

HANiLTECH

COMPANY PROFILE



“HANIL TECH MESSAGE”

We, Hanil Tech, specialize in designing and manufacturing compressed air systems and refrigeration air conditioning systems, which are essential power sources for all industries. Our main business is installation, construction, and maintenance. We were established on the basis of professional technology, know-how, and advanced management techniques. Our executives and employees are united in doing their best to provide reasonable and clear technical solutions to all of our customers' technical and mechanical needs.



Establishing strong trust with customers, especially major domestic conglomerates, Thanks to your enthusiastic support, we provide the best value We are continuing to grow as a company.

Accordingly, our Hanil Tech executives and staff are not satisfied with being the best in Korea and continue to take on the challenge of becoming a world-class company. Especially in the knowledge industry and information age of the 21st century, we provide excellent creative talent and cutting-edge technological capabilities. And the service ability that meets customer needs is said to be a company's competitiveness. By strengthening this competitiveness, we To establish ourselves as a warm company in our hearts as a partner that grows and develops as a blue-chip company. We will make ceaseless efforts. thank you

**All executives and employees of
Hanil Tech Co., Ltd.**

01 Company Introduction Overview

Our company specializes in the fields of utilities, HVAC systems, and clean rooms, and provides the best value to customers based on the best technology and construction capabilities.

Company name	Hanil Tech Co., Ltd.
Date of establishment	June 20, 2006
CEO	Kim Cheol-bae
Industry	Air conditioning and refrigeration equipment, mechanical equipment, clean room equipment, etc.
Number of employees	16 people
Address	21-19 Yangcheongnonso-gil, Ochang-eup, Cheongwon-gu, Cheongju-si, Chungcheongbuk-do
Homepage	www.haniltech.kr



Company establishment

- 2006. 6. Establishment of Korea-Japan Air Conditioning System (located in Ochang Science Industrial Complex, Cheongwon, North Chungcheong Province)

Major business partners

- 2006. 7. Registered as LG Chem partner
- 2007. 4. Registered as a partner of LG Electronics
- 2008. 3. Registered as a partner of LS Industrial Systems
- 2006. 8. Registered as LX Hausys partner
- 2007. 9. Registered as Amore Pacific partner
- 2008. 6. Registered as a partner of LG Household & Health Care

Opening a dealership & store

- Air Comp: Ingersoll Rand (USA) / Cameron (USA) / Anest Iwata (Japan)
- Dehumidifying device: Geumseong Hitech Co., Ltd. (Korea) / HI series (Hanil Tech)
- Refrigeration air conditioning: LG Electronics Co., Ltd. / Century Co., Ltd. / Poongcheon ENG Co., Ltd. / Kyungin Machinery Co., Ltd.

Establishment of corporation and change of name

- 2008. 2. Establishment of Hanil Tech Co., Ltd. and change of name
- 2008. 7. Headquarters expansion and relocation and capital increase
- 2015. 6. Registered as a specialized construction business (mechanical equipment construction business)
- 2018. 2. Machine manufacturing factory registration
- 2019. 9. Relocation of headquarters and factory to new construction
- 2019. 2. Registered as a refrigerant recovery business
- 2023. 3. ISO9001 & ISO14001 certification
- 2023. 7. Establishment of corporate research and development department

02 History



Establishment of corporation and expansion of headquarters

- Establishment of Hanil Tech Co., Ltd.
- Headquarters expansion and capital increase



Relocation of headquarters and factory to new construction

- Relocation to Ochang-eup, Cheongju-si.
- Newly constructed office building 1
- Newly constructed 3 factory buildings

2006. 06

Company establishment (Korea-Japan Air Conditioning System)



2015.06

Registered as a professional construction business

- Registered as a mechanical equipment construction business.
- Registered as a machinery manufacturing factory.
- Recruitment of design experts.



2022.12

Annual sales exceed KRW 20 billion



환경 | ENVIRONMENT



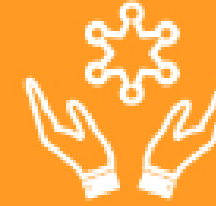
- Climate change response
- Reduce carbon emissions
- Promote resource conservation/recycling
- Clean technology development

사회 | SOCIAL



- Coexistence with the local community
- Support for the socially disadvantaged
- Data and privacy protection
- Prohibit discrimination and respect diversity.

지배구조 | GOVERNANCE

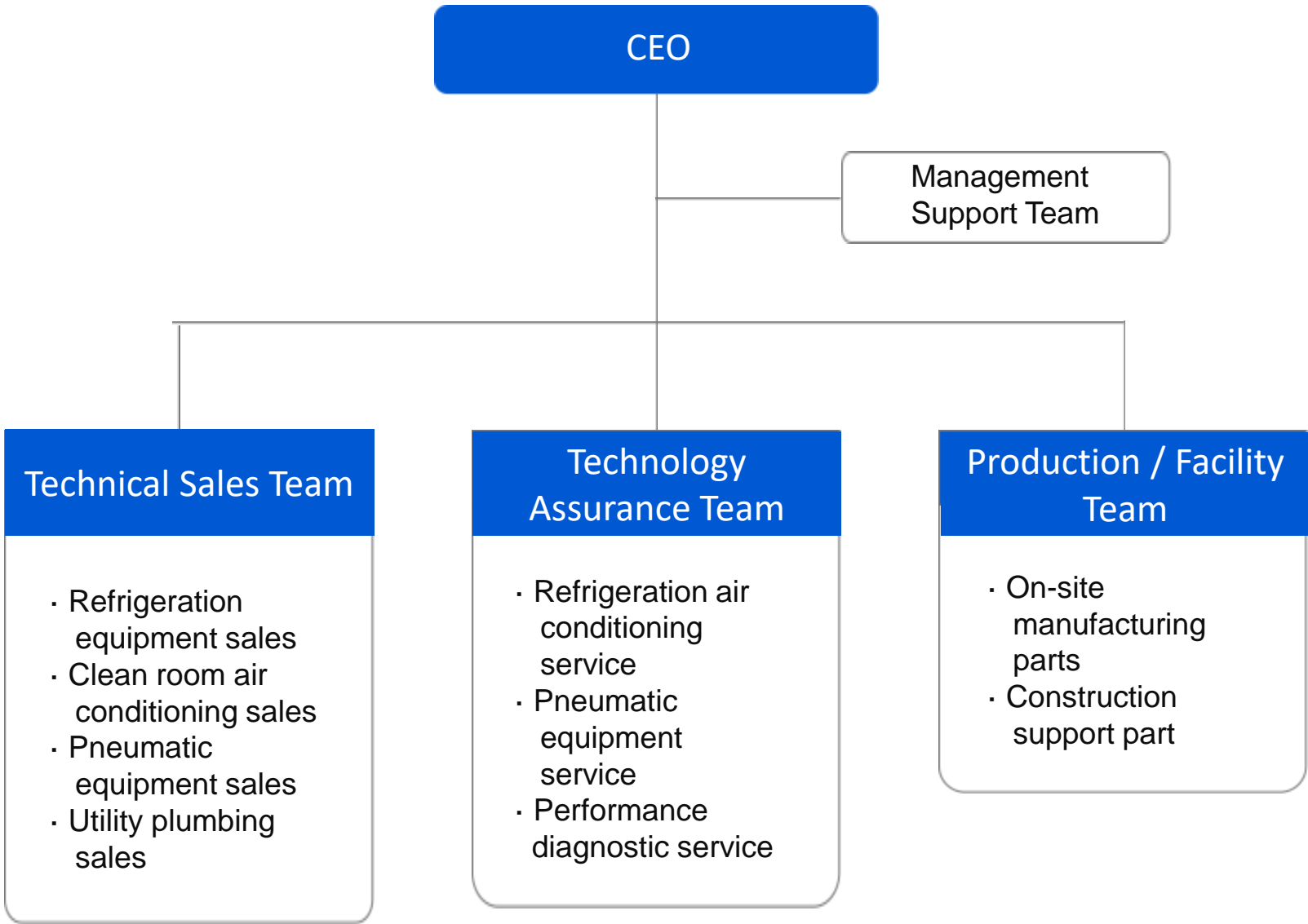


- Enhancing board transparency
- Employment equality
- Legal and ethical compliance
- Anti-corruption/enhancing fairness

Hanil Tech strives for the sustainable development of the company by simultaneously pursuing economic and social values through ESG management, which stands for environment, society, and governance.

