SAM JUNG

SPEED CHILLER
SPEED CHILLER
SPEED CHILLER

SAM JUNG ENC
SPEED CHILLER

SAMJUNG ENC, a long-term manufacturer specializing in industrial chillers for 29 years

Since SAMJUNG ENC has been established in May 30, 1993, it is a company that specializes in producing only industrial chillers for 29 years.

Development, mass-production, and commercialization of GLOBAL's best cooling devices for hydrogen gas chargers are helping to revitalize the Korean hydrogen economy, and SAMJUNG ENC.
Realizes many achievements such as development of CHILLER testing system for GLOBAL's best hydrogen charging system with technology.

SAMJUNG ENC is a future-oriented company that leads in cooling equipment technology and aims to "innovate" customer satisfaction through technology development and quality-first principles of meeting and keeping promises of “fidelity” with customers.

Company Profile

SAMJUNG ENC

The first in the chiller industry

EU CE accreditations for all chiller items

Factories 1, 2, 3 - Operating its production lines
Factory 1 (freezing manufacturing)/Factory 2 (metal plate manufacturing)/Factory 3 (heat exchanger)

Chiller specialized developer/manufacturer
SAMJUNG ENC is a specialized company that has developed only chillers since its establishment in 1993.

Proven technology with market share over 90%
- CRYSTAL SAPPHIRE GROWER COOLING SYSTEM
- HOT & COOL 2CHANNEL~3CHANNEL
- SKID CHILLER COOLING SYSTEM

Establish the service response system within 12 hours nationwide

Apply over 40% of heat exchanger parts compared to the similar volume

HISTORY

1993.	05	Found SAMJUNG Engineering
1995.	04	Superconducting Cooler Sales Initiation
1999.	12	Initiate development of SPEED CHILLER
2001.	04	ISO 9001/ISO 14001 certificates
2004.	07	Acquisition of a practical patent (Registration No. 0282298)
2007.	07	Change of corporation to SAMJUNG ENC.
2008.	07	Accreditation of CE, a European standard
2011.	10	EU CE accreditations for all chiller items
2012.	01	First time production of EVAPORATOR TWISTED & SPIRAL COIL in the chiller industry
2012.	03	Manufacturing license of special freezing equipment first time in the chiller industry
2015.	04	Invention patent (10-1511693) a thermal shock cooling and heating system
2015.	04	Invention patent (10-2014-0190214) a pump to prevent from freezing and bursting of chiller
2015.	12	IInvention patent (10-1582276) - a chiller with the function to prevent from raindrops
2016.	01	Invention patent (10-1589225) - a rapid SKID chiller with the function to prevent from raindrops
2016.	05	Establishment of the Corporate Affiliated Research Institute of SAMJUNG ENC’s Gyeongin Branch
2017.	04	Acquisition of Venture Company Confirmation
2017.	04	Obtain Innobiz Confirmation
2018.	01	Expansion to Hwasung Jeongok Marine Industrial Complex
2018.	01	Cooling device for hydrogen gas charger primary production delivery (Yeoju H_2 charging station)
2018.	02	New purchase of turning center, machining center
2018.	10	Mechanical equipment construction business registration
2019.	01	Acquisition of a patent for the invention of the oil cooling system (Registration No. 10-1941494)
2019.	02	Acquisition of a patent for invention of a cooling device for hydrogen gas charger (Registration No. 10-194990)
2020.	05	Acquisition of Main Biz Confirmation / Acquisition of Company Specialized in Material, Parts and Equipment / Acquisition of National Root Company Confirmation
2020.	07	Winning the Best Technology Award for Participating in Hydrogen Mobility + Show Exhibition
2020.	12	Awarded Minister of SMEs and Startups
2020.	12	2020 Korea's 14th Patent Awards for Excellence
2021.	01	Hydrogen gas charging gun ice prevention device invention patent (No. 10-2202439)
2021.	02	Acquisition of a patent for low-temperature cooling system for hydrogen gas chargers with oil recovery function (No. 10-2213908)
2021.	02	Acquisition of a patent for the invention of a cooling system for hydrogen gas chargers (No. 10-2217530)
2021.	02	Obtain confirmation of participation in the campaign for work-life balance
2021.	06	Registered as a member of the Hydrogen Convergence Alliance (H2KOREA)
2021.	09	Recipient of the 2021 Hong Dae-Yong Prize of the Patent Technology Awards from the Korean Intellectual Property Office

Product Features

Characteristics of the SAMJUNG ENC SPEED CHILLERS

The specially developed design minimizes the unnecessary space inside the CHILLER while maximizing the maintenance space to minimize the installation area. SAMJUNG ENC has secured functions and safety so that it can be used widely from primary industrial sites to cutting-edge semiconductor production processes, and more than 40% of the internal components of SPEED CHILLER using semiconductor application technology were developed and manufactured to be permanently usable, and have also made every effort to maintain maintenance and compatibility of parts. The chronic problems of GAS LEEK and WATER LEEK of existing coolers and freezer-related products have been fundamentally solved, and by introducing a system that can minimize loss of compressor motor and various motor coils, SAMJUNG ENC is challenging to zero defect rate by introducing all SPEED CHILLER models.

Corporate Research Institute

A Venture Company

INNOBIZ Association

ISO9001/ ISO 14001

MAINBIZ Association

Korea National Ppuri Industry Center (KPIC)

Invention Patent

Work-Life Balance

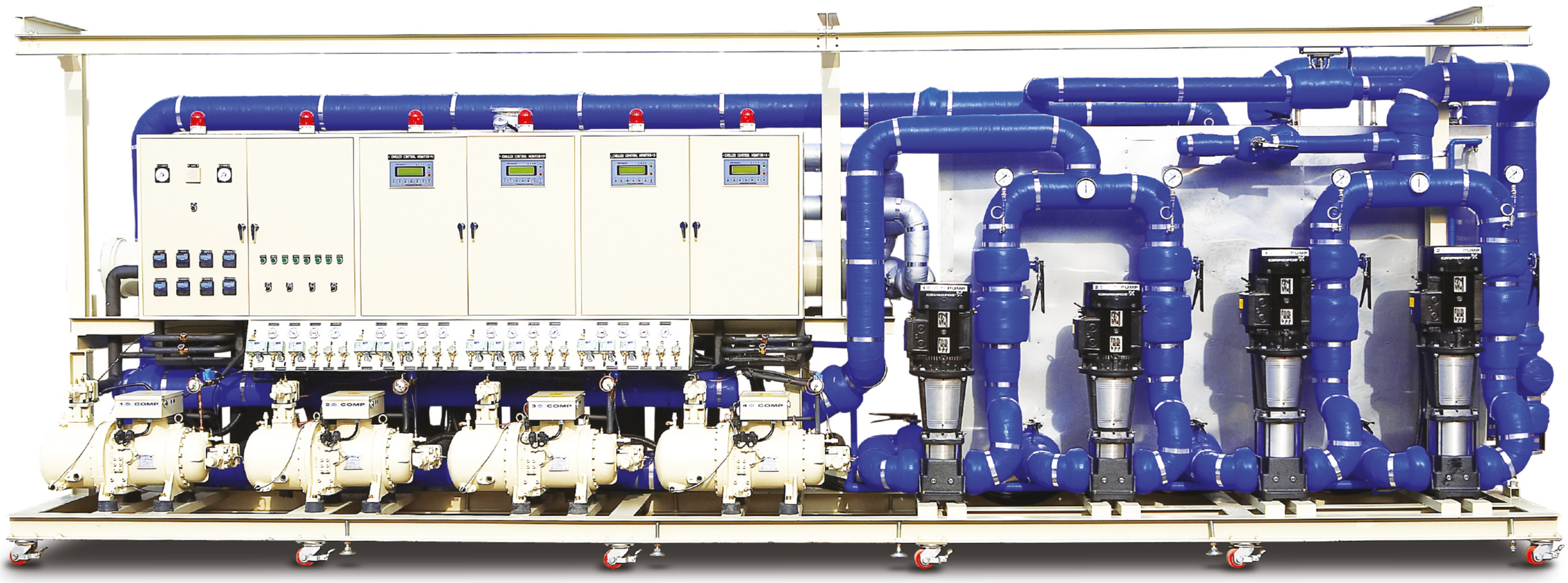
CE Certification

Utility Patent

Korean Intellectual Property Office

Clean Place of Business

Company specializing in materials, parts, and equipment



PRODUCT 01

H2 CHILLER

Air-Cooled H2 SUB CHILLER

Water-Cooled H2 MAIN CHILLER

Movable H2 EXPLOSION PROOF CHILLER
(Zone 1.2 EX d IIB+H2)

H2 CHILLER TECHNOLOGY

A long-lived specialized company that has devoted 29 years to producing Industrial Chillers, SAMJUNG ENC

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SAMJUNG ENC is a future-oriented company that leads in cooling equipment technology and aims to "innovate" customer satisfaction through technology development and quality-first principles of meeting and keeping promises of “fidelity” with customers.

제 2021-0015 호

수소전문기업 확인서

1. 기 업 명 : 주식회사삼정이엔씨 (사업자등록번호: 140-81-23241)
2. 대 표 자 : 김 승 섭
3. 소 재 지 : 경기도 화성시 사신면 전곡산업8길 73(전곡리 1118-8, 장외리 623-1, 623-2)
4. 유 효 기 간 : 2021. 9. 14. ~ 2026. 9. 13.

위 기업은 「수소경제 육성 및 수소 안전관리에 관한 법률」 제11조 제2항에 따라 수소전문기업임을 확인합니다.

2021년 9월 14일

산업통상자원부장관

Hydrogen Specialized Company Certificate

POSSESSED INVENTIONS

- A chiller control system for hydrogen gas fueler
- A low-temperature cooling system for hydrogen gas fueler with a function to collect oil
- A prevention tool from freezing of fueling gun of hydrogen gas
- A chiller for hydrogen gas fueler
- An oil cooling system
- A chiller with the function to prevent from raindrops
- A rapid SKID chiller with the function to prevent from raindrops
- A chiller for cold water
- A thermal shock cooling and heating system
- A pump to prevent from freezing and bursting of freezer

Air-Cooled H_2 CHILLER new products

Air-Cooled Integral Type H_2 CHILLER

Air-Cooled All-In-One Type H_2 CHILLER

● Motivation for Development

1. Dominate the market by securing a price competitive advantage for Hydrogen charging coolers require higher stability and efficiency than general industrial coolers
2. Expect revitalize domestic market and stable maintenance through localization of existing imported goods

● Development Task

1. Secure efficient charging time compared to imported goods
2. Securing price and technology competitiveness through localization

● Development Performance

1. A representative product under stable operation at over 130 Hydrogen Charging Stations in Korea
2. A product that can provide the ultimate freezing effect under the GLOBAL climate properties, four seasons and tropical CONDITIONS
3. The Air-Cooled H_2 CHILLER that reduces the UTILITY area of a Hydrogen Charging Station and substantially simplifies the piping facility
4. The Air-Cooled H_2 CHILLER will play a prominent role in the carbon neutral effect, such as efficiency increase, power consumption decrease, and area reduction.

Water-Cooled H_2 CHILLER FLOW

Korean Model Water-Cooled H_2 CHILLER for four seasons

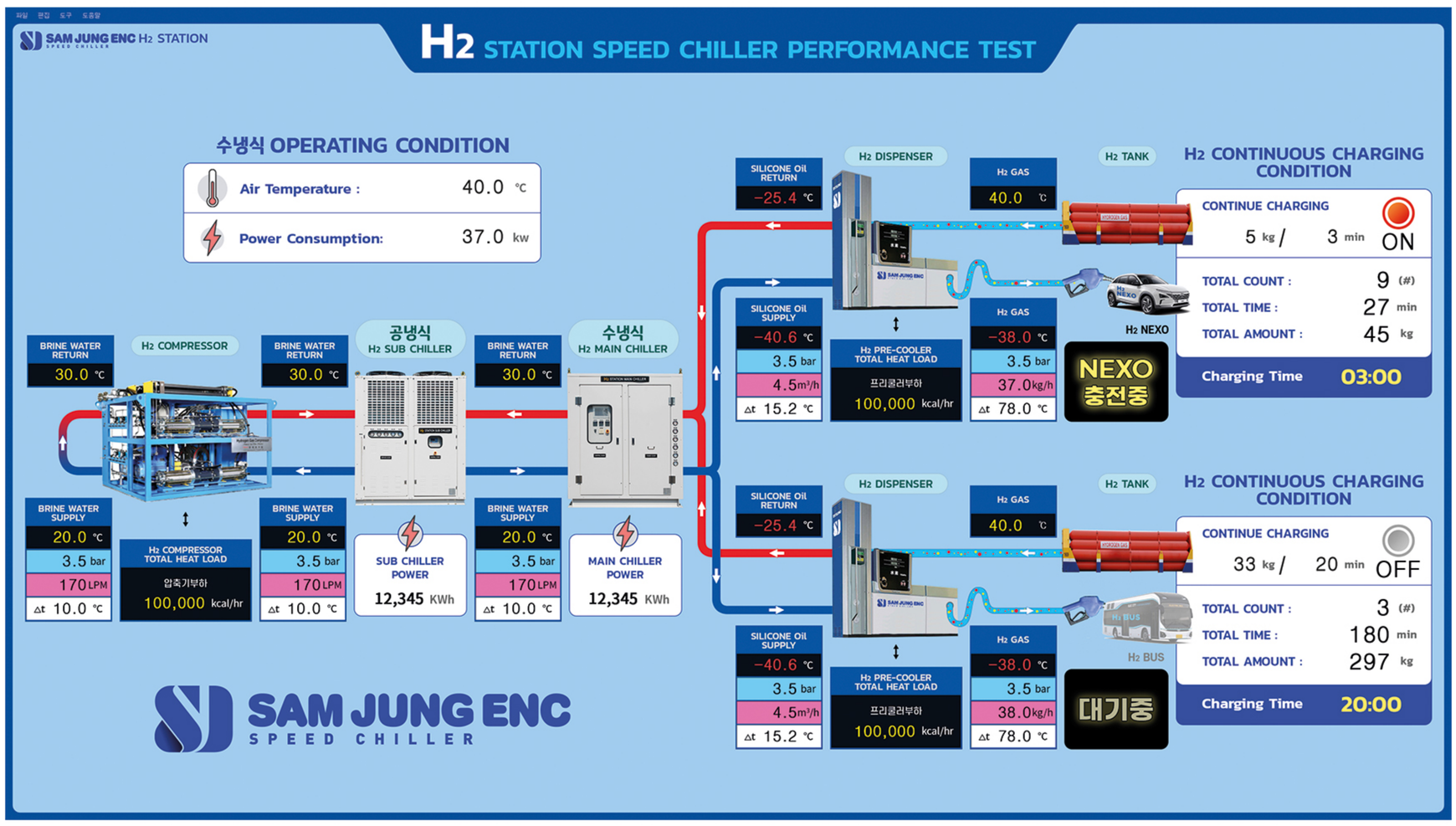
Air-cooled H_2 SUB CHILLER

Water-cooled H_2 MAIN CHILLER

The Water-Cooled H_2 CHILLER is a representative product operating commercially at over 130 Hydrogen Charging Stations in Korea.

As a product suitable for the GLOBAL climate properties, four seasons and tropical conditions, it cools the CONDENSER temperature of the refrigerant in the water-cooling method to achieve the ultimate freezing ability.

