhumiao



Central



Northern



Kaohsiung



# FMCS and FA project performance

## FMCS

- ProMOS Zhuke No.1 and No.2 Factory
- tsmc 8 factory
- ChipMOS(IMOS)
- AMTC Taoyuan Factory
- SMIC(Shanghai)
- HHGrace(Shanghai)
- PSMC P2
- PSMC P3
- ProMOS Zhongke No.3 Factory
- Macronix FAB 5A
- Tianma

## C/R & MEP

- Greatek Electronics Inc.
- FOXCONN
- ChipMOS(IMOS)
- tsmc 8 factory
- CHIPBOND Technology Corporation
- CMO(Chi Mei)
- UMC
- HannStar Display Corp.
- Lianjian Technologies
- Winbond Elec. Corp.
- HHGrace(Shanghai)
- MTTW First factory
- MTTW Second factory
- MTTW 1A factory



## POWER SCADA

- CHENG SHIN Thailand A Factory
- CHENG SHIN Thailand B Factory
- CHENG SHIN Kunshan factory
- CHENG SHIN Vietnam factory
- PSMC P2
- PSMC P3
- KINGRAY R1P2
- KINGRAY R2P1
- HHGrace
- - Hannstar Display (Nanjing)
  - Lianjian Technologies
  - Inventec Corporation(Shanghai)
  - SMIC(Shanghai) PCW SCADA
  - IVO PCW SCADA
  - IVO HVAC SCADA
  - Tripod (WUXI) Electronic Co.Ltd.

## GMS(Gas Safety)

- ProMOS Zhuke No.1 and No.2 Factory
- tsmc 8 factory
- ProMOS Zhongke No.3 Factory
- KINGRAY R1P2
- Macronix FAB 5A
- Micron A1 Portion GMS
- IVO (5(G)TFT)
- Tianma(4.5(G)STN)
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# Water treatment system

- ChipMOS(IMOS) PCW/PV/HV
- UNIPAC FAB3 UPW
- Macronix FAB2 UPW
- UMC FAB 8D UPW
- UMC FAB 12A UPW
- AU wastewater treatment
- Macronix 80%WWT wastewater treatment
- PSMC P2 WWT wastewater treatment
- PSMC P3 WWT wastewater treatment





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