01 **Company Introduction**

**Organization and
technical personnel**



	Qualification classification	Number of people	Rating
Mechanical equipment	Air Conditioning Refrigeration Mechanical Engineer	2	Advanced
	Air conditioning refrigeration machinery industrial engineer	1	Intermediate
	Air conditioning refrigeration technician	1	Beginner
	Welding technician	2	Beginner
	Mechanical Equipment Beginner Engineer	2	Intermediate
Safety	Industrial safety engineer	1	Intermediate

02 Business Areas

Freezer system

- Air conditioning constant temperature and humidity system
- Clean room system (ICR, GMP)
- EHP system



Compressed air system

- Air Compressor System
- air dryer system



Utility production/construction

- Utility Piping
- HVAC Duct
- PCW, CDA, N2 Supply Piping



02 Business Areas

Refrigeration air conditioning system

Provides total service related to environmental design and construction of cutting-edge production facilities for batteries, semiconductors, LCD displays, bio, food, cosmetics, precision equipment, etc.

Consulting



Identify and review expected problems in the early planning stage of the project and suggest optimal solutions

- Receive customer requests
- Business feasibility review
- Review of various laws and regulations
- Production process review
- Investment cost review

Design



Differentiated design according to the characteristics of each product reflects measures to reduce operating costs and initial investment costs

- Clean room environmental conditions and system selection
- Air conditioning heat load calculation
- Selection of appropriate equipment for cleanliness
- Mechanical seal placement plan
- Preparation of detailed design book

Construction



Optimal construction management process operation
 Turn-key construction experience accumulated over many years
 Thorough safety and quality control

- Create a construction schedule plan
- Construction council composition
- Process Safety Quality Control
- Material receipt and construction management
- Commissioning and completion

02 Business Areas Compressed air system

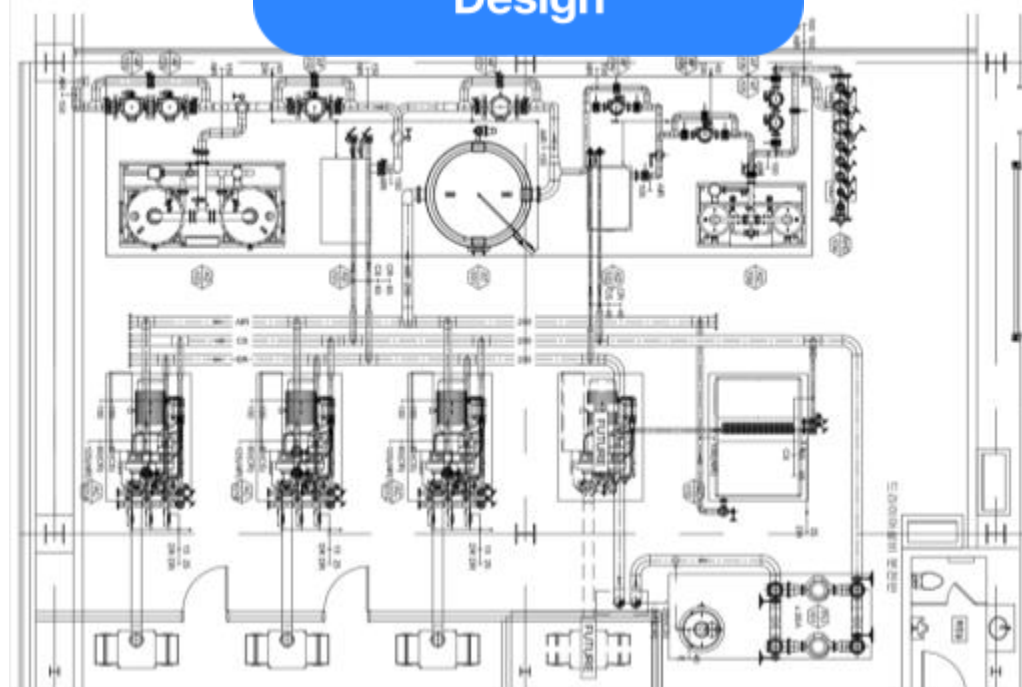
Provides services such as design and construction of compressed air (CDA) systems, which are essential elements in cutting-edge production processes, and validation work.

Consulting



In the initial planning stage of the project, identify the expected load by time period and suggest an optimal load response plan.

Design



Differentiated design according to the characteristics of each product reflects measures to reduce operating costs and initial investment costs

Construction



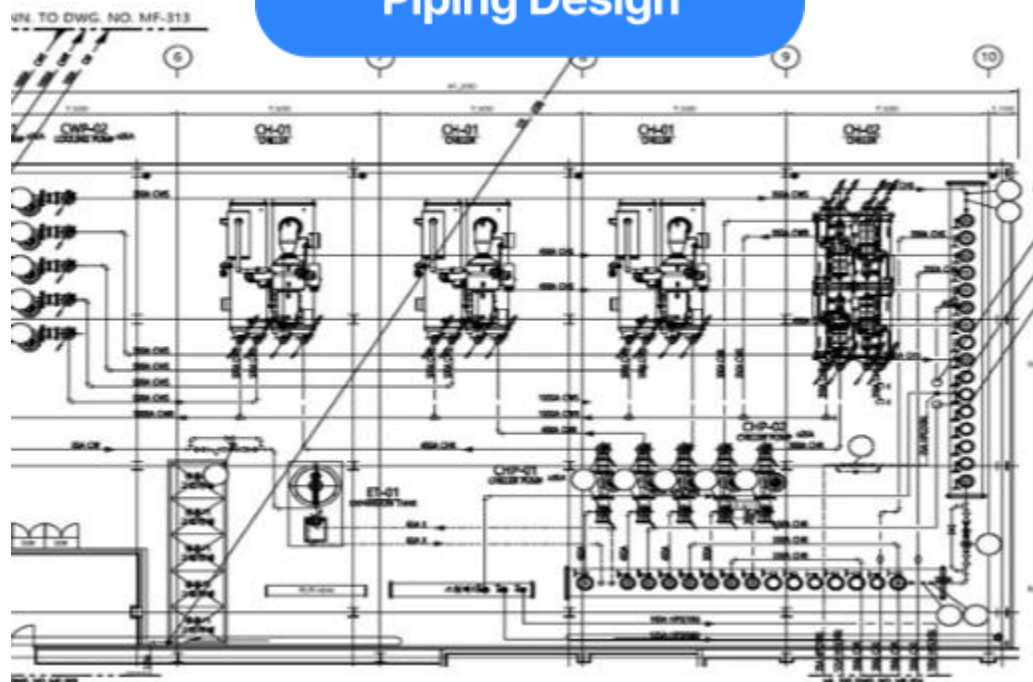
CDA equipment and piping have a direct impact on manufactured products and require more thorough process management. Thorough quality control through experience in carrying out numerous large projects

02 Business Areas

Utility production/construction

Provides utility system piping design and construction services for batteries, semiconductors, LCD displays, bio, food, cosmetics, precision equipment, etc.

Piping Design



Identify interferences and expected problems, find the optimal solution, and create a design

- Selection of materials suitable for equipment specifications
- Proposal of optimization considering interference
- Preparation of detailed design book
- Supervisor approval and field distribution

Installation



Achieve the best quality by applying project execution know-how accumulated over many years to the process.

- Create a construction schedule plan
- Construction council composition
- Process Safety Quality Control
- Construction technician competency management
- Material receipt and construction management

Inspection



After completion of construction, review of consistency with drawings and inspection of quality measurement of installed piping

- Establishment of inspection test plan
- Tightness testing (atmospheric pressure, water pressure)
- Non-destructive testing when necessary

02 Business Areas Refrigeration system

By selecting and applying the optimal equipment suited to the characteristics of the user site, the best performance and driving safety are guaranteed.

Turbo freezer



Absorption type cold and water dispenser



Inverter Scroll Chiller



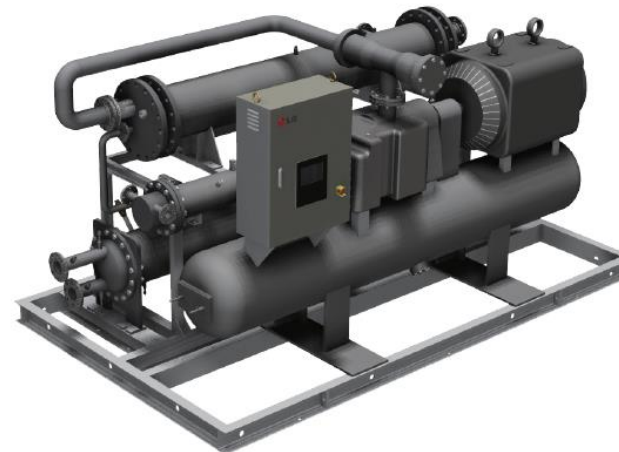
Open cooling tower



Air-cooled screw freezer



Water-cooled screw



Circulation pump



Enclosed cooling tower



02 Business Areas

Compressed air system

By selecting and applying the optimal equipment suited to the characteristics of the user site, the best performance and driving safety are guaranteed.