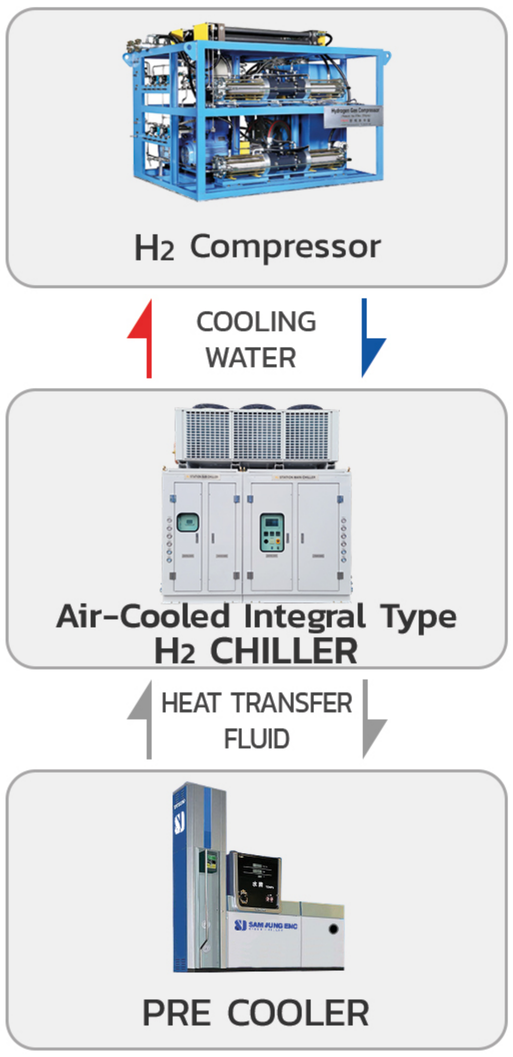
It is possible to use both the hydrogen compressor Cooling Water and the DISPENSER CHILLER Cooling Water. It is composed so that the MAIN CHILLER and SUB CHILLERS are supplied to 1 SYSTEM.



Air-Cooled Integral Type H_2 CHILLER FLOW

Customer-oriented specialized Air-Cooled Integral Type H_2 CHILLER

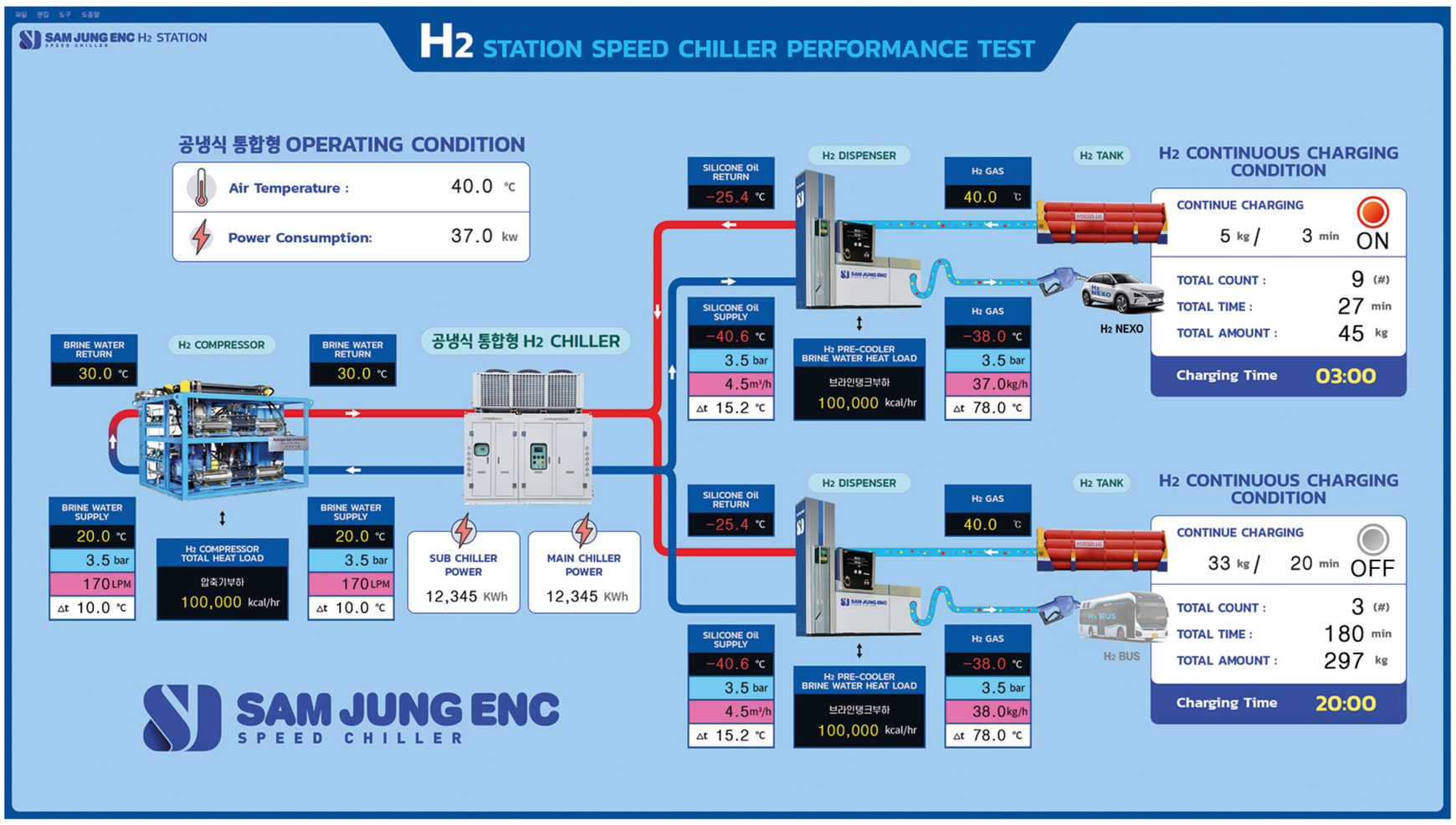
Air-Cooled Integral Type H_2 CHILLER



The Air-Cooled Integral Type H_2 CHILLER reduces the UTILITY area of a Hydrogen Charging Station and significantly simplifies the piping facility.

It is one of the products that provide various solutions for minimizing the area of a Hydrogen Charging Station and easy integrated control by using both the H_2 COMPRESSOR cooling water and the DISPENSER CHILLER cooling water.

In particular, it is suitable for the GLOBAL climate properties, four seasons and tropical conditions.



Air-Cooled All-In-One Type H_2 CHILLER FLOW

All-in-One H_2 CHILLER overcoming high ambient temperature

Air-Cooled All-In-One Type H_2 CHILLER

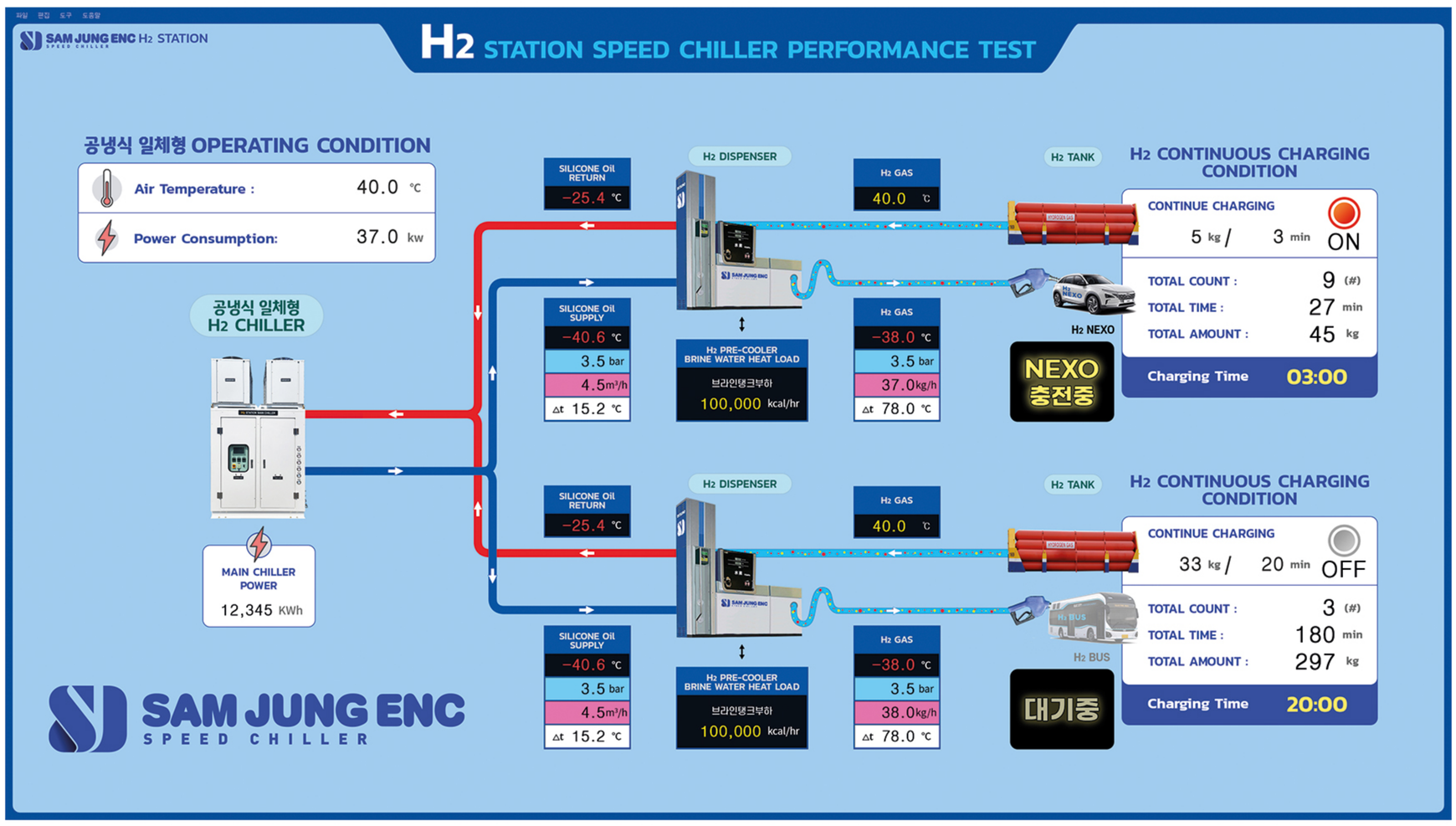
Air-Cooled All-In-One Type H_2 CHILLER

HEAT TRANSFER FLUID

PRE COOLER

It is an H_2 CHILLER type that provides high efficiency by cooling only the DISPENSER PCHE of a Hydrogen Charging Station.

The All-in-One H_2 CHILLER, which avoids the water-cooling, is a product with superb energy usability from choosing the Hydrogen Charging Station site. It is a significantly commercialized product that contributed to stabilizing a Hydrogen Charging Station through efficiency increase, decreased electric consumption, and reduced area. It is an All-in-One H_2 CHILLER for the next-generation hydrogen gas chargers that will play a prominent role in the carbon neutral effect.

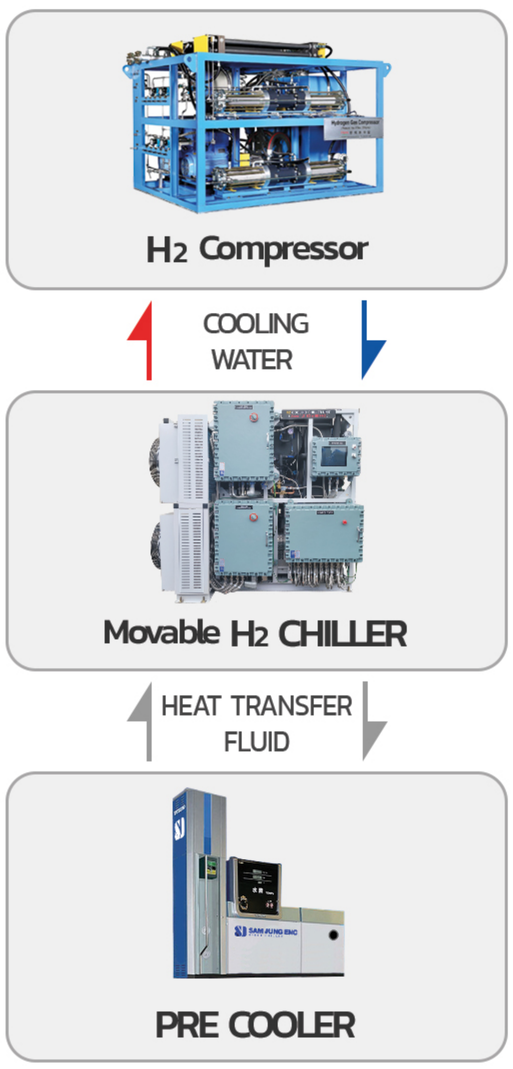


Movable H_2 EXPLOSION PROOF CHILLER

(Zone 1,2 EX d IIB + H_2)

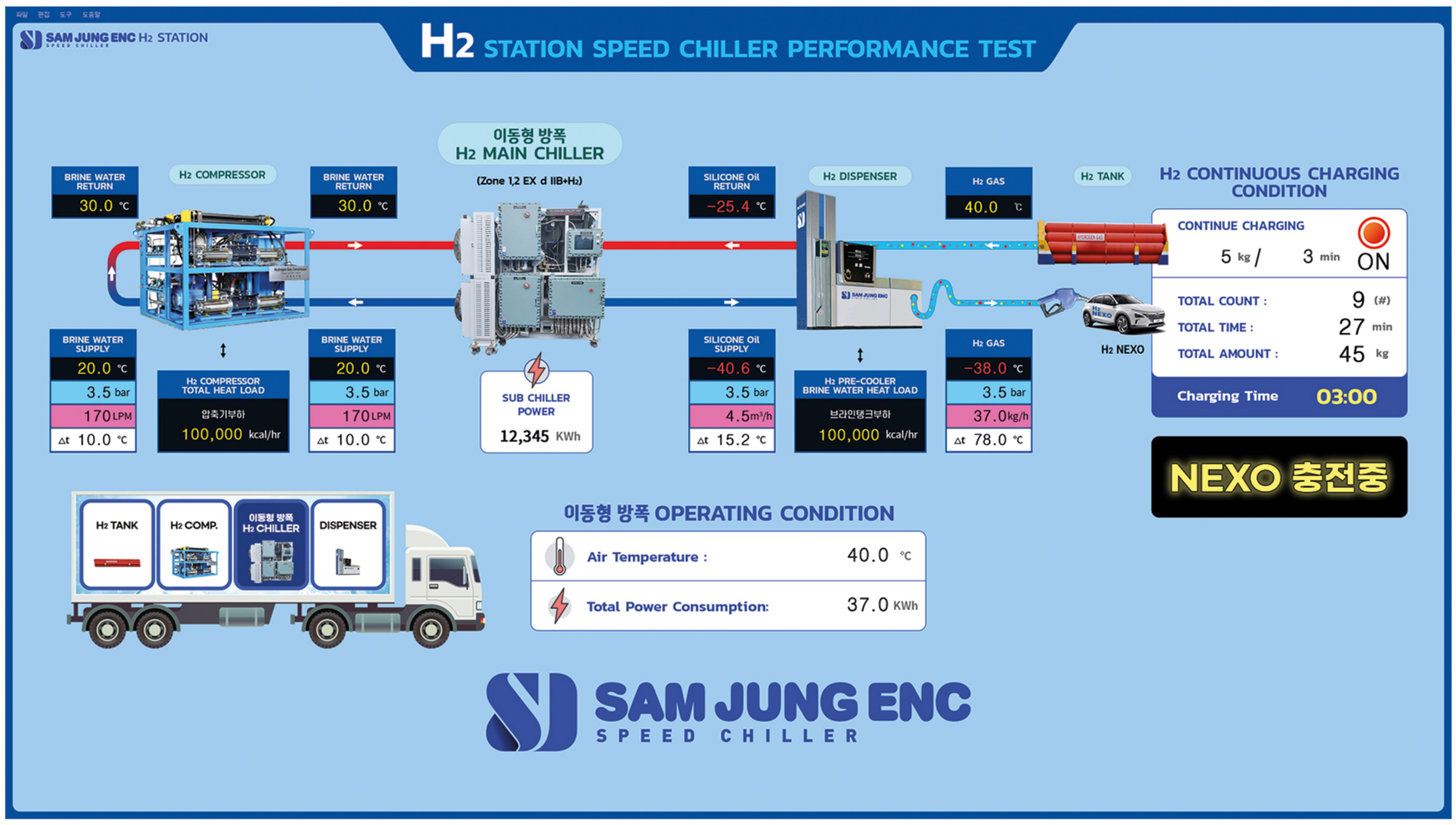
Movable H_2 CHILLER for the Hydrogen Charging Station

Movable H_2 EXPLOSION PROOF CHILLER
(Zone 1.2 EX d IIB+H_2)



The Movable Explosion-Proof H_2 CHILLER (Zone 1,2 EX d IIB+H_2) is a product of technology requiring efficient operation and the highest level of safety.

The Movable Explosion-Proof H_2 CHILLER is to be installed inside a movable vehicle trailer. It is a specialized H_2 CHILLER, for the next-generation hydrogen gas chargers, with the explosion-proof rank, space-optimized design, high-efficiency performance, and durability design against vibration stress.



How to select the Chiller Type for Hydrogen Charging

Features of SAMJUNG ENC H_2 STATION Cooling System

1. Rechargeable continuously (based on H_2 NEXO 5kg/3min, H_2 Bus 29kg/15min)
2. Quick Cool to reduce cooling time
3. Reduction of charging waiting time by installing inverter pump
4. Maintain the PRE COOLER temperature for 365 days regardless of outside air temperature or charging temperature.
5. Minimize charging heat load shock by applying PUMP individually
6. Precise temperature deviation management functioned by maintaining set temperature
7. H_2 Installation location in charging station / manufacturing Cooler according to installation area conditions
8. Maintenance of Cooler for domestic and foreign hydrogen charging
9. Establishment of an emergency service network system for all regions of Korea
10. Establish systems for installation and operation in GLOBAL locations

Water Cooled

H_2 Compressor

COOLING WATER

Air-Cooled H_2 SUB CHILLER

COOLING WATER

Water-Cooled H_2 MAIN CHILLER

HEAT TRANSFER FLUID

PRE COOLER

Air-Cooled Integral Type

H_2 Compressor

COOLING WATER

Air-Cooled Integral Type H_2 CHILLER

HEAT TRANSFER FLUID

PRE COOLER

Air-Cooled All-in-One Type

Air-Cooled All-in-One Type H_2 CHILLER

HEAT TRANSFER FLUID

PRE COOLER

Movable Type

H_2 Compressor

COOLING WATER

Movable H_2 CHILLER

HEAT TRANSFER FLUID

PRE COOLER

Next generation H_2 CHILLER SYSTEM

NEXO

BUS

Airplane

Train

Ship

Truck

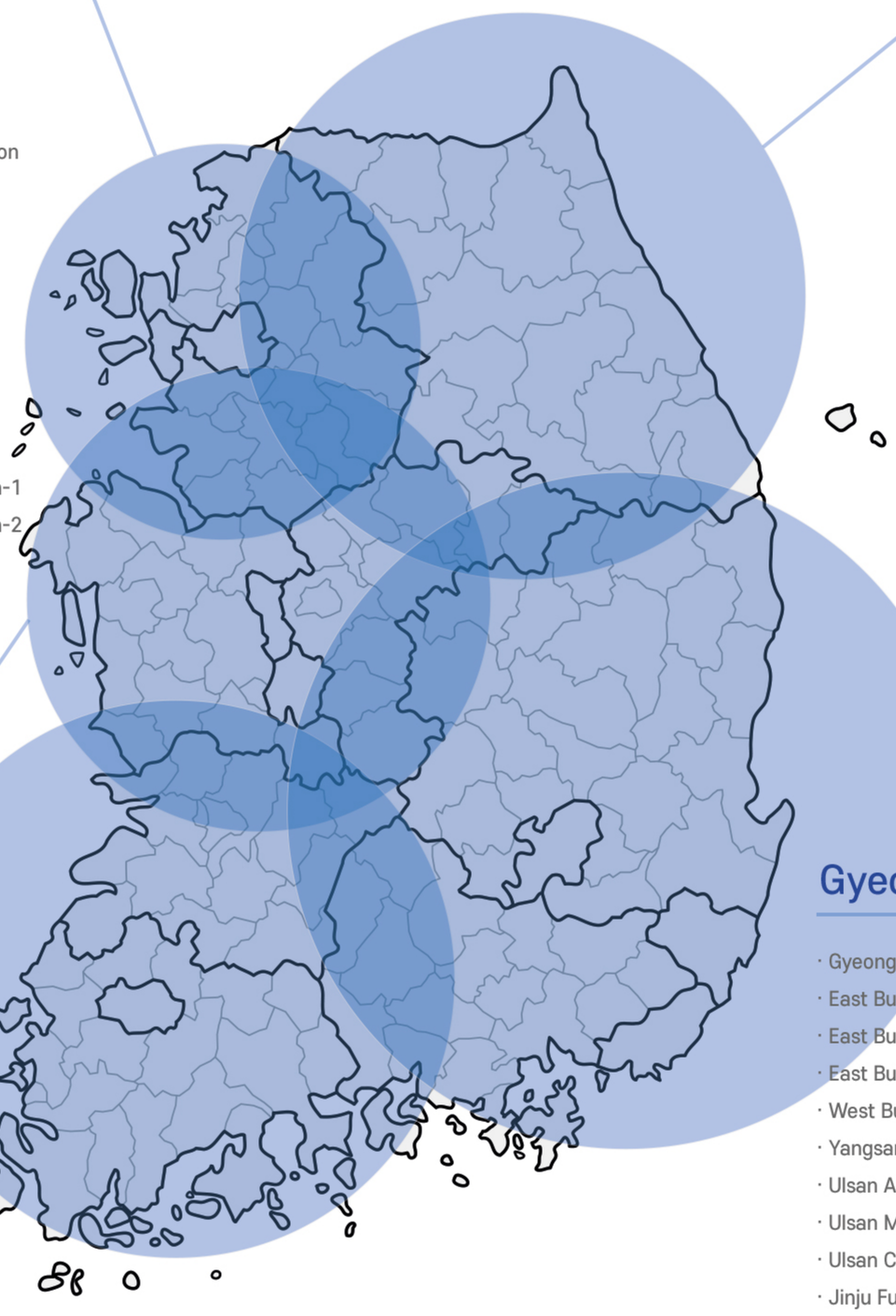
Forklift truck

Drone

State of SAMJUNG ENC's supply of the H_2 Chillers

Winning orders/Supplies to over 130 Charging Stations nationwide

(As of April 2022)



Metropolitan area
(Seoul, Gyeonggi, Incheon)

- Goyang Wondang Fueling Station
- Gwangmyeong Fueling Station
- Guri Topyeong Fueling Station
- Gimpo Fueling Station
- Namyangju Fueling Station
- Balan Fueling Station
- Bucheon City Fueling Station
- Seongnam Fueling Station
- Suwon (Gwanggyo) Service Area
- Suwon Tapdong Fueling Station
- Ansan Sangrok Fueling Station
- Ansan Fueling Station
- Anseongmatchum Service Area
- Anseong Fueling Station
- Anseong Service Area
- Yeoju Service Area
- Paju Munbal Fueling Station
- Pyeongtaek Wolgok Fueling Station-1
- Pyeongtaek Wolgok Fueling Station-2
- Pyeongtaek Fueling Station
- Pyeongtaekhang Fueling Station-1
- Pyeongtaekhang Fueling Station-2
- Pyeongtaekhang Fueling Station-3
- Hanam Dream Service Area
- Hwasung Fueling Station
- Gangseo Bus Fueling Station-1
- Gangseo Bus Fueling Station-2
- Gangseo Bus Fueling Station-3
- Seosomun Service Area
- Seoul Magok Fueling Station
- Seoul Ogok Fueling Station
- Seocho Bangbae Fueling Station
- Jingwan Fueling Station-1
- Jingwan Fueling Station-2
- Jingwan Fueling Station-3
- GukhoeUisadang Fueling Station
- Gangnam Segok Fueling Station
- Cheonghwa Dobong Fueling Station
- Incheon Gyeyang Fueling Station
- Incheon Seogu(Yeonhui) Fueling Station
- Incheon Seogu Fueling Station
- Incheon Songdo Fueling Station
- Incheon Oryu Fueling Station
- Incheon Junggu Fueling Station
- IncheonTechnopark Fueling Station
- Incheonhang Fueling Station-1
- Incheonhang Fueling Station-2
- Incheonhang Fueling Station-3
- Hyundai Steel Incheon Fueling Station-1
- Hyundai Steel Incheon Fueling Station-2

Gangwondo

- Daegwallyeong Fueling Station
- Donghae Fueling Station
- Wonju Fueling Station
- Chooncheon Fueling Station-1
- Chooncheon Fueling Station -2

Chungcheongdo
(Chungcheongbukdo,Chungcheongnamdo,Daejeon)

- Institute for Advanced Engineering
- Goesan Fueling Station
- Naepo Fueling Station
- Dangjin Fueling Station
- Eumseong Fueling Station
- Jugam Service Area-1
- Jugam Service Area-2
- Jincheon Fueling Station
- Cheonan Fueling Station-1
- Cheonan Fueling Station-2
- Cheongju Expressway Service Area
- Chungnam Techno Park(Seosan)-1
- Chungnam Techno Park(Seosan)-2
- Chungnam Techno Park(Asan)-1
- Chungnam Techno Park(Asan)-2
- Daejeon Nangwol Fueling Station-1
- Daejeon Nangwol Fueling Station-2
- Daejeon Jeonjugi
- Daejeon Jungchon Fueling Station
- Daejeon Fueling Station-1
- Daejeon Fueling Station-2
- Daejeon Fueling Station-3
- Daejeon Hakha Fueling Station
- Boryeong Fueling Station-1
- Boryeong Fueling Station-2
- Boryeong Fueling Station-3
- Sintanjin Fueling Station
- Chungju Fueling Station-1
- Chungju Fueling Station-2
- Chungju Fueling Station-3

Gyeongsangdo

- Gyeongsan Fueling Station
- East Busan Fueling Station -1
- East Busan Fueling Station -2
- East Busan Fueling Station -3
- West Busan NK Fueling Station
- Yangsan Fueling Station
- Ulsan APK Fueling Station
- Ulsan Maeam-dong Fueling Station
- Ulsan Changpyeong Fueling Station
- Jinju Fueling Station
- Ulsan Hyundai Motors, NEXO LINE -1
- Ulsan Hyundai Motors, NEXO LINE -2
- Korea Automotive Technology Institute(Changwon) -1
- Korea Automotive Technology Institute(Changwon) -2
- Korea Automotive Technology Institute(Changwon) -3
- Korea Automotive Technology Institute(Changwon) -4
- Institute of Daegu Intelligent Auto Parts
- Changwon Fueling Station -1
- Changwon Fueling Station -2
- Haman Service Area
- Daegu Fueling Station -1
- Daegu Fueling Station -2
- Daegu Fueling Station -3
- Daechon Fueling Station
- Seongju Fueling Station
- Chilgok Fueling Station

Jeollado
(Jeollabukdo, Jeollanamdo, Gwangju)

- Goheung Fueling Station
- Gwangyang Fueling Station
- Gwangju Fueling Station -1
- Gwangju Fueling Station -2
- Gunsan Fueling Station
- Deogyusan Fueling Station
- Mokpo Fueling Station
- Buan Gomso Fueling Station
- Buan Fueling Station-1
- Buan Fueling Station-2
- Osu Fueling Station
- Iksan Fueling Station
- JangdeungDong Fueling Station-1
- JangdeungDong Fueling Station-2
- Jangheung Fueling Station
- Jeonju Songcheon Fueling Station
- Jeonju Fueling Station-1
- Jeonju Fueling Station-2
- Jeonju Fueling Station-3

Ansan Fueling Station

Asan Chosa Fueling Station

APK Fueling Station

Seosan Fueling Station

AIR-COOLED INDOOR INTEGRAL TYPE

AIR-IN SIDE CHILLER

Air-cooled indoor integral type

It is a product that is widely used in the industrial plants and can be installed easily.

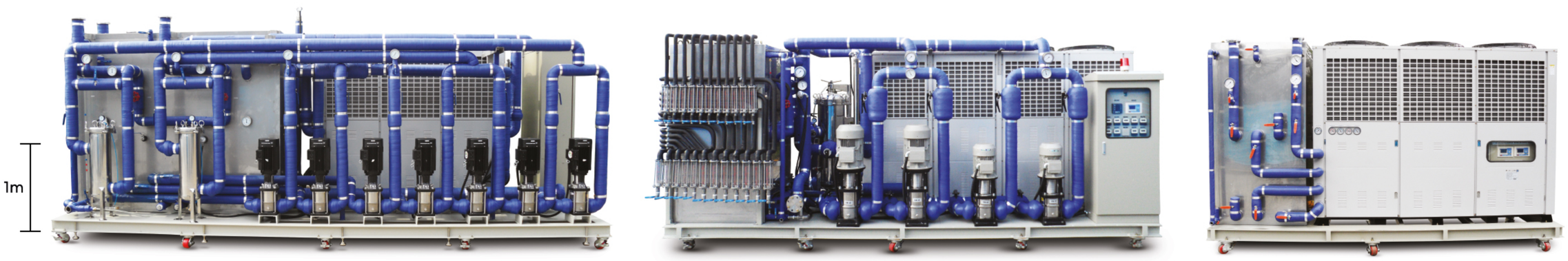
Features of Use

- **Air-cooled indoor integral type**
  As an integral type with 1 unit simply, it is designed optimally to be able to adapt the indoor environment.
  In particular, it shows the excellent performance of cooling effect for a variety of industrial equipment in the industrial plants.
- **General type**
  general chiller to maintain the temperature variation of output cold water within 1-2 ℃
- **Precise type**
  precise chiller to maintain the temperature variation of output cold water within 0.3-0.7 ℃

Standard specifications

Division/Model		SJ-01A	SJ-02A	SJ-03A	SJ-05A	SJ-075A	SJ-10A	SJ-15A	SJ-20A	SJ-25A	SJ-30A	SJ-40A
Rated power of compressor (kw)		0.75	1.5	2.2	3.75	5.6	7.5	11.25	15	19	22.5	30
Pump power (kw)		0.4	0.4	0.75	0.75	1.1	1.5	1.8	2.2	3	3	4
Discharge rate (ℓ/min)		55	55	80	120	150	200	250	320	400	400	450
Cooling capacity (kcal/h)		2,800	5,500	8,500	15,000	22,500	30,000	45,000	60,000	75,000	90,000	120,000
Maximum discharging pressure (bar)		2	2	2	3	3	3	3	4	4	4	4
Weight (kg)		80	130	180	400	480	600	700	800	900	1,000	1,200
Tank volume (ℓ)		17	23	33	80	120	160	200	230	300	300	380
Refrigerant		FREON R-407C										
Total consumption power (kw)		1	2	3	5	7	9.5	14	20	25	28	38
External size (front)	L	500	500	500	650	650	750	750	850	850	1,050	1,050
	W	850	850	850	1,250	1,250	1,600	1,900	2,200	2,200	3,000	3,000
	H	1,400	1,790	1,790	1,790	1,790	2,000	2,200	2,300	2,300	2,300	2,300