TURBO AIR COMPRESSOR



OIL FREE AIR COMPRESSOR



DESICCANT AIR DRYER



AIR FILTER SYSTEM



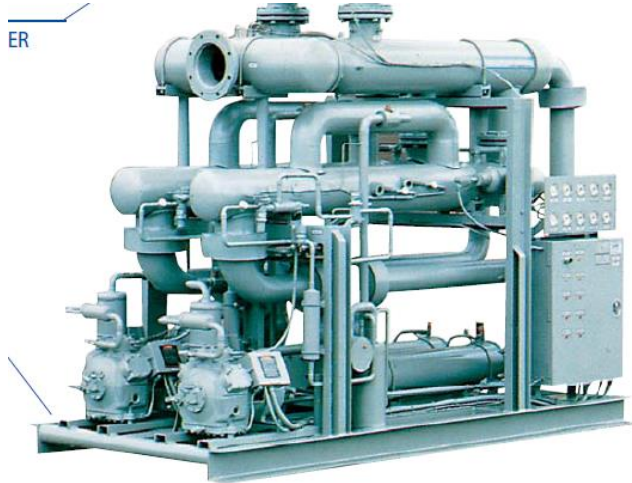
SCROLL AIR COMPRESSOR



INVERTER AIR COMPRESSOR



REFRIGERATOR AIR DRYER



N2 GENERATOR SYSTEM



02 Business Areas

Air conditioning equipment

By selecting and applying the optimal equipment suited to the characteristics of the user site, the best performance and driving safety are guaranteed.

Air Conditioning



Constant temperature and humidity



Condensing unit



EHP Air conditioner



Air Shower



Blower Filter Unit



Fan Filter Unit

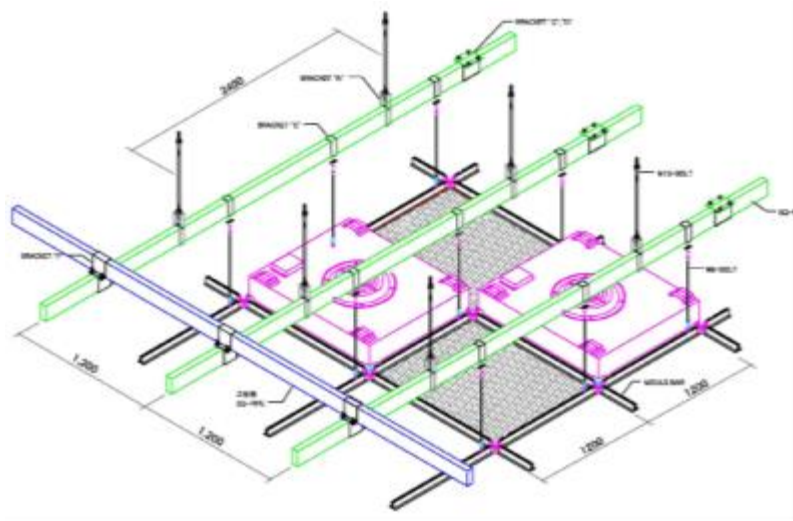


Pass Box



02 Business Areas **System sealing**

System sealing design



Ceiling T-bar & panel installation



Main & sub C-beam installation



Installation of electric bolts and inspection lights



AL mold bar installation



Air conditioning ducts, secondary electrical installation



Installation of FFU & TD etc.



Blind panel installation and finishing



03 Business performance freezer system

Turbo chiller system
installation



Circulation pump and
piping installation



Screw chiller system
installation



Screw chiller system
installation



Installation of closed
cooling tower



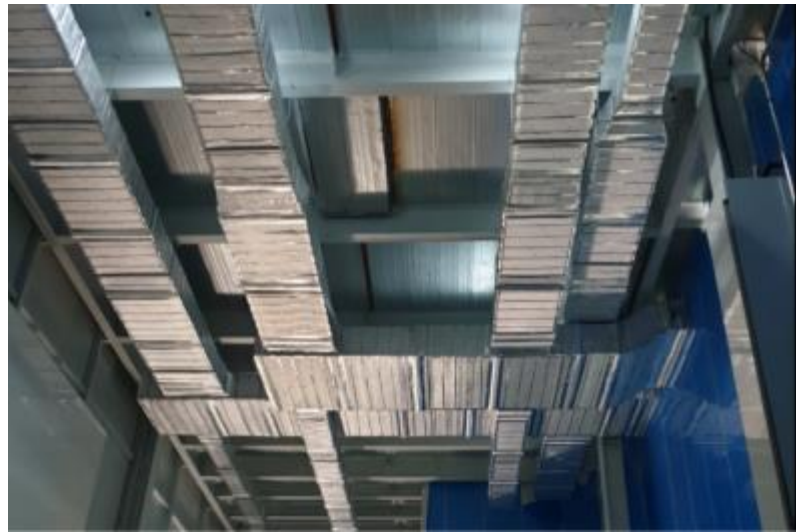
Installation of 10,000 CRT
open cooling towers



03 Business performance

Air conditioning clean room system

Air conditioning duct installation



Clean panel installation



Air conditioner and piping installation



Installation of outdoor unit for air conditioner



High C/L clean room installation



Air shower installation



System sealing



T.A.B work



03 Business performance compressed air system

TURBO AIR COMPRESSOR



SCREW AIR COMPRESSOR



SCROLL AIR COMPRESSOR



N2 GENERATOR SYSTEM



Frozen AIR DRYER



Adsorption type AIR DRYER



AIR FILTER SYSTEM



CO2 REMOVAL DRYER



03 Business performance

Utility production/construction

Compressed air piping
construction



Freezer piping
construction



Pump piping construction



Cooling tower piping
construction



PCW SYSTEM production



PCW SYSTEM production



04 Main customer base

Hanil Tech Co., Ltd. is working with many companies.



Major
customers

 LG 에너지솔루션

 LG 생활건강

 더블유씨피 (주)

 HYUNDAI
현대바이오랜드

AMOREPACIFIC

 LG 화학

 Coca-Cola
코카콜라 음료 주식회사

 LSELECTRIC

 LX하우시스

 태극제약(주)

 samyang
삼양바이오팜

 Hansol
한솔제지

 cnf

 ENEREVER
BATTERY SOLUTION

Main dealer

 LG전자

LG전자 종합공조

 IR
Ingersoll Rand.