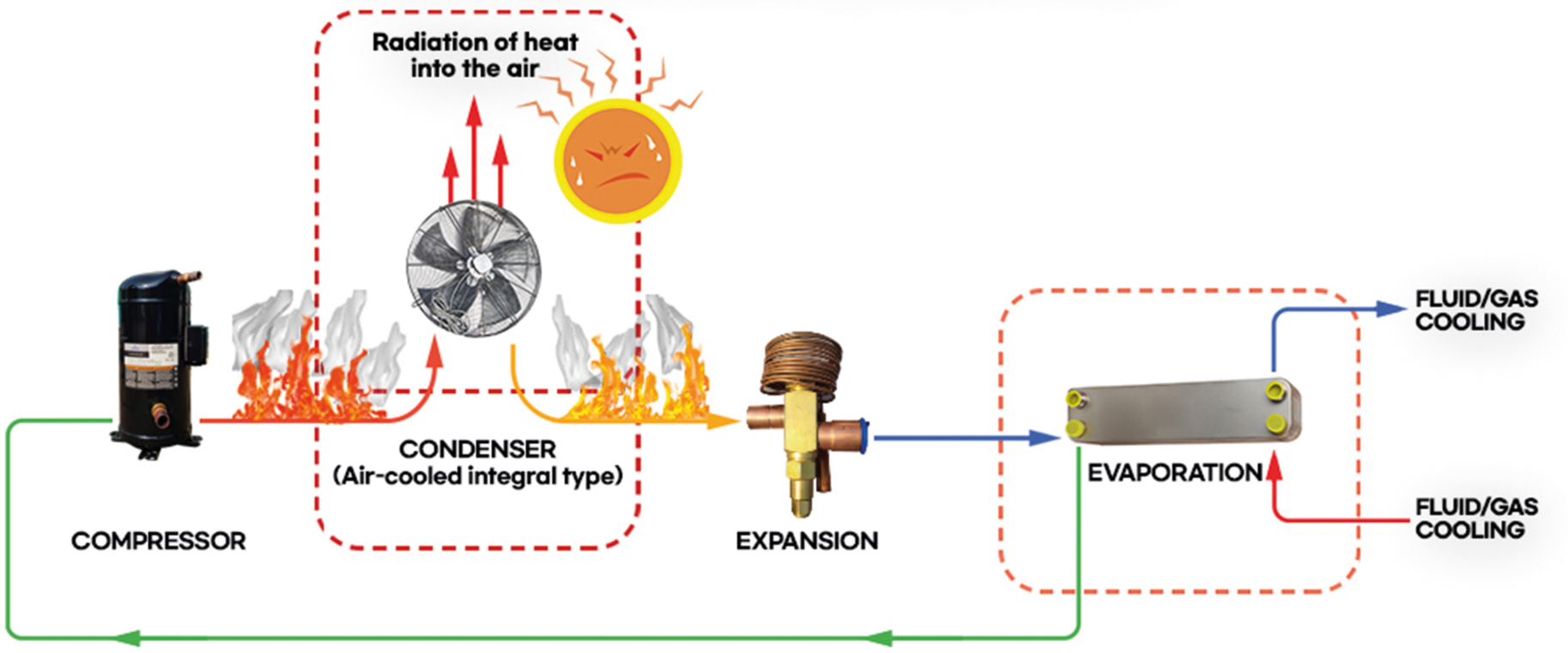
Air-cooled indoor integral



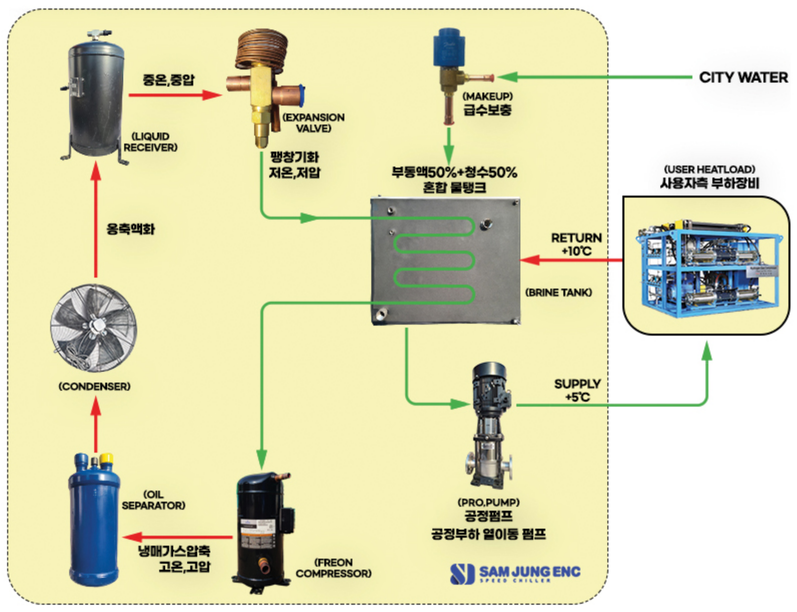
Composition principle

Operational principle of chiller

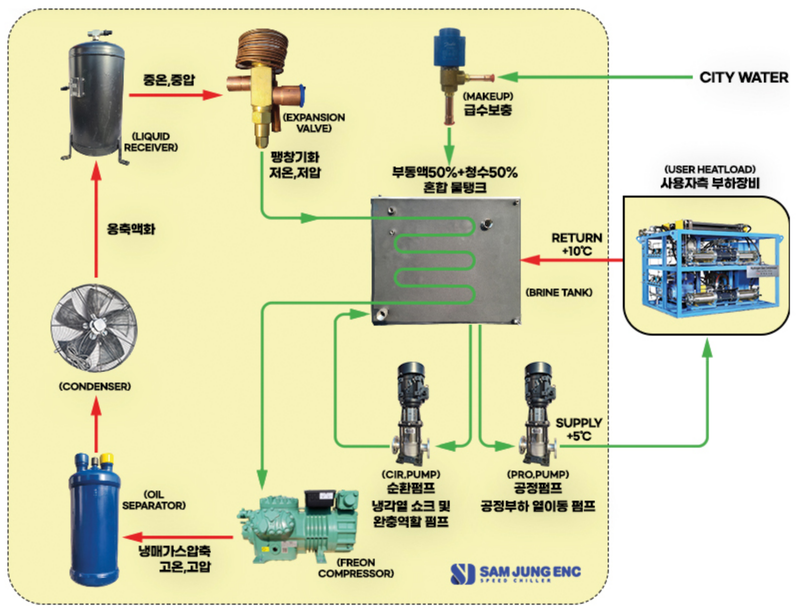
It shows the continuous cooling effect by radiating condensation heat (condenser) that is occurred during the operation of refrigerant cycle using freon gas compressor inside the integral type chiller into the surrounding air and by chilling evaporate to fluid/gas.



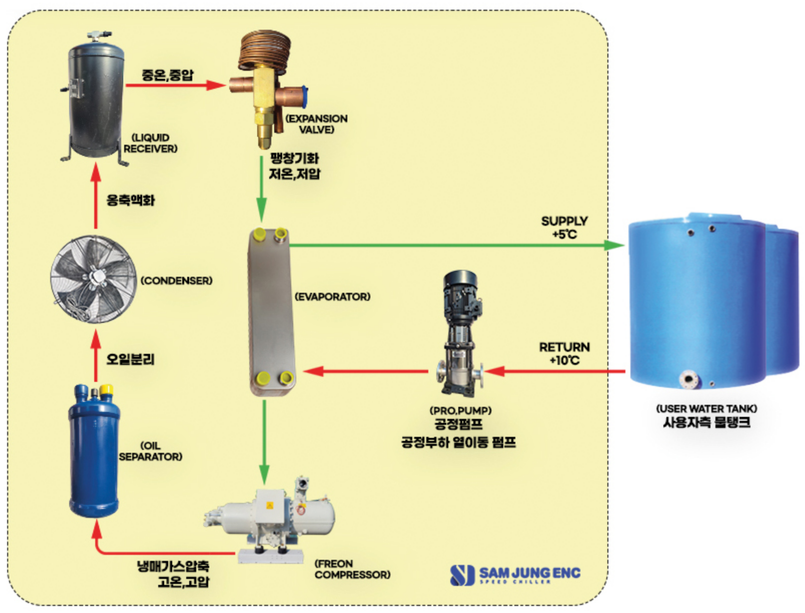
Air-cooled indoor integral type A - Scroll



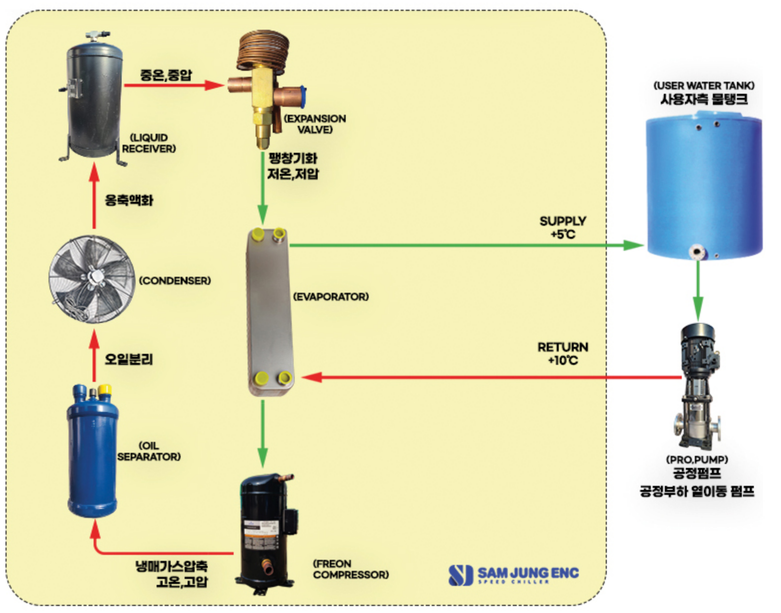
Air-cooled indoor integral type B - Reciprocating



Air-cooled indoor integral type D - Screw



Air-cooled indoor integral type E - Scroll



AIR-OUT SIDE CHILLER

Air-cooled outdoor integral type

It can be widely used in the industrial plants and installed simply in a variety of installation environments such as indoors and outdoors.

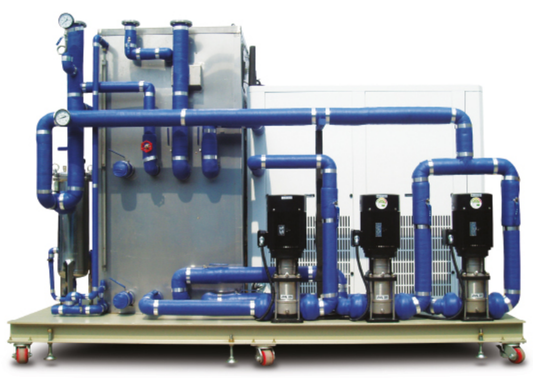
Features of Use

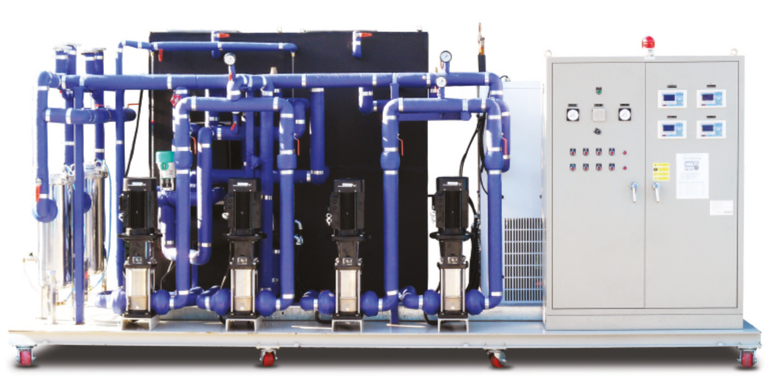
- **Air-cooled outdoor integral type**
  As an integral type with 1 unit simply, it is designed optimally to be able to adapt multiple installation environments such as indoors and outdoors.
  In particular, it shows the excellent performance of cooling effect for a variety of industrial equipment in the industrial plants.
- **General type**
  general chiller to maintain the temperature variation of output cold water within 1-2 ℃
- **Precise type**
  precise chiller to maintain the temperature variation of output cold water within 0.3-0.7 ℃

Standard specifications

Division/Model		SJ-03A	SJ-05A	SJ-075A	SJ-10A	SJ-15A	SJ-20A	SJ-25A	SJ-30A	SJ-40A	SJ-50A	SJ-60A
Rated power of compressor (kw)		2.2	3.75	5.6	7.5	11.25	15	19	22.5	30	38	45
Pump power (kw)		0.75	0.75	1.1	1.5	1.8	2.2	3	3	4	5.5	7.5
Discharge rate (ℓ/min)		80	120	150	200	250	320	400	400	500	600	700
Cooling capacity (kcal/h)		8,500	15,000	22,500	30,000	45,000	60,000	75,000	90,000	120,000	150,000	180,000
Maximum discharging pressure (bar)		2	3	3	3	3	4	4	4	4	4	4
Weight (kg)		300	400	500	600	700	800	900	1,000	1,100	1,200	1,300
Tank volume (ℓ)		33	80	120	160	200	230	300	300	380	450	550
Refrigerant		FREON R-407C										
Total consumption power (kw)		3	5	7	9.5	14	20	25	28	38	45	55
External size (front)	L	700	700	800	800	1,030	1,030	1,030	1,030	1,030	1,040	1,040
	W	1,260	1,260	1,400	1,400	1,630	1,950	1,950	2,800	2,800	3,740	3,740
	H	1,900	1,900	1,900	1,900	2,300	2,300	2,300	2,400	2,400	2,400	2,400

Air-cooled outdoor integral

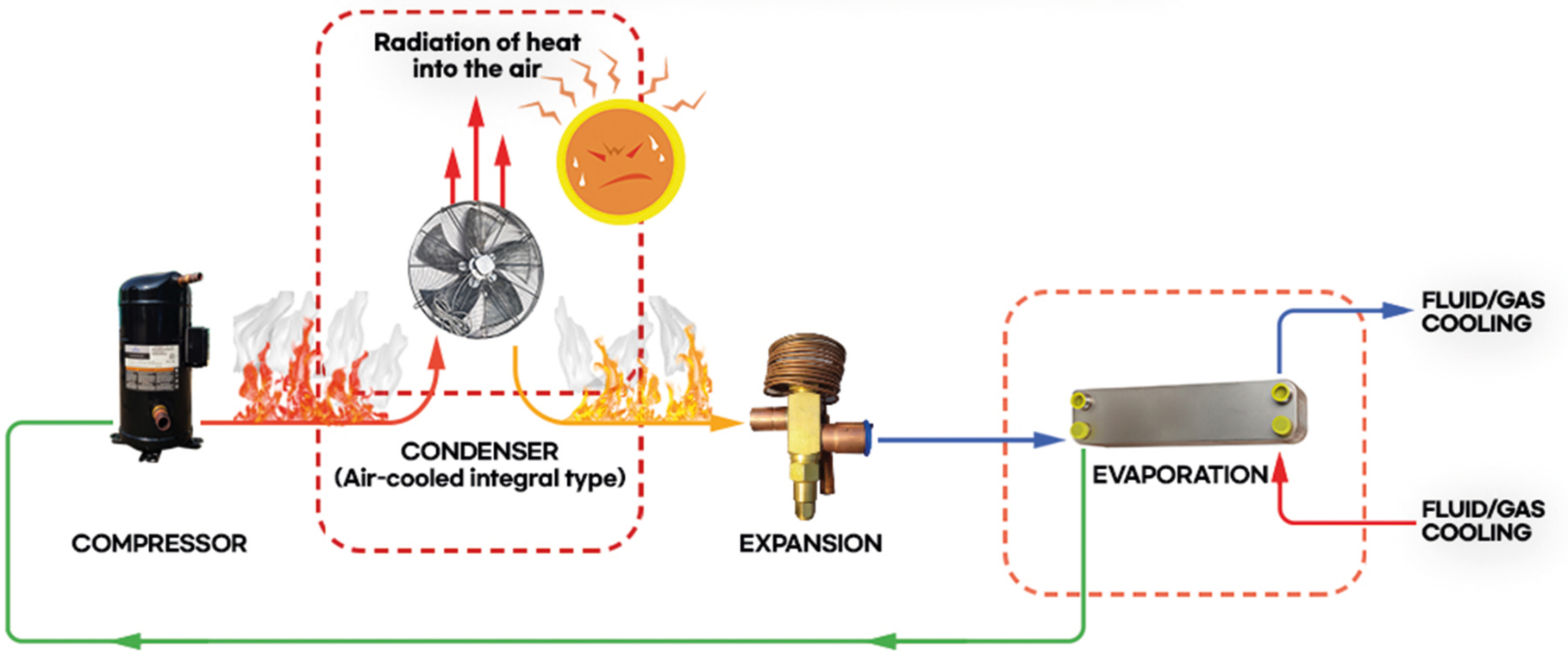




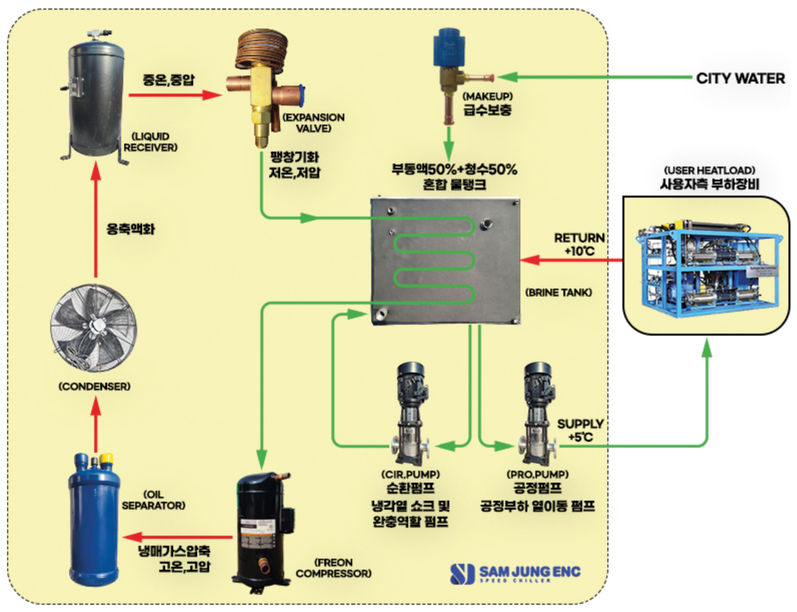
Composition principle

Operational principle of chiller

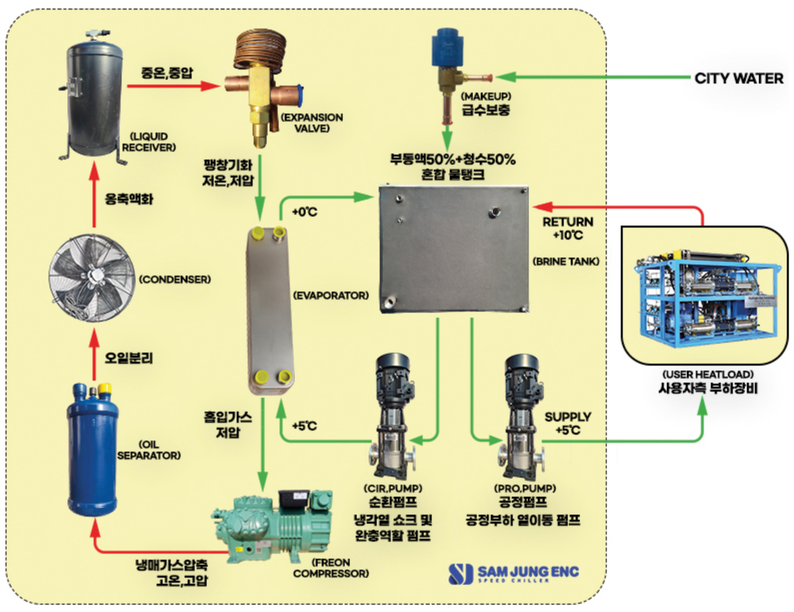
It shows the continuous cooling effect by radiating condensation heat (condenser) that is occurred during the operation of refrigerant cycle using freon gas compressor inside the integral type chiller into the surrounding air and by chilling evaporate to fluid/gas.



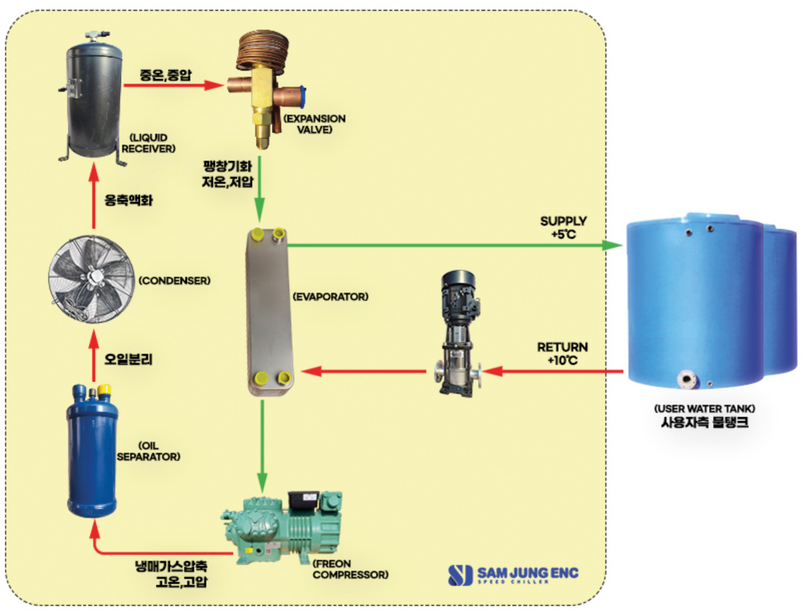
Air-cooled outdoor integral type B - Scroll



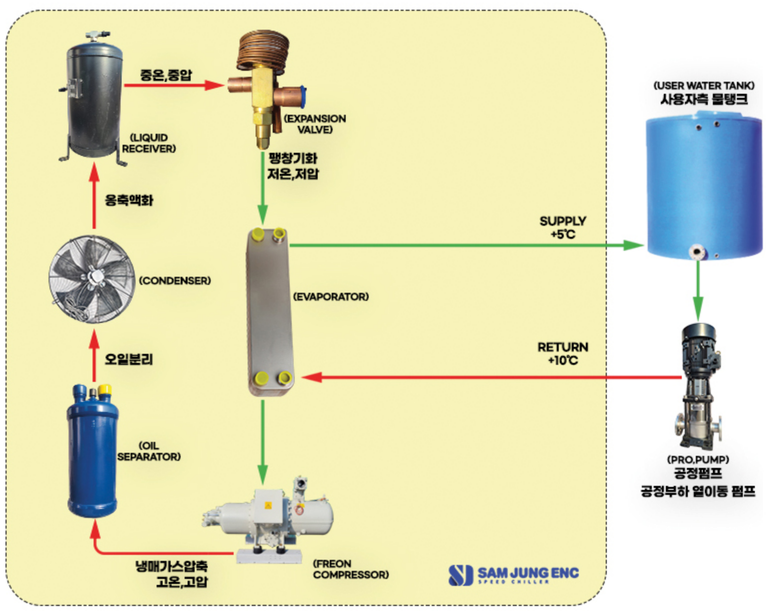
Air-cooled outdoor integral type C - Reciprocating



Air-cooled outdoor integral type D - Reciprocating



Air-cooled outdoor integral type E - Screw



AIR-COOLED SEPARABLE TYPE

AIR-REMOTE CHILLER

Air-cooled separable type

It can be installed where has the limitation for industrial plants or requires quietness.

Features of Use

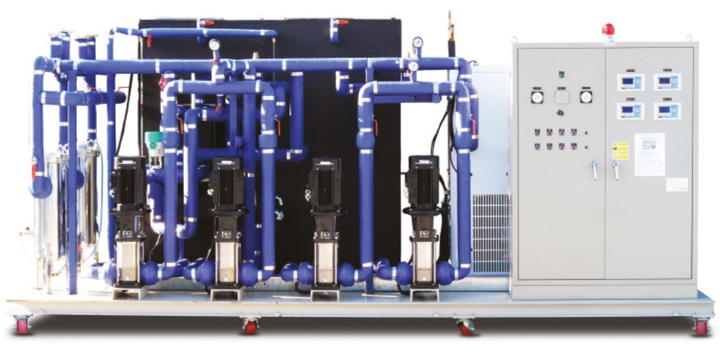
- **Air-cooled separable type**
  It consists of two independent remotes to be installed both in indoor and outdoor.
- **General type**
  general chiller to maintain the temperature variation of output cold water within 1-2 ℃
- **Precise type**
  precise chiller to maintain the temperature variation of output cold water within 0.3-0.7 ℃

Standard specifications

Division/Model		SJ-05AS	SJ-075AS	SJ-10AS	SJ-15AS	SJ-20AS	SJ-25AS	SJ-30AS	SJ-40AS	SJ-50AS	SJ-60AS	SJ-80AS
Rated power of compressor (kw)		3.75	5.6	7.5	11.25	15	19	22.5	30	38	45	60
Pump power (kw)		0.75	1.1	1.5	1.8	2.2	3	3	4	5.5	7.5	10
Discharge rate (ℓ/min)		120	150	200	250	320	320	400	450	600	700	800
Cooling capacity (kcal/h)		15,000	22,500	30,000	45,000	60,000	75,000	90,000	120,000	150.000	180.000	240,000
Maximum discharging pressure (bar)		3	3	3	3	3	3	4	4	4	4	4
Weight (kg)		150	230	350	430	500	600	700	900	1.000	1.100	1,200
Tank volume (ℓ)		80	120	160	20	230	230	300	380	450	550	650
Refrigerant		FREON R-407C										
Total consumption power (kw)		5	7	9.5	14	20	25	28	38	45	55	70
External size (front)	L	650	650	750	750	750	750	850	850	850	1,040	1,040
	W	1,250	1,250	2,000	1,600	1,900	1,900	2,200	2,200	2.200	3,740	3,740
	H	1,790	1,790	2,000	2,000	2,000	2,000	2,100	2,100	2.100	2,400	2,400