잉가솔랜드 코리아

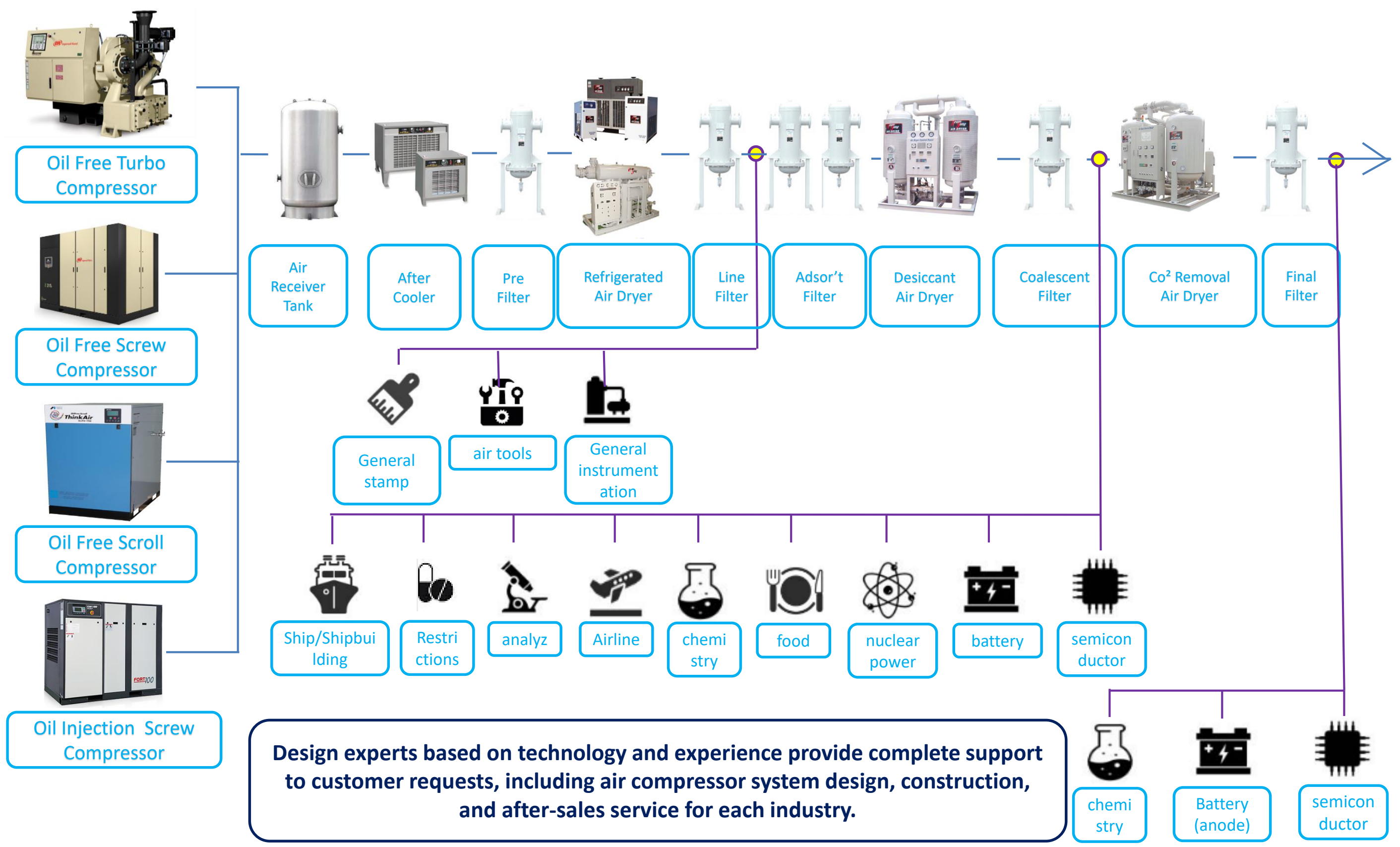
 Century

센추리

 Gardner
Denver

가드너 덴버

Business Areas Air Compressor System Design Process




(Next chapter link)

Business Areas Compressed air quality standard grade/ ISO 8573-1




ISO 8573-1 : 2010 Compressed Air Contaminants Purity Classes								
class	Particle				Water		Oil	
	By Paticle Size (maximun number of particle per m³) See Mote 2			By Mass	Vapor Pressure Dewpoint		Liquid	Liquid, Aerosol & Vapor
	0.10 ~ 0.5 microns	0.5 ~ 1.0 microns	1.0 ~ 5.0 microns	mg/m³	°C	°F	g/m³	mg/m³
0	As specified by the equipment user or supplier moer stringent than class 1							
1	≤ 20,000	≤ 400	≤ 10	-	≤ -70	≤ -94	-	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40	≤ -40	-	≤ 0.1
3	-	≤ 90,000	≤ 1,000	-	≤ -20	≤ -4	-	≤ 10
4	-	-	≤ 10,000	-	≤ +3	≤ +37	-	≤ 5
5	-	-	≤ 100,000	-	≤ +7	≤ +45	-	-
6	-	-	-	0 - ≤ 5	≤ +10	≤ +50	-	-
7	-	-	-	5 - ≤ 10			≤ 0.5	-
8	-	-	-	-			≤ 5	-
9	-	-	-	-			≤ 10	-
X	-	-	-	> 10			> 10	> 5
Microbiological Contaminants					Other Gaseous Contaminants			
No purity classes are identified					No purity classes are identified Gases mentioned aer : CO, CO ₂ , SO ₂ , NOX			