Air-cooled separable

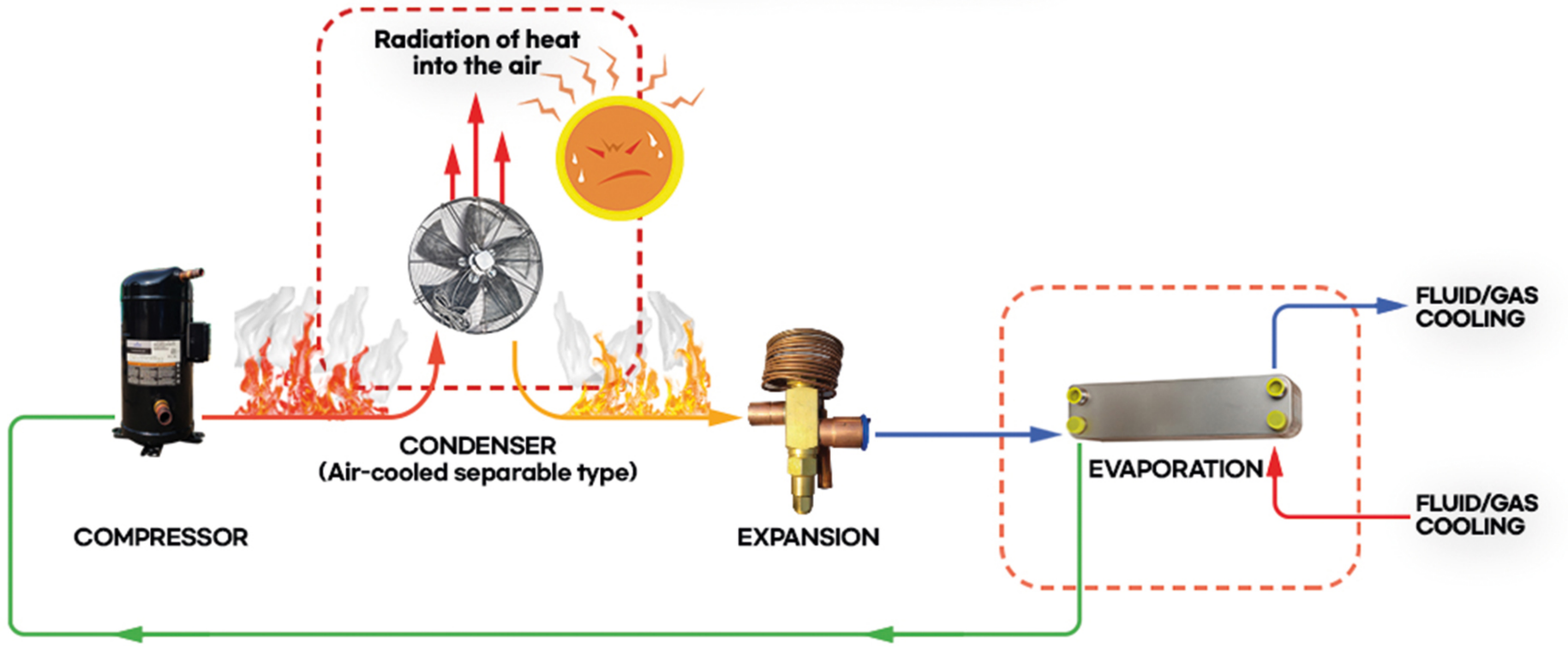
1m



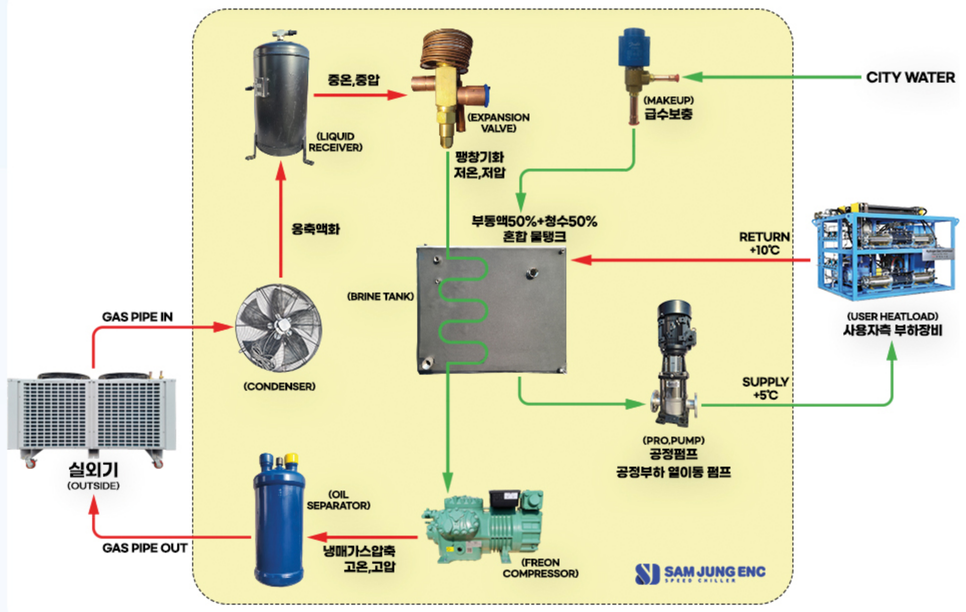
Composition principle

Operational principle of chiller

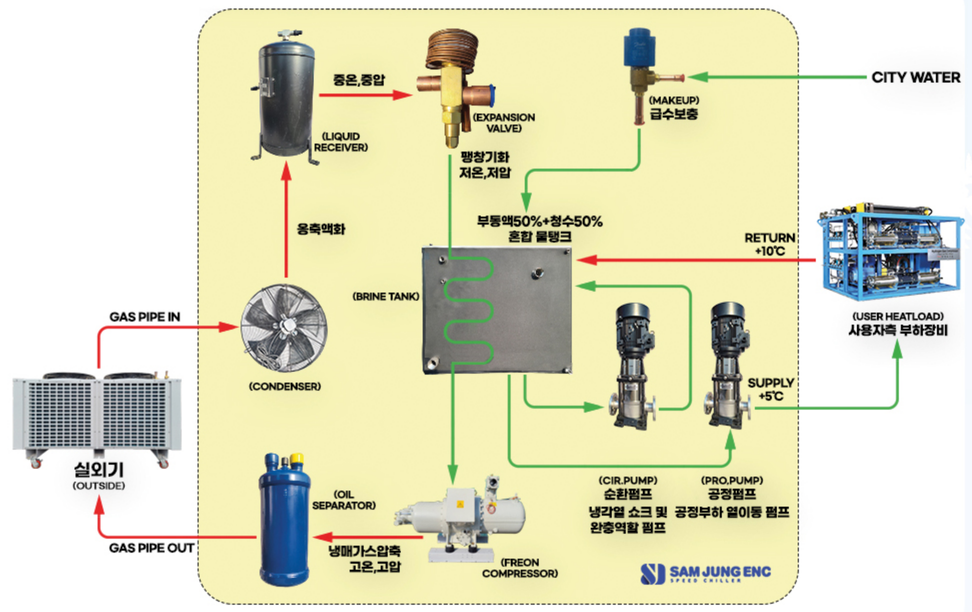
It is a system that can provide continuous cooling effect by radiating condensation heat (condenser) at the remote outdoor unit in to the air so as to perform stable cooling of refrigerant gas and by cooling evaporate to fluid/gas at the remote indoor.



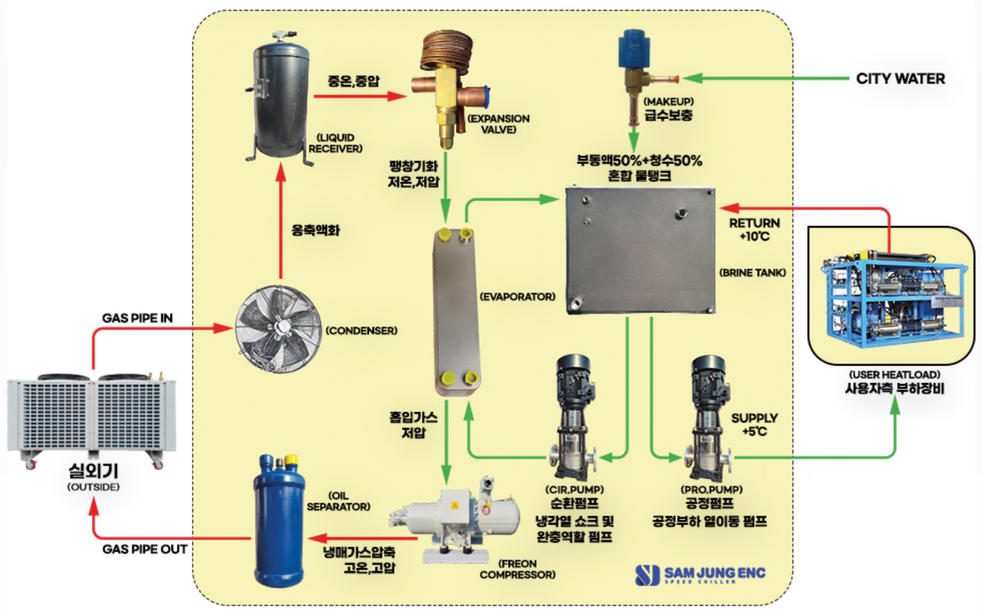
Air-cooled separable type A - Reciprocating



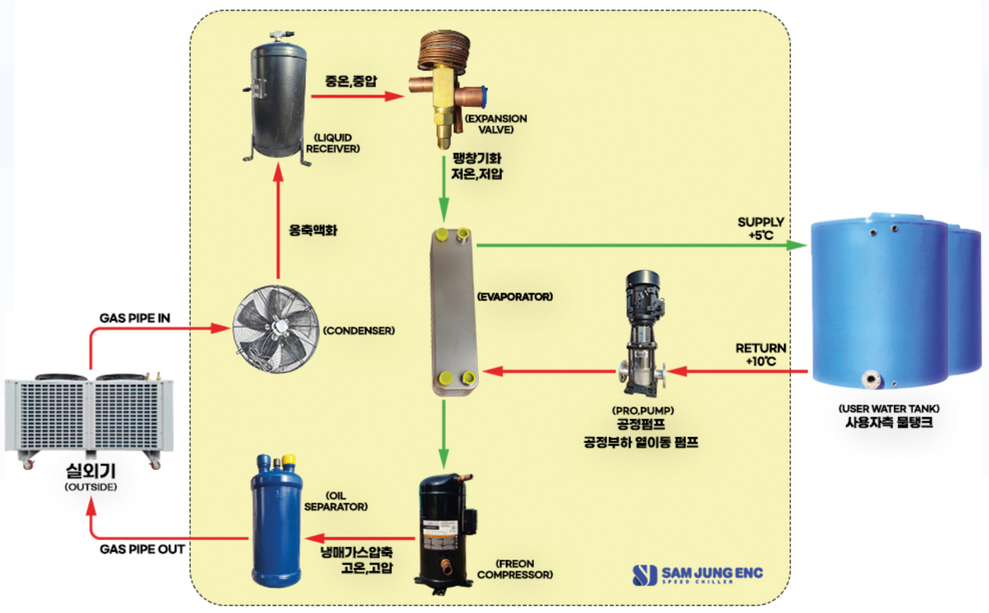
Air-cooled separable type B - Screw



Air-cooled separable type C - Screw



Air-cooled separable type D - Scroll



WATER-COOLED INTEGRAL TYPE

WATER COOLING CHILLER

Water-cooled integral type

Water-cooled integral type is a product that shows excellent cooling effect stably and efficiently regardless of seasons and air temperature.

Features of Use

- Water-cooled integral type
  It is a cooling method of condenser using industrial plant cooling tower and industrial water.
- General type
  general chiller to maintain the temperature variation of output cold water within 1-2 ℃
- Precise type
  precise chiller to maintain the temperature variation of output cold water within 0.3-0.7 ℃

Standard specifications

Division/Model		SJ-03W	SJ-05W	SJ-075W	SJ-10W	SJ-15W	SJ-20W	SJ-25W	SJ-30W	SJ-40W	SJ-50W	SJ-60W
Rated power of compressor (kw)		2.2	3.75	5.6	7.5	11.25	15	19	22.5	30	38	45
Pump power (kw)		0.75	0.75	1.1	1.5	1.8	2.2	3	3	4	5.5	7.5
Discharge rate (ℓ/min)		80	120	150	200	250	320	320	400	450	600	700
Cooling capacity (kcal/h)		8,500	15,000	22,500	30,000	45,000	60,000	75,000	90,000	120,000	150,000	180,000
Tank volume (ℓ)		33	80	120	160	200	230	230	300	380	450	550
필용냉각수량 ℓ/min		80	100	150	200	250	300	300	350	400	700	800
Weight (kg)		250	350	500	600	700	800	900	1,000	1,100	1.200	1,300
Refrigerant		FREON R-407C										
Total consumption power (kw)		3	5	7.2	9.5	13.5	17.7	23	26	34.5	45	55
External size (front)	L	500	650	650	650	750	750	750	750	750	850	850
	W	650	1,250	1,250	1,250	1,600	1,600	1,600	1,900	1,900	2,200	2,200
	H	1,790	1,790	1,790	1,790	2,000	2,000	2,000	2,200	2,200	2,300	2,300

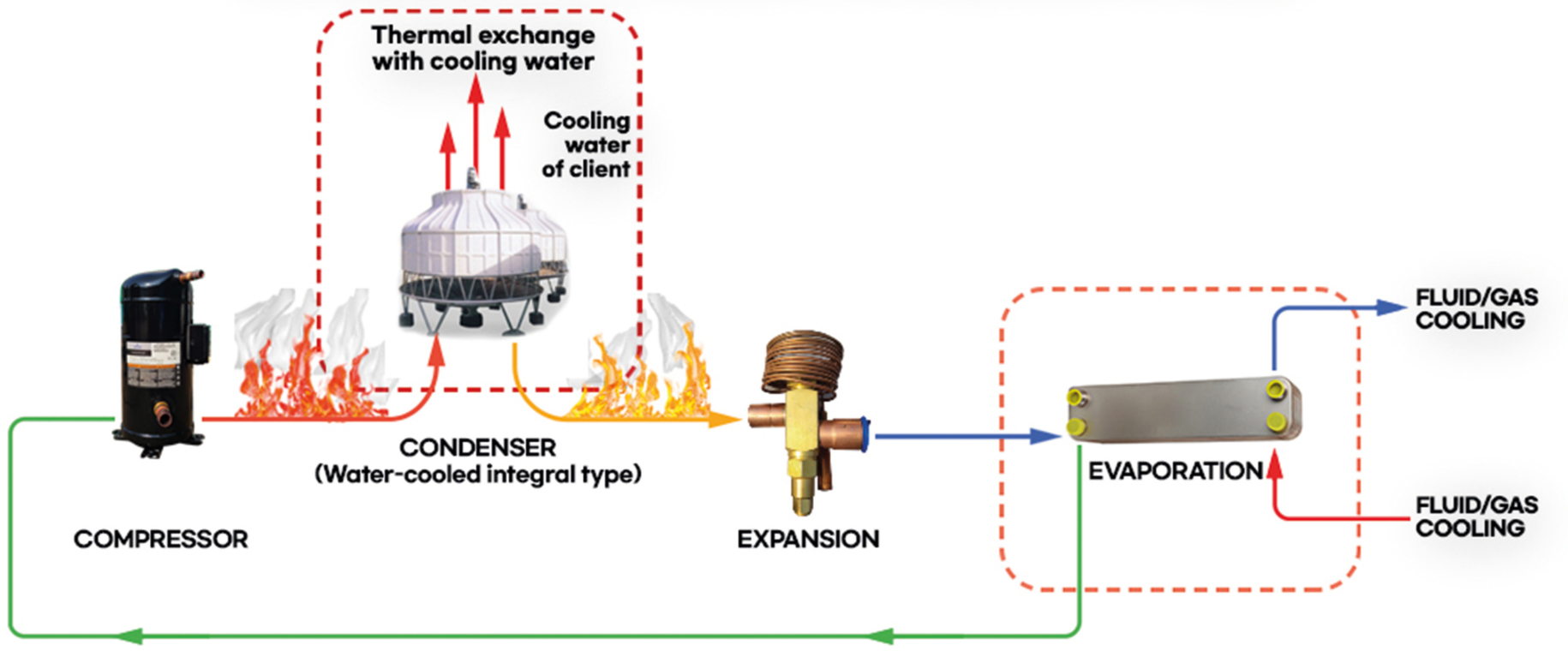
Water-cooled integral

1m

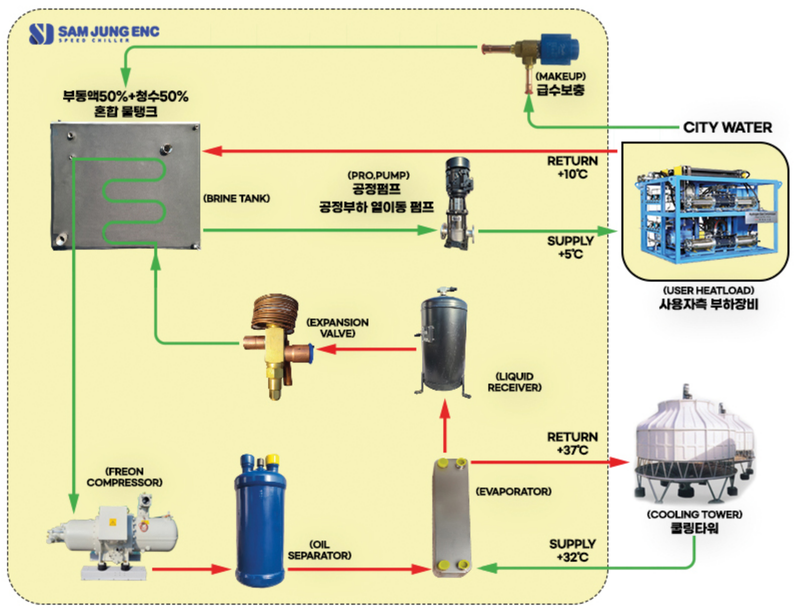
Composition principle

Operational principle of chiller

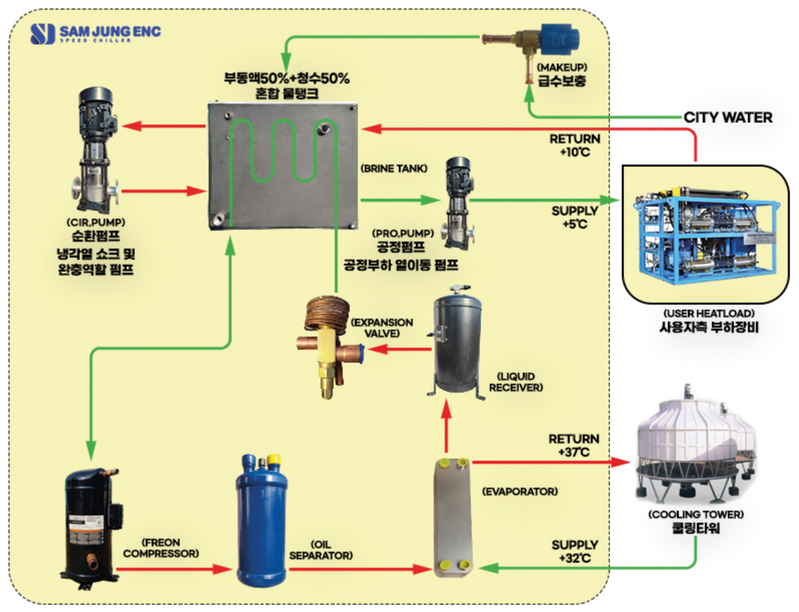
It shows the continuous cooling effect by radiating condensation heat (condenser) that is occurred during the operation of refrigerant cycle using freon gas compressor inside the water-cooled integral type chiller into the surrounding air and by chilling evaporate to fluid/gas.