ISO 8573-1 : 2010 Industrial fields that apply class 3 or higher



General stamp




air tools

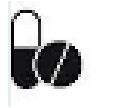


General instrumentation


ISO 8573-1 : 2010 Industries applicable to class 2 or higher




Ship/Shipbuilding




Restrictions




analyz




Airline



chemi stry



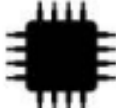
food



nuclear power



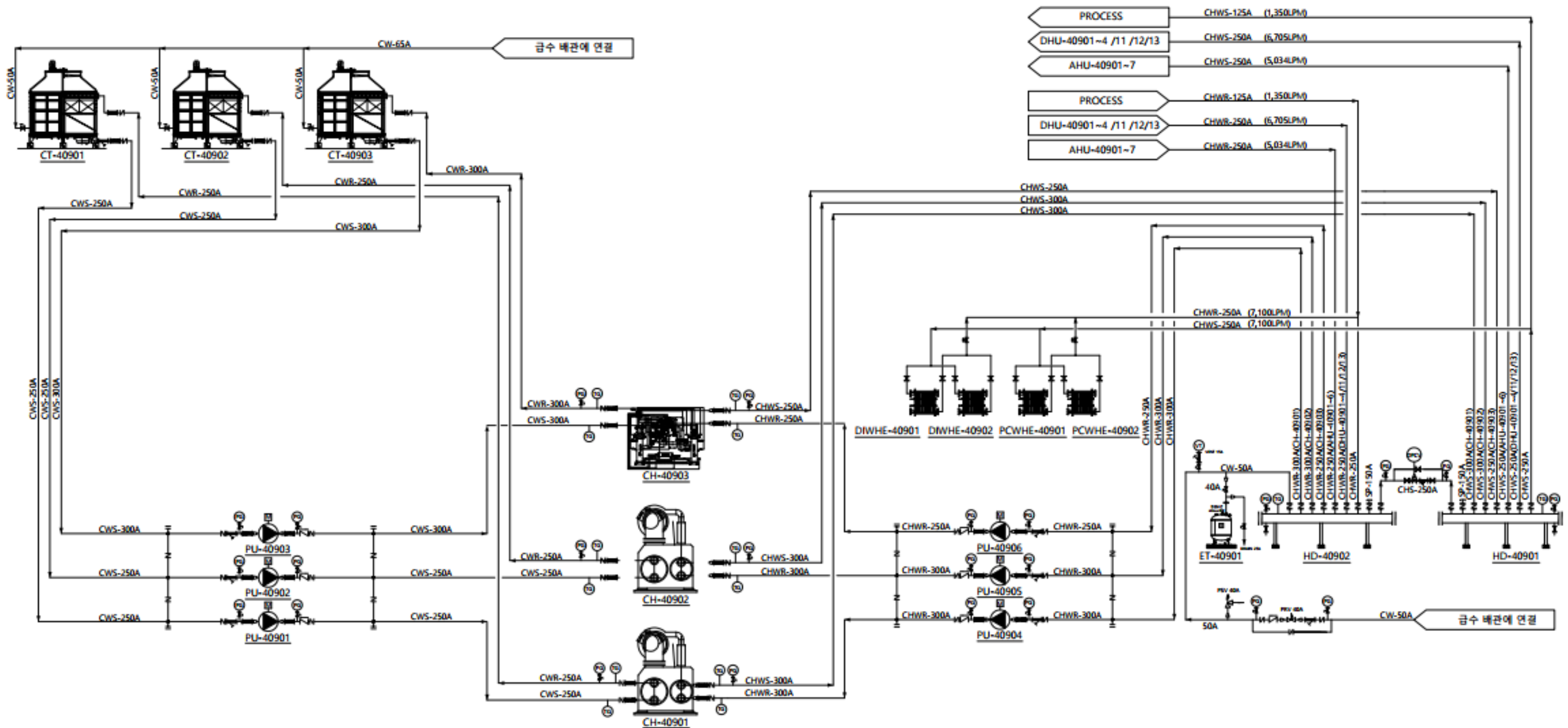
battery



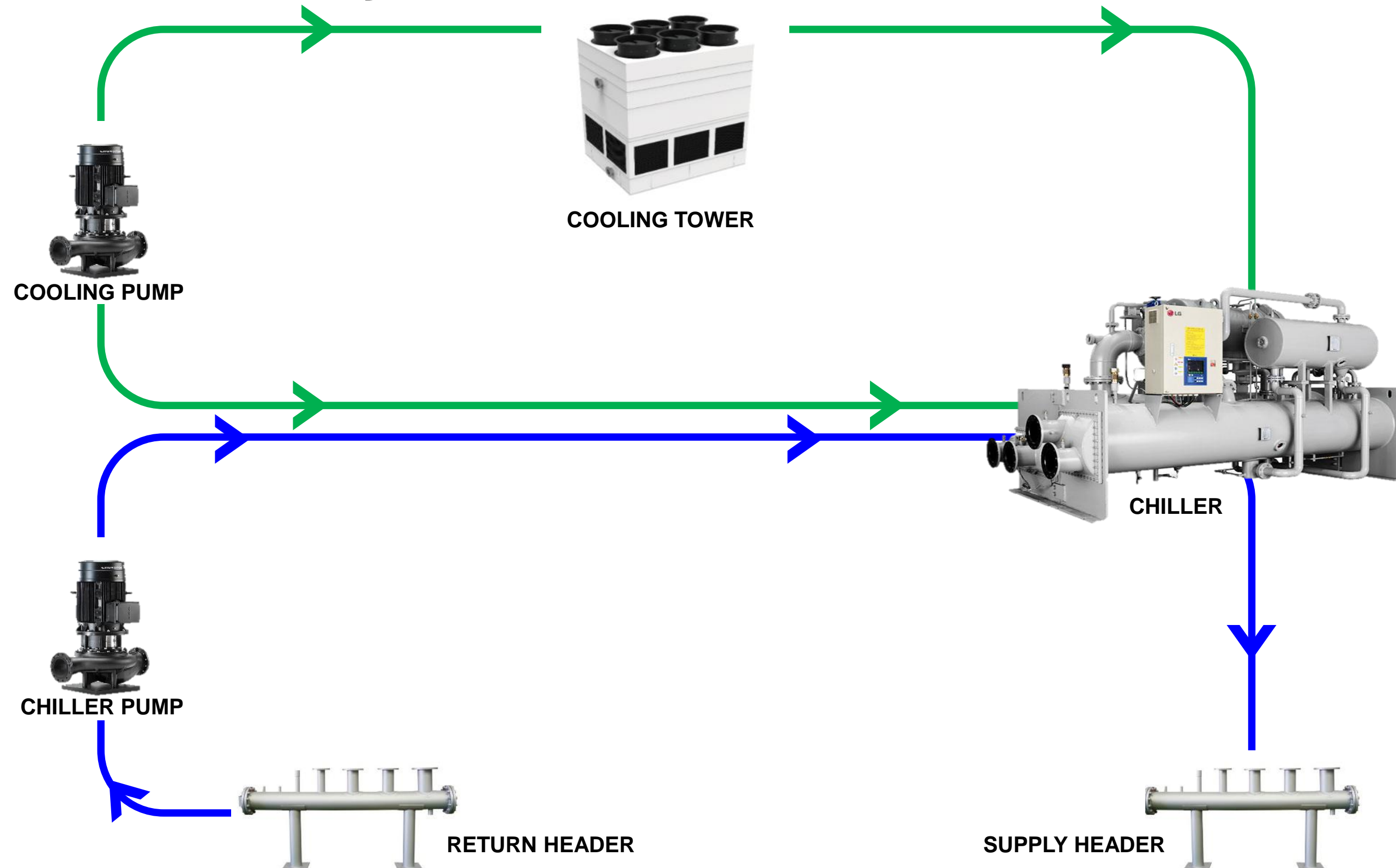
semicon ductor

There are quality standard grades for compressed air, and we provide compressed air supply solutions suitable for each industry.

Water-cooled chiller system design



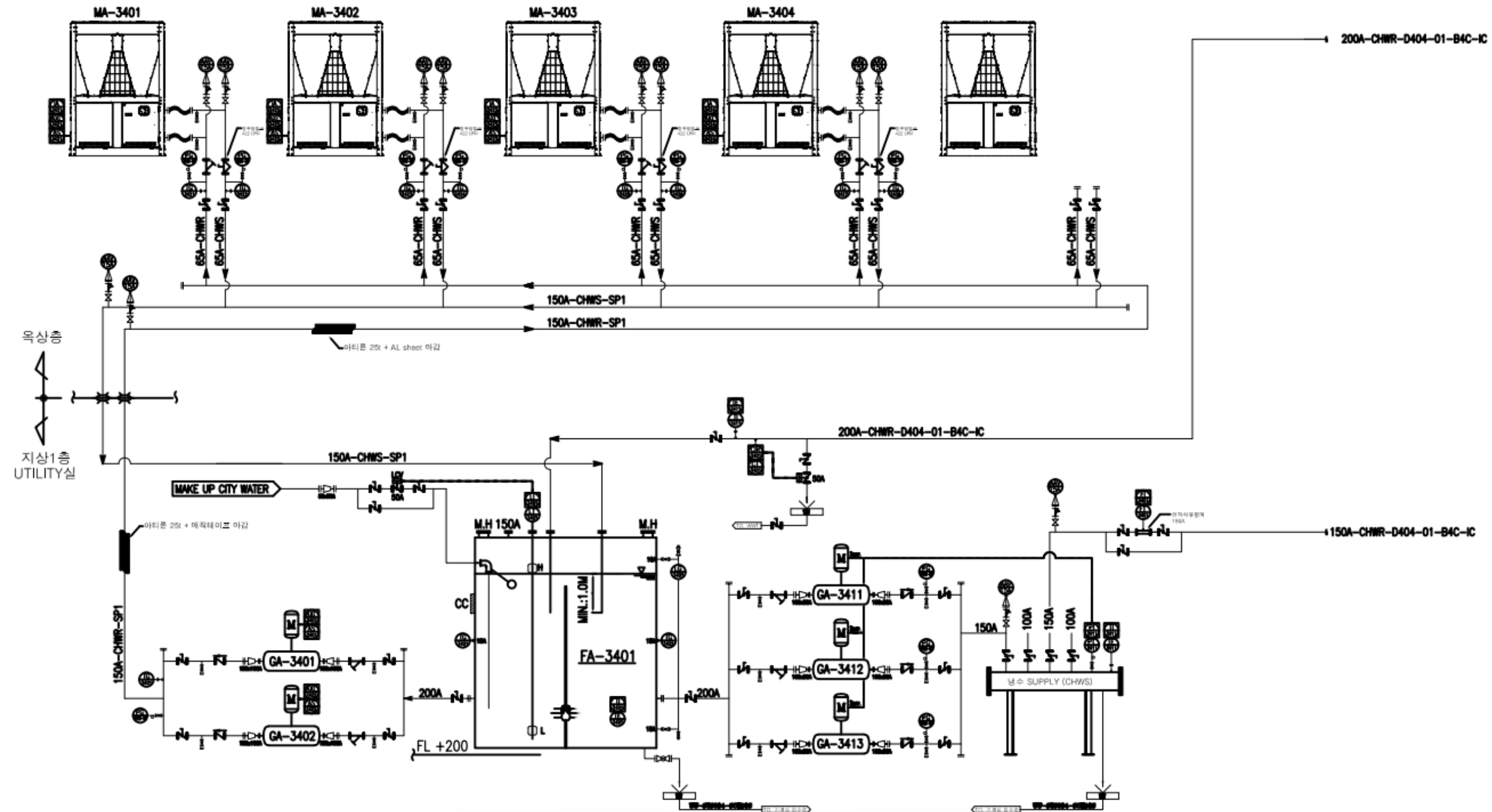
Water-cooled chiller system flow chart



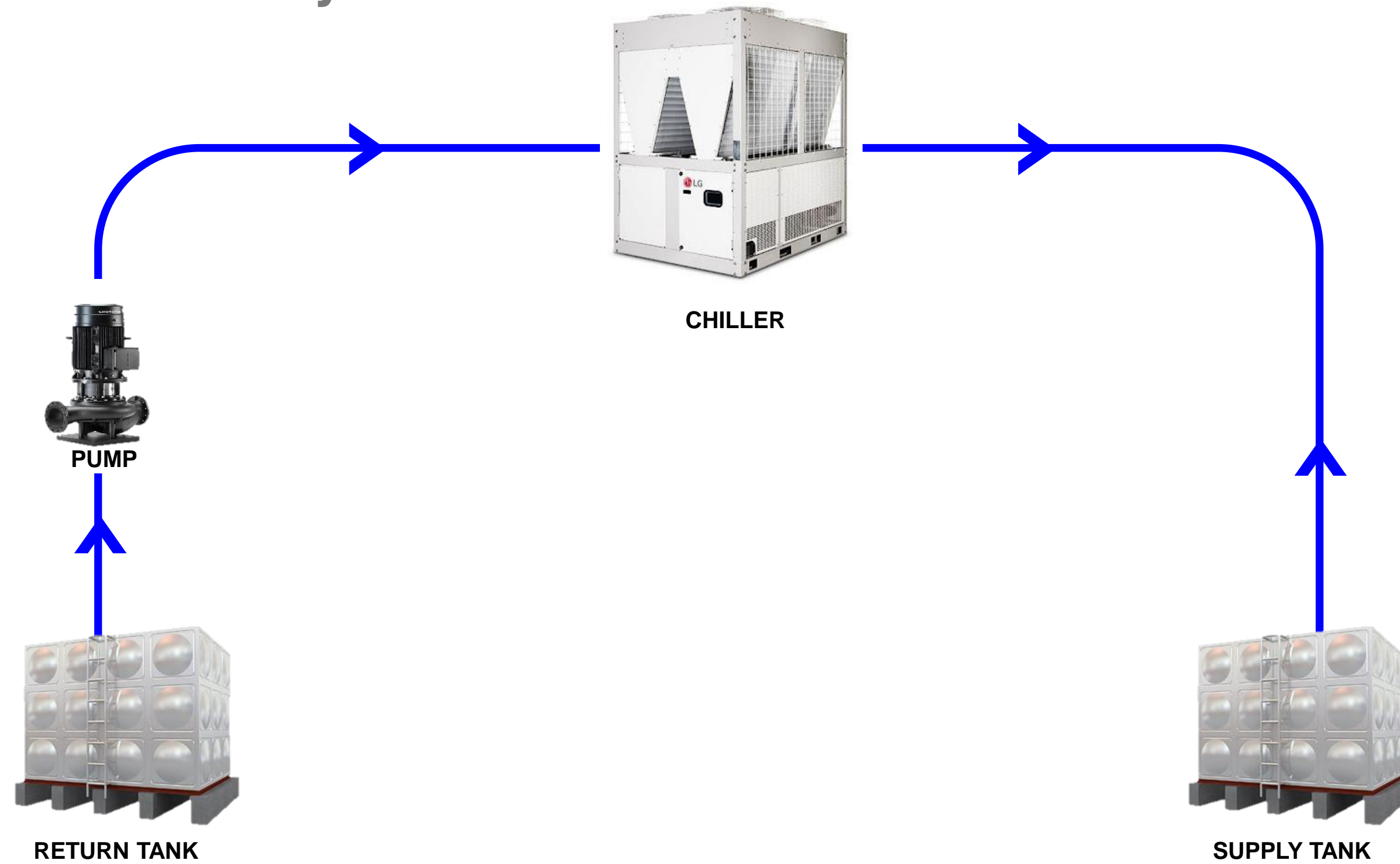
Water-cooled chiller system flow chart



Air-cooled freezer system design



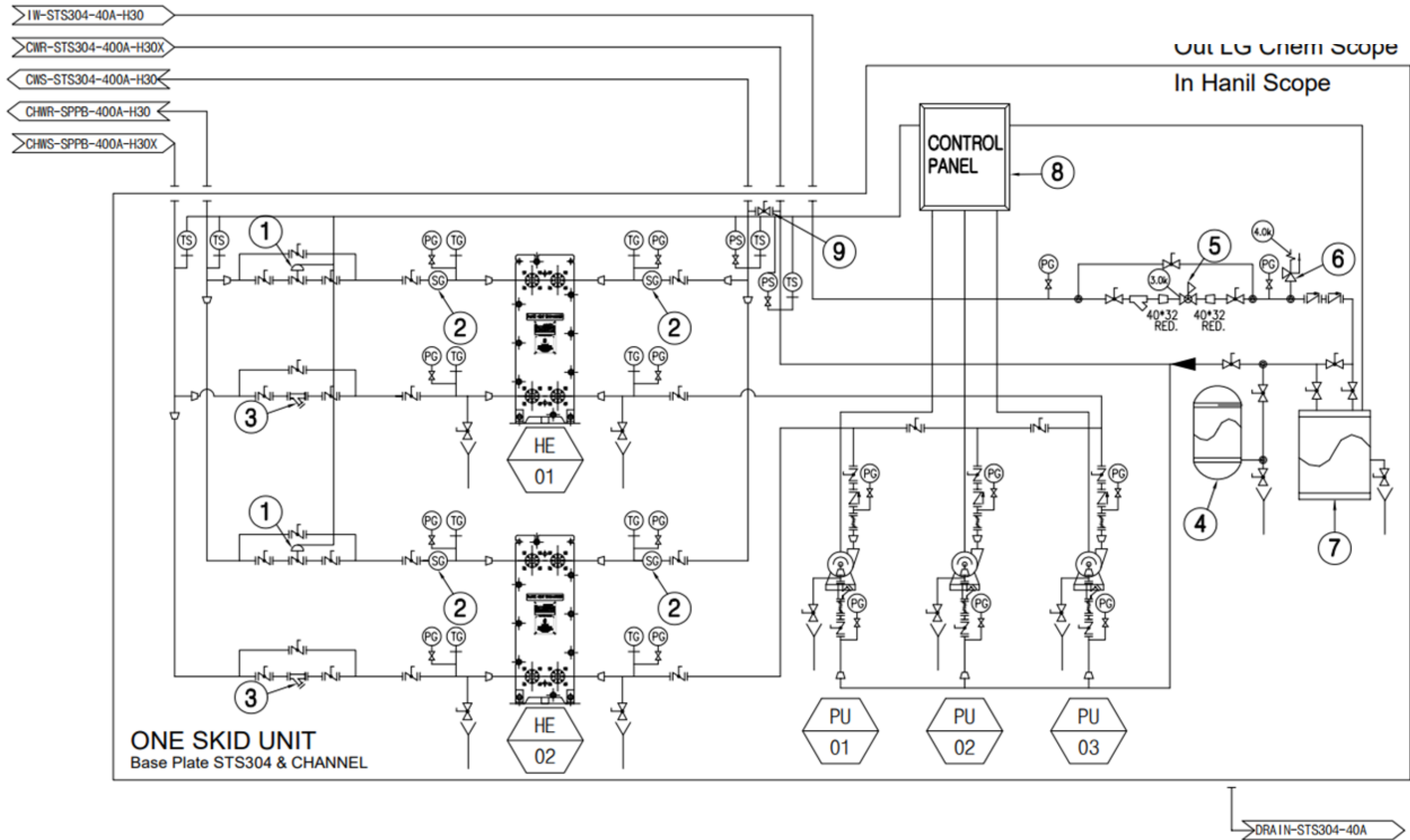