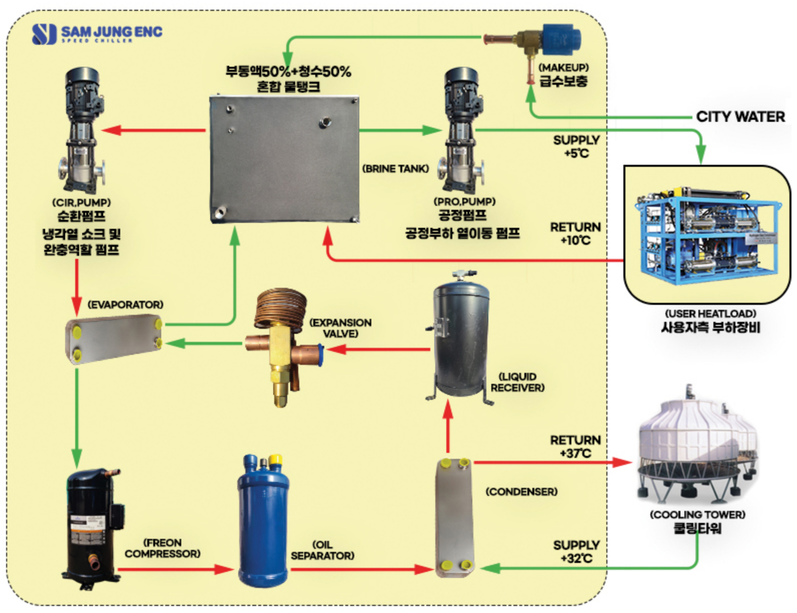
Water-cooled integral type A - Screw



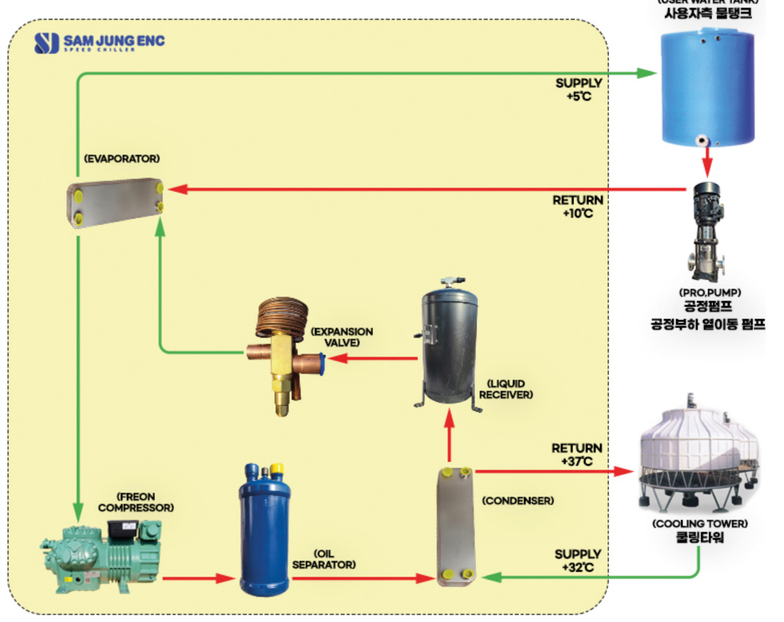
Water-cooled integral type B - Scroll

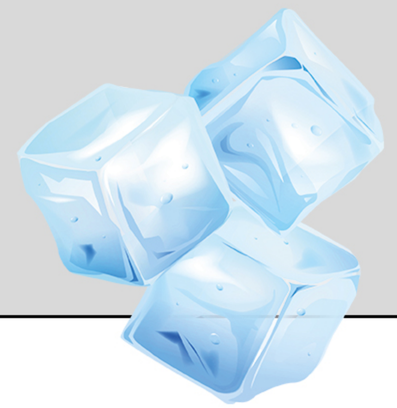


Water-cooled integral type C - Scroll



Water-cooled integral type E - Reciprocating

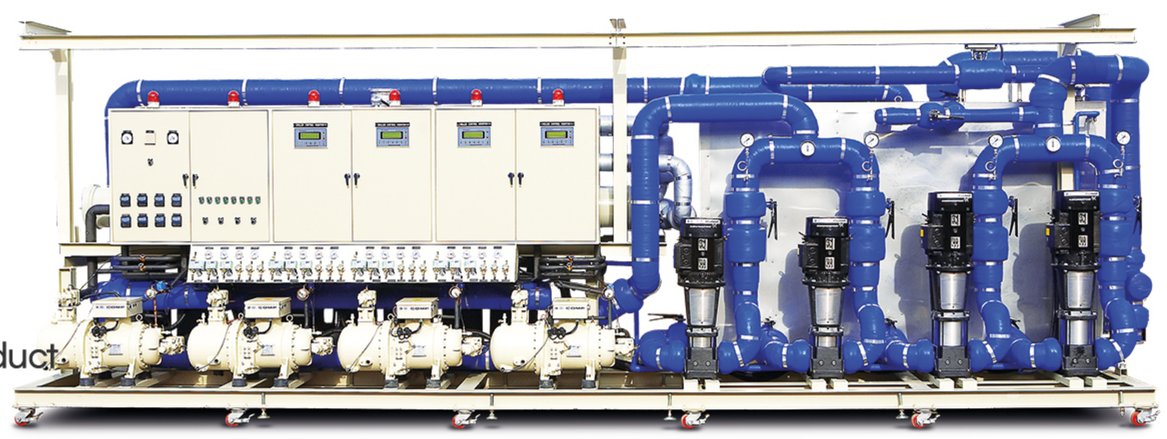




SKID CHILLER

SKID chiller

It is an innovative product to cool the cooling system of factory process water part by part in the production process with 1 unit of SKID chiller.



Features of Use

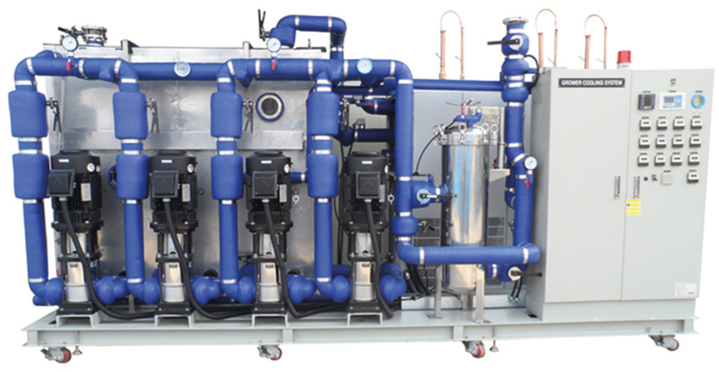
- SKID chiller
  As a mid-to-large scale cooling system, it is a custom-made product according to the load capacity and installation area of the client.
- General type
  general chiller to maintain the temperature variation of output cold water within 1-2 ℃
- Precise type
  precise chiller to maintain the temperature variation of output cold water within 0.3-0.7 ℃

Standard specifications

Division/Model		SJ-20A SKID	SJ-30A SKID	SJ-40A SKID	SJ-50A SKID	SJ-60A SKID	SJ-80A SKID	SJ-100A SKID	SJ-120A SKID	SJ-140A SKID	SJ-160 SKID	SJ-200 SKID
Rated power of compressor (kw)		15	22.5	30	38	45	60	75	84	105	120	150
Pump power (kw)		2.2	4	5.5	7.5	7.5	10	11	11	15	15	22
Discharge rate (ℓ/min)		250	350	450	550	700	900	1,100	1,300	1,500	1,700	2,100
Cooling capacity (kcal/h)		60,000	90,000	120,000	150,000	180,000	240,000	300,000	360,000	420,000	480,000	600,000
Maximum discharging pressure (bar)		5	5	5	5	5	5	5	5	5	5	5
Weight (kg)		800	1,000	1,300	1,600	2,000	2,400	3,000	3,300	3,600	4,000	4,500
Tank volume (ℓ)		-	-	-	-	-	-	-	-	-	-	-
Refrigerant		FREON R-407C										
Total consumption power (kw)		20	28	38	50	60	80	100	120	140	160	200
External size (front)	L	1,400	1,400	1,400	1,400	1,400	2,100	2,100	2,100	2,100	2,100	2,100
	W	3,200	4,000	4,000	5,000	5,000	5,000	5,000	5,000	6,000	6,000	6,000
	H	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600

SKID chiller

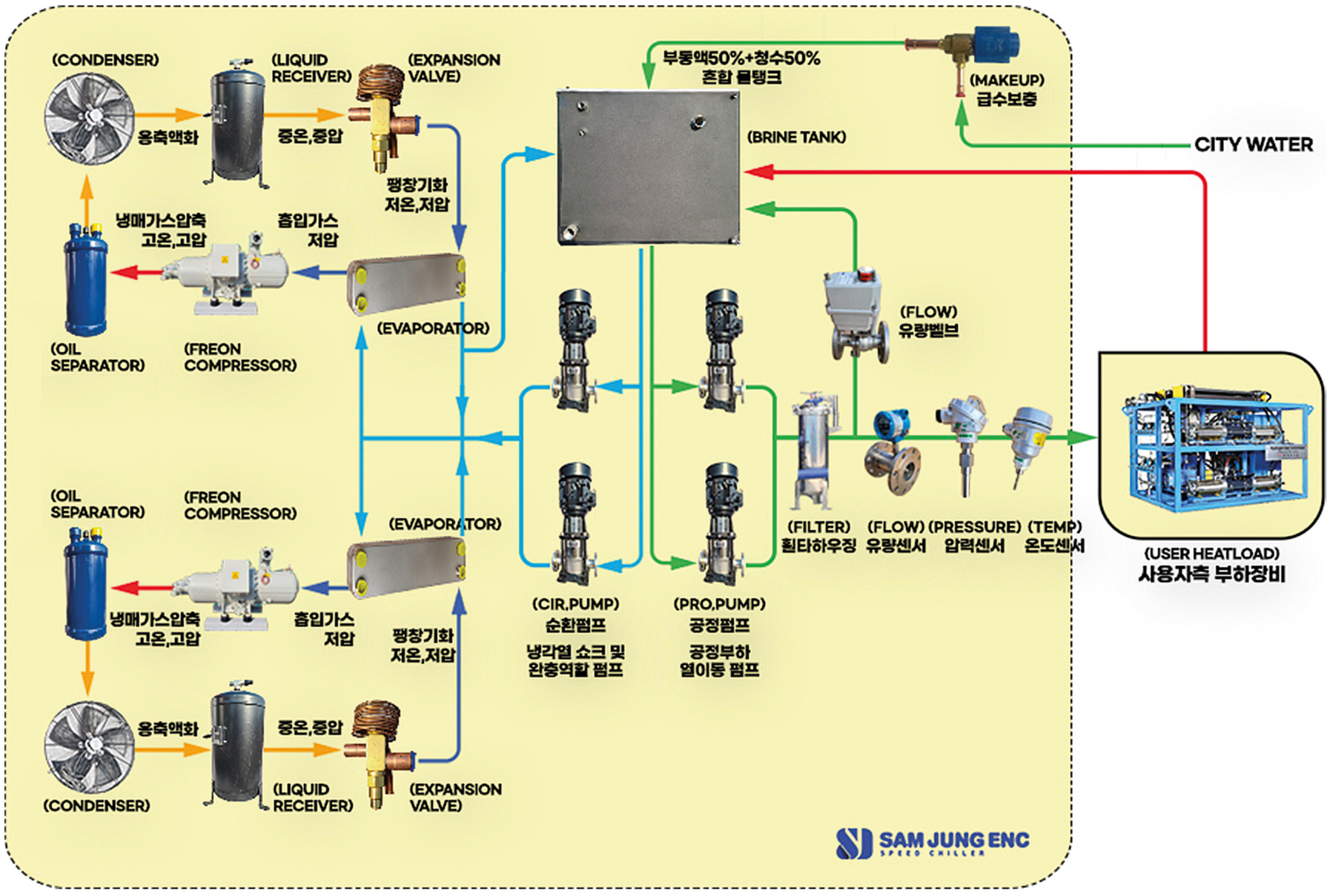
1m



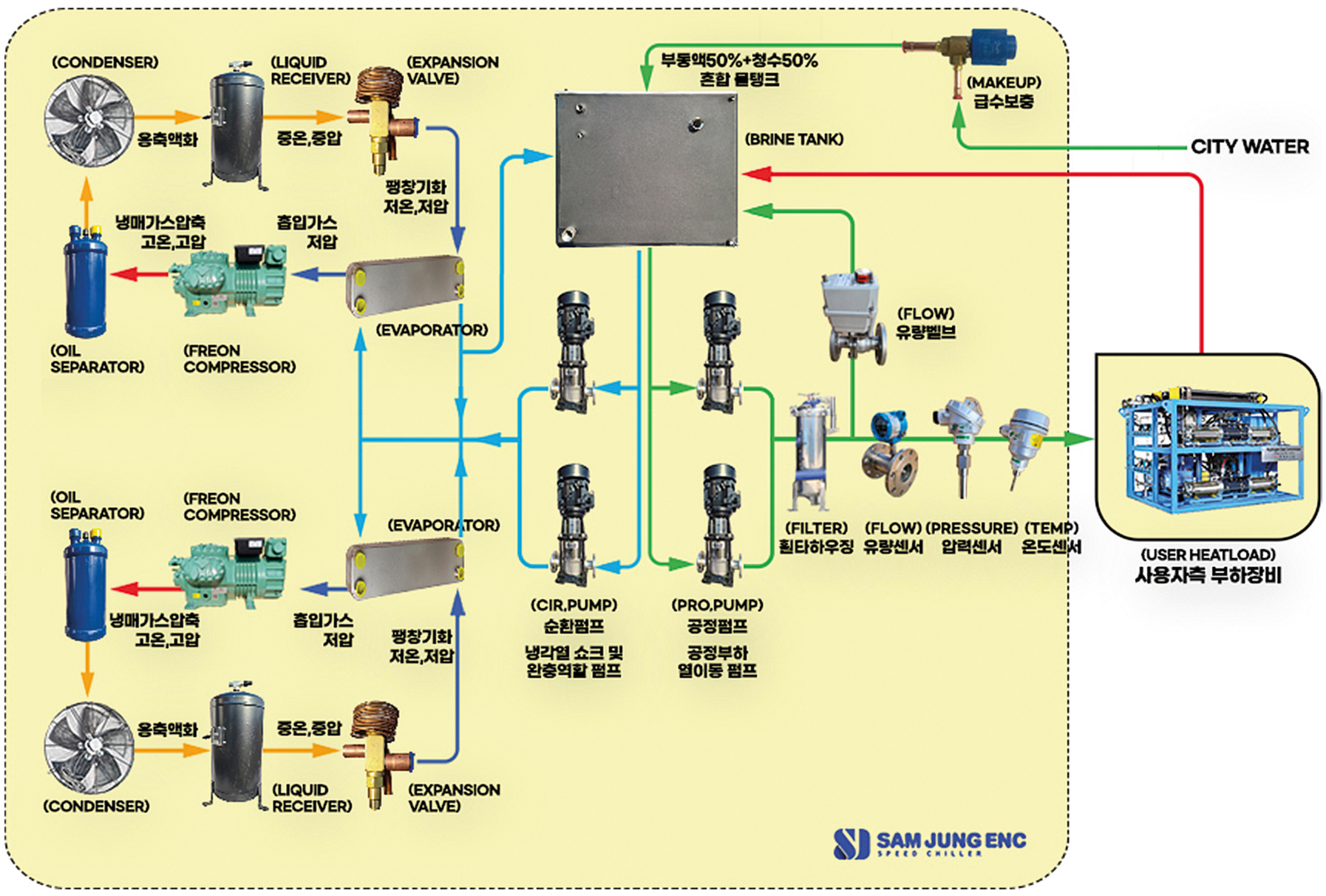
Composition principle

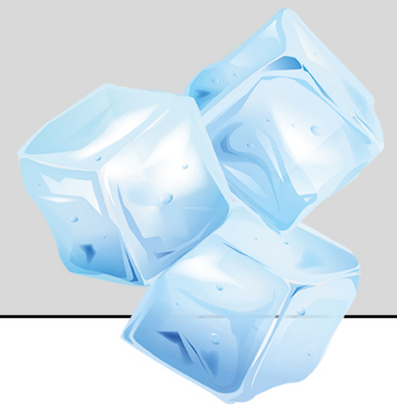
It is a product organized based on 4 cycles of freezing including
compression, condensation, expansion, and evaporation and to realize the strong and optimal cooling capacity in
variable heat loads, efficient flow distribution, and temperature shock.