Air-cooled freezer system flow chart



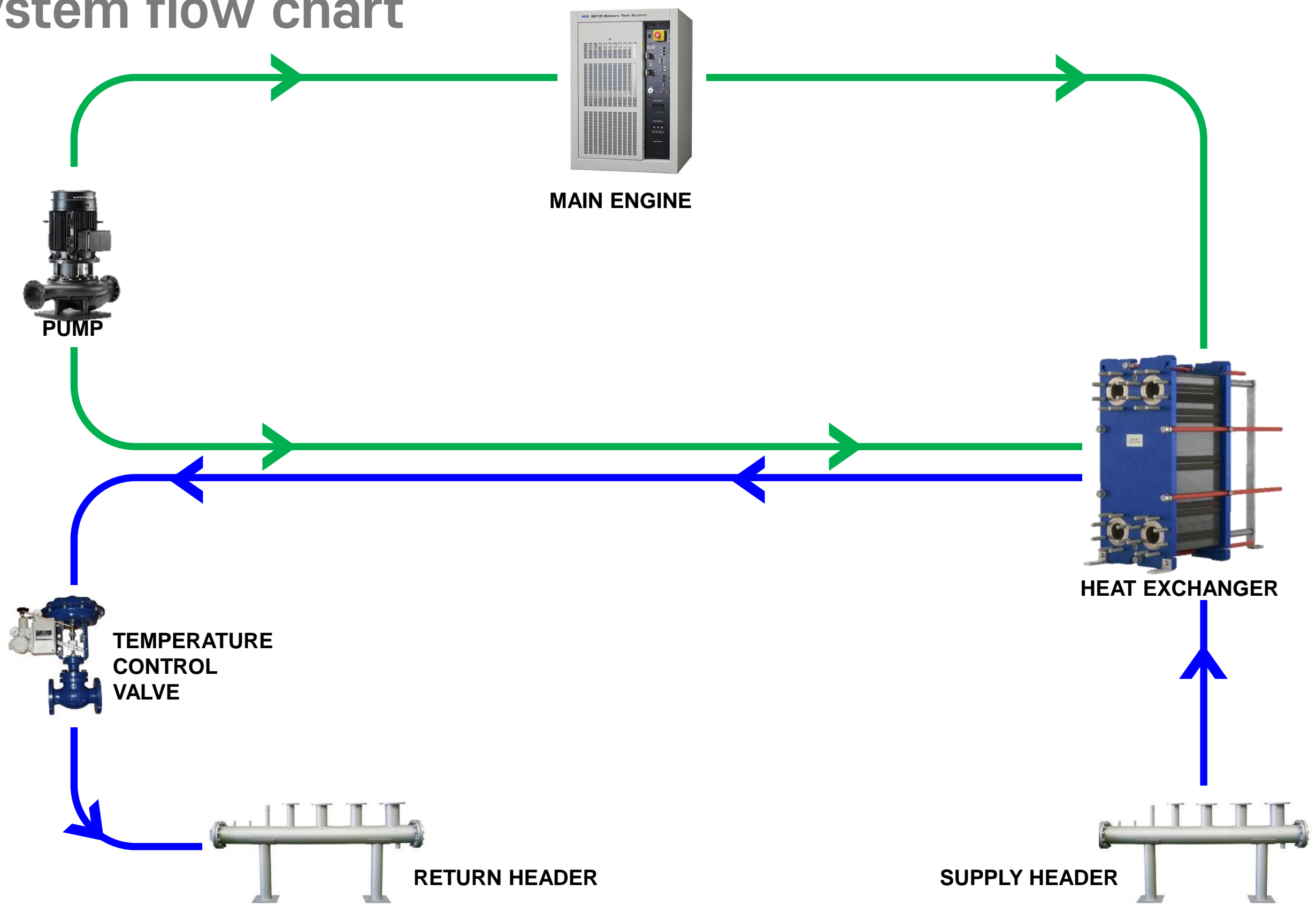
Air-cooled freezer system construction



PCW system blueprint



PCW system flow chart



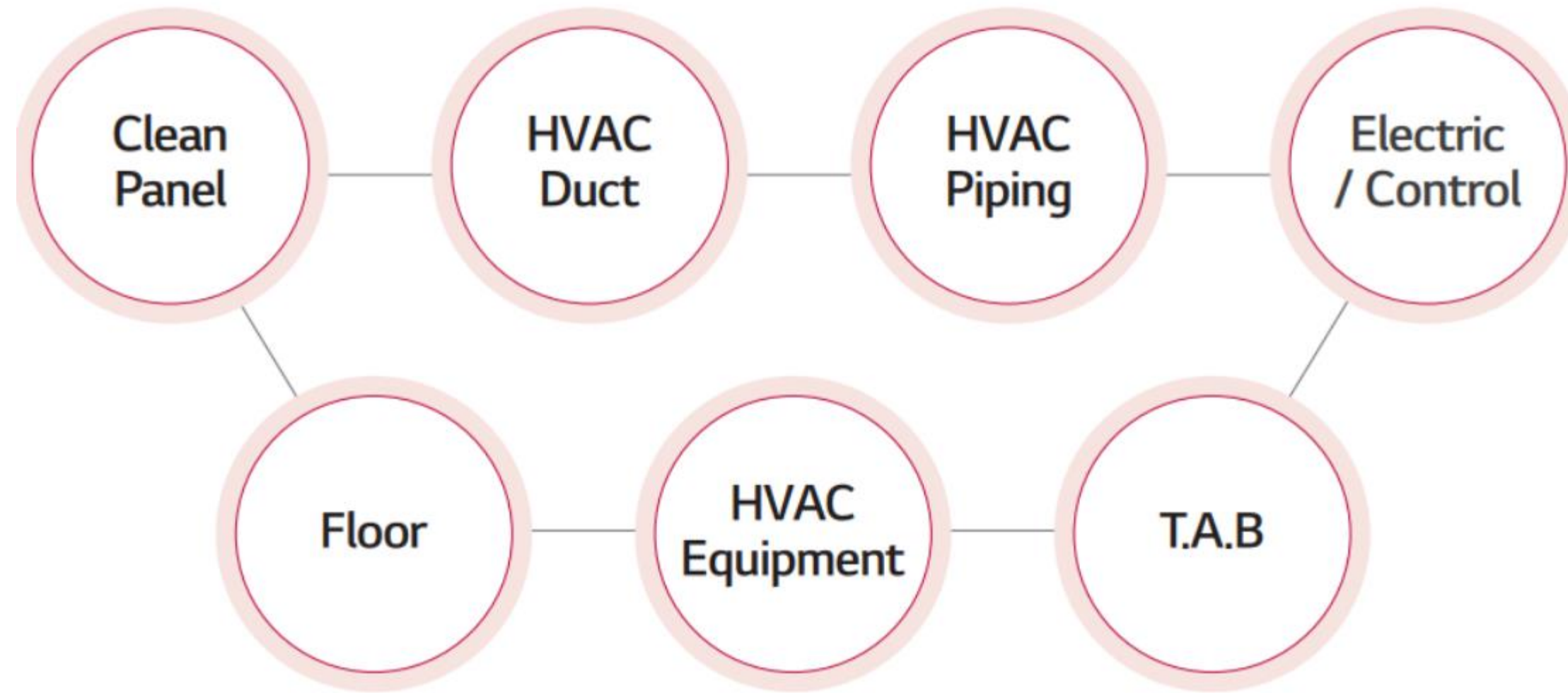
Heat exchanger system construction



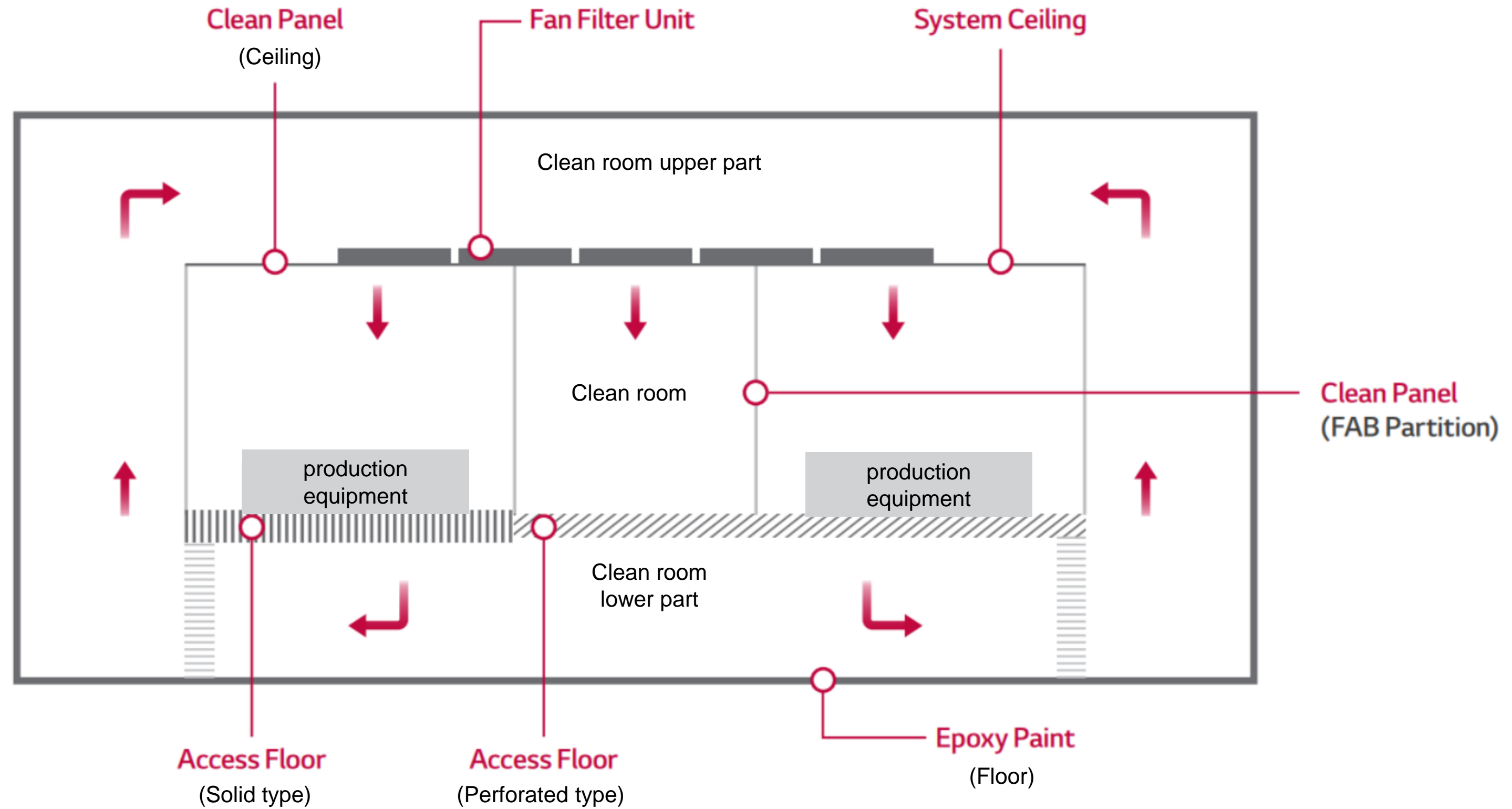
Clean room work process



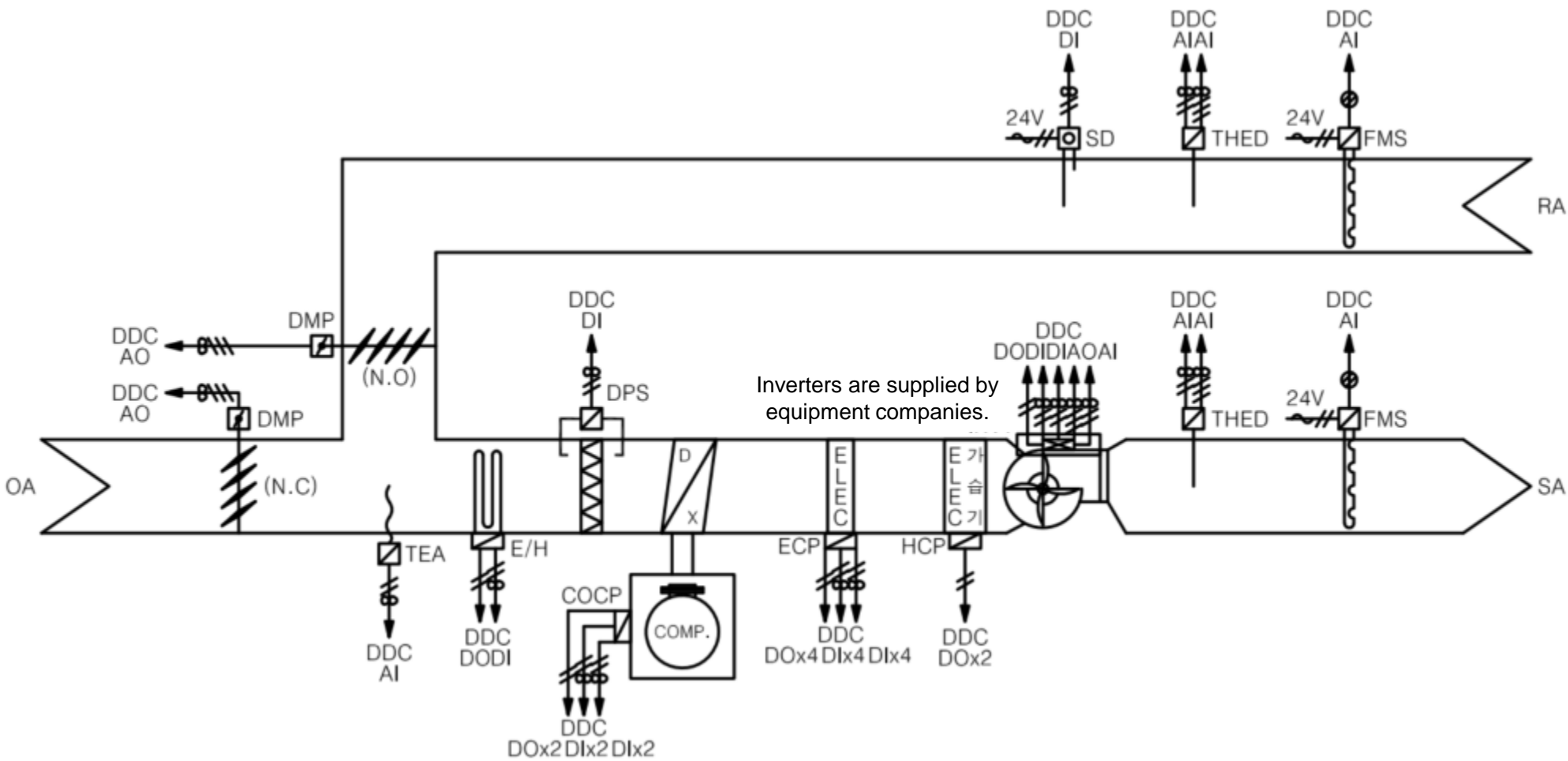
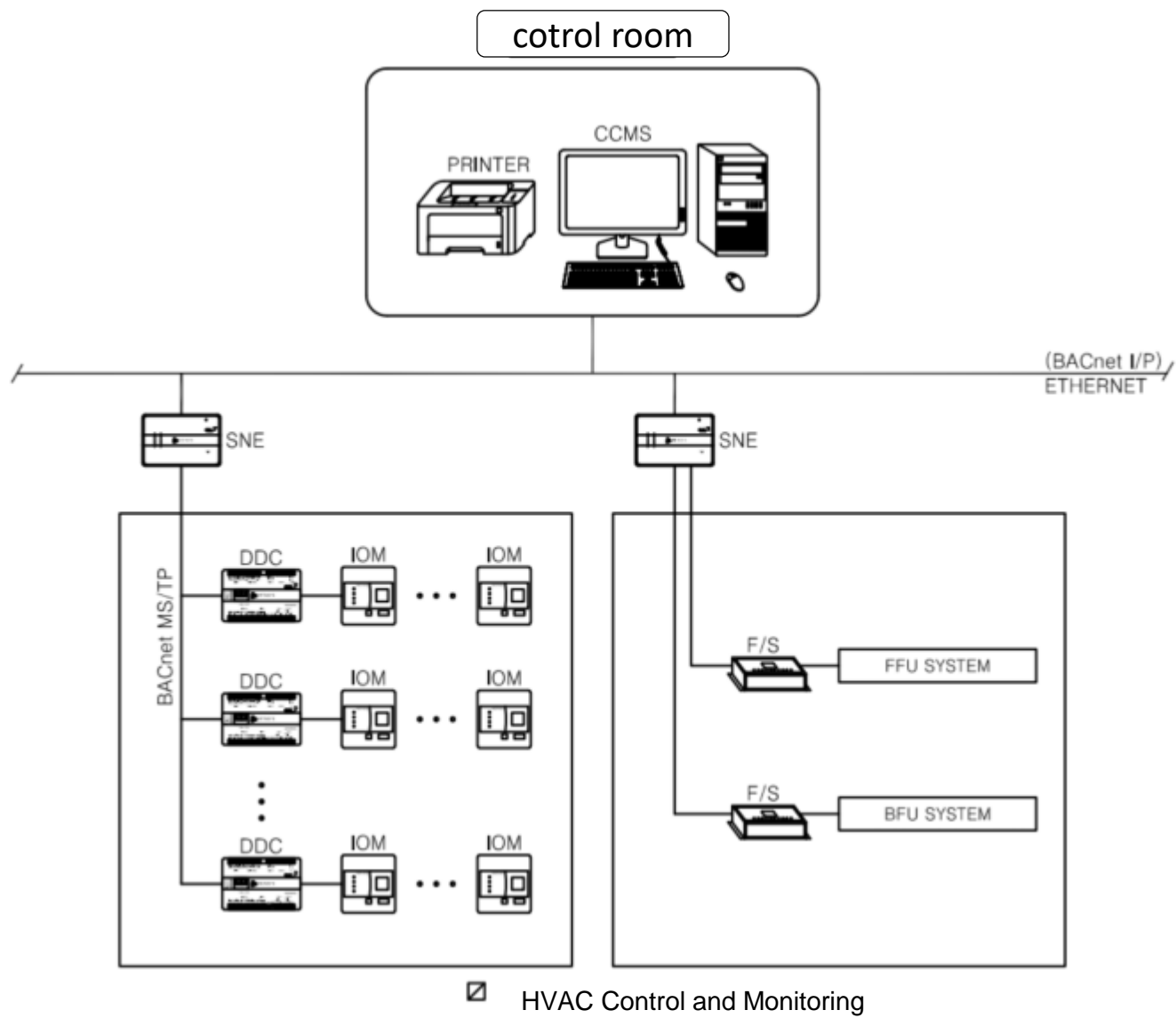
Clean room construction scope



Clean room internal composition



Automatic control configuration





H A N I L T E C H N O L O G Y

THANK YOU!

T. +82 43-216-2202
E. hanil77@chol.com