SKID chiller A



SKID chiller B





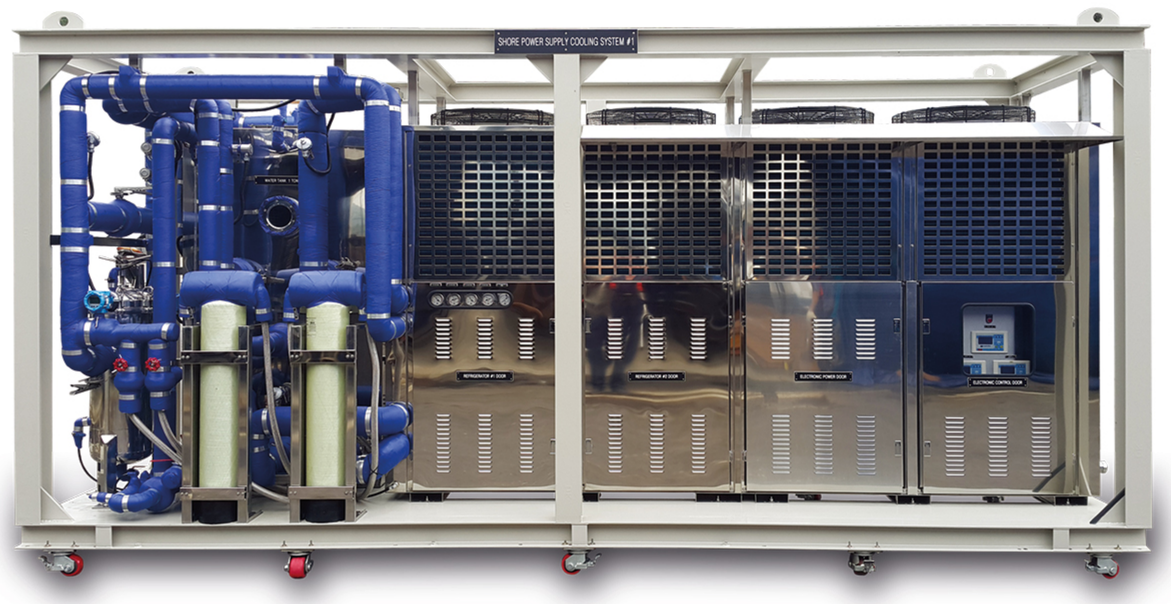
SPECIAL CHILLER

Special chiller

As a custom-made product, it provides the best technology, such as high temperature, ultra-precision, and so on, that are required in the industrial plants.

Features of Use

- **Low temperature type**
  Low temperature type chiller that maintains the chilling fluid at -80℃ ±1℃.
- **General type**
  High temperature type chiller that maintains the chilling fluid at +250℃ ±1℃.
- **Precise type**
  A type of chiller that maintains the chilling fluid with temperature variation within ±0.01℃~±0.5℃.



Standard specifications

구분/모델		SJ-01AH	SJ-02AH	SJ-03AH	SJ-05AH	SJ-075AH	SJ-10AH	SJ-15AH	SJ-20AH	SJ-30AH	SJ-40AH
Rated power of compressor (kw)		0.75	1.5	2.2	3.75	5.6	7.5	11.25	15	22.5	30
Pump power (kw)		0.4	0.4	0.75	0.75	1.1	1.5	1.8	2.2	3	4
Discharge rate (ℓ/min)		55	55	80	120	150	200	250	320	400	450
Cooling capacity (kcal/h)		2,800	5,500	8,500	15,000	22,500	30,000	45,000	60,000	90,000	120,000
Maximum discharging pressure (bar)		5	5	5	5	5	5	5	5	5	5
Weight (kg)		120	150	200	400	480	600	700	800	1,000	1,200
Tank volume (ℓ)		17	23	33	80	120	160	200	230	300	380
Refrigerant		FREON R-407C									
Total consumption power (kw)		5	10	15	20	30	40	50	60	70	80
External size (front)	L	500	500	500	650	650	750	750	850	1,050	1,050
	W	850	850	850	1,250	1,250	1,600	1,900	2,200	3,000	3,000
	H	1,400	1,790	1,790	1,790	1,790	2,000	2,200	2,300	2,300	2,300

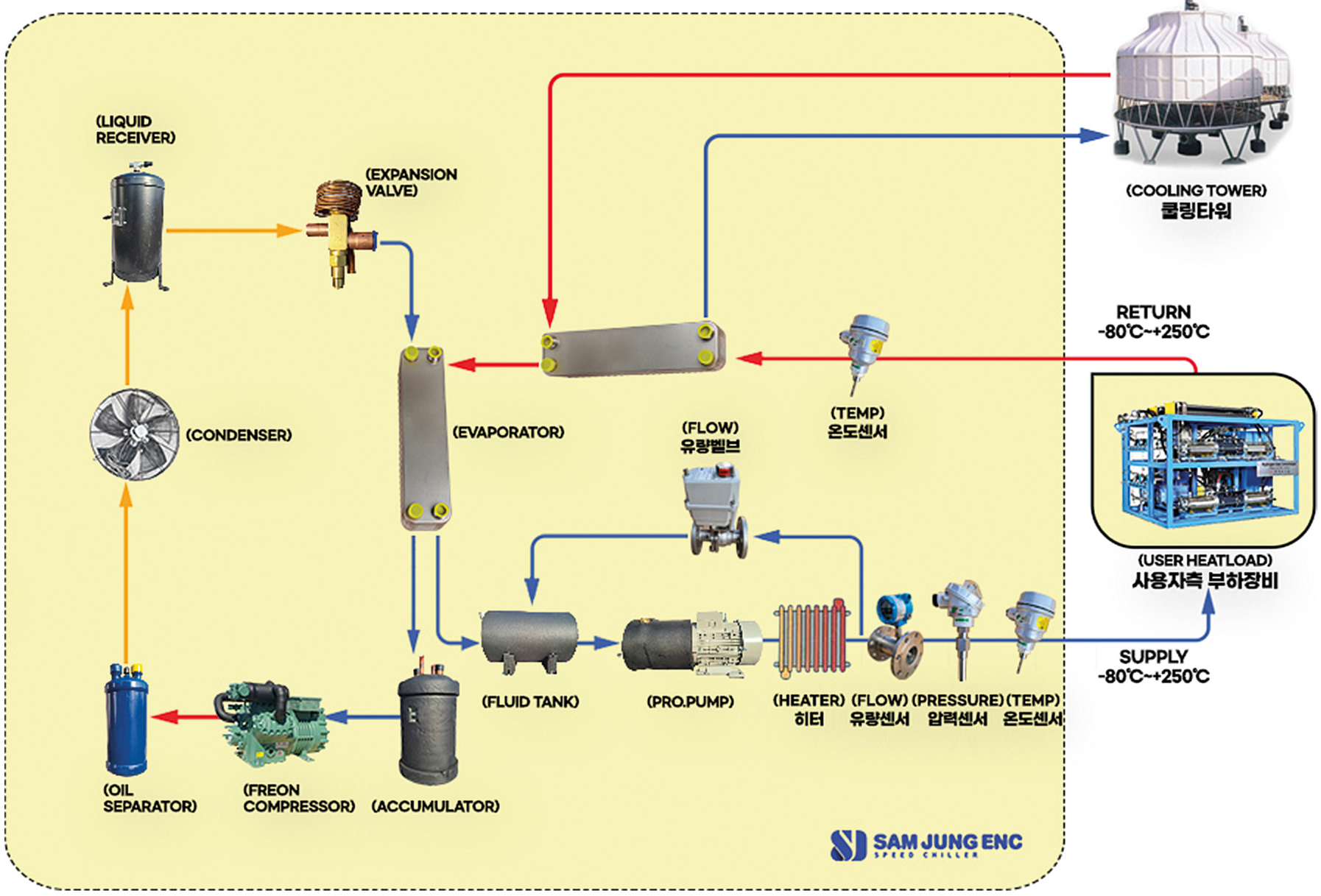
Special chiller

1m

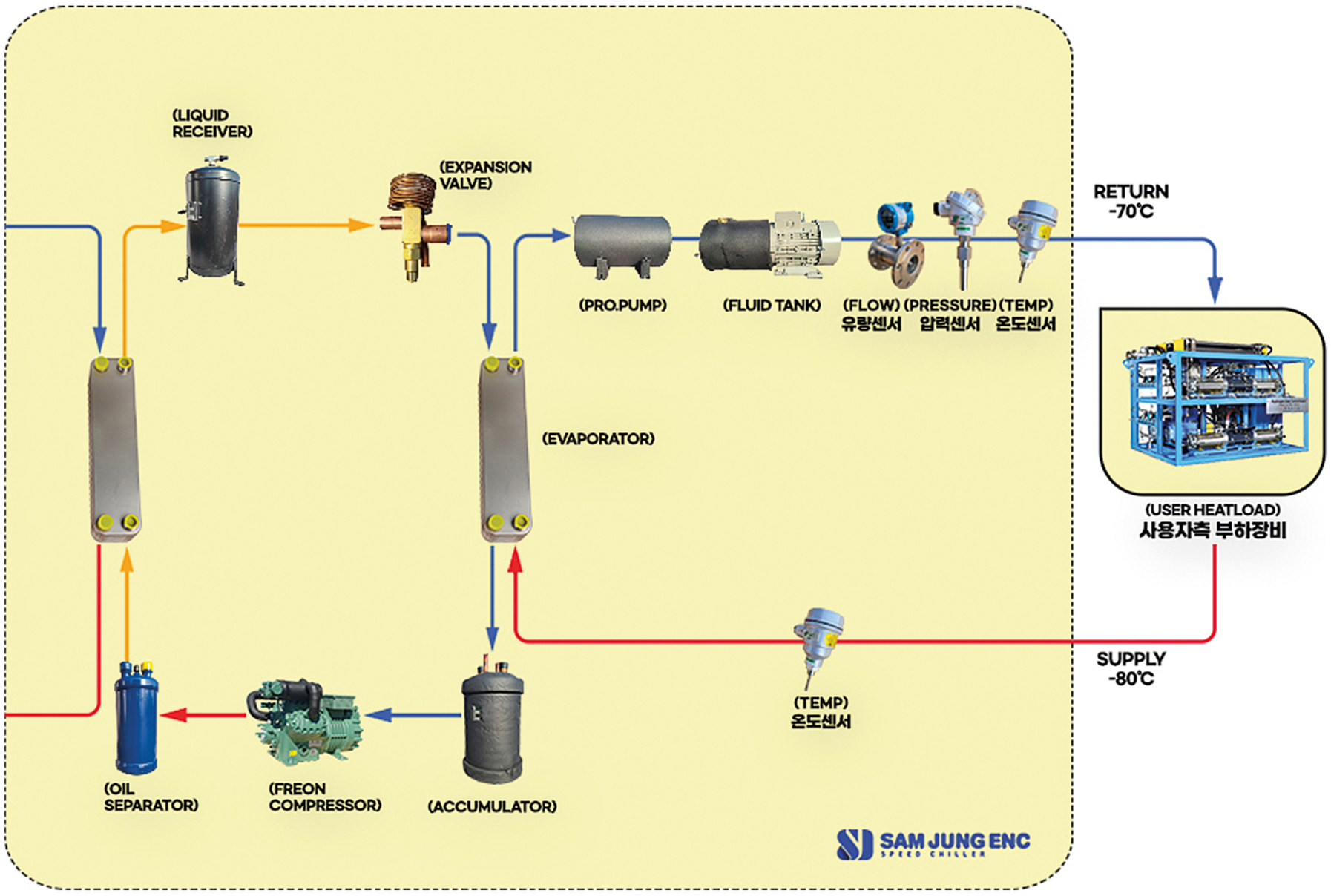
Composition principle

As a custom-made product, it provides the best technology,
such as high temperature, ultra-precision, and so on, that are required in the industrial plants.

Special chiller for low and high temperature



Special chiller for low temperature



In celebration of the completed verification of delivery and operation

2021 H2 Mobility + Energy Show
(with the member of the National Assembly, Jung Tae-Ho)

SAMJUNG ENC Technology Institute

2021 H2 Mobility + Energy Show, the introduction of the H2 CHILLER

The ceremony of the Patent Technology Awards
by the Korean Intellectual Property Office

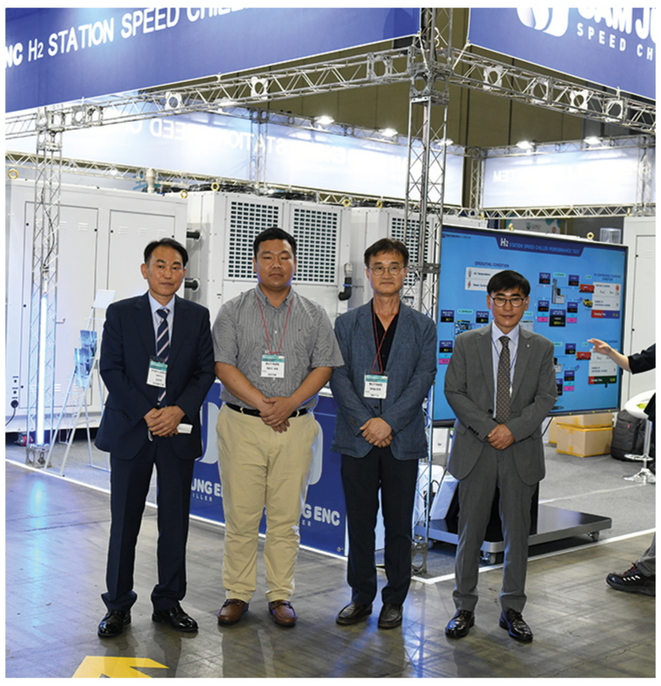
Hydrogen Charging Station Operator Education

The 7th Nationwide Hydrogen Charging Stations
Free-Checkup Tour Kickoff Ceremony

H_2 CHILLER demonstration

Exhibition. Awards

2021 Exhibition. Awards



2020 Exhibition. Awards

SAM JUNG ENC
SPEED CHILLER

The company, developing along with customers

We play a key role to develop domestic industry and to improve the productivity of your company by satisfying various specifications for all kinds of industrial equipments required by information oriented and digital industry in this rapidly changing twenty-first century, domestically producing various freezing equipments, that were mostly depend on import, with our own technique, and improving them as the best products group.

SAMJUNG ENC promises to grow into a Chiller specialized company performing technology innovations and fulfilling social responsibilities.

SAM JUNG ENC
SPEED CHILLER

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