

SAMSHIN

THE BEST PARTNER FOR PLANT ENGINEERING


 SAMSHIN



This is Hyunchul Shin, CEO of SAMSHIN.

Over the past 30 years, **SAMSHIN** has grown into a leading partner in plant engineering. We have accumulated experience in the materials industry through numerous and diverse projects in the plant field, and based on these experiences, we are diversifying our business model into the secondary battery industry, which is the next big industry of the future, and preparing for continuous growth.

SAMSHIN is a company that is ready to lead the way as a leader in this industry based on its experience in actually supplying and delivering facilities that produce and recycle key materials for secondary batteries such as lithium. We will further develop and grow based on the trust and accumulated technology that we have built up over 30 years. Thank you.

(주) 삼신 대표이사
신현철 

CEO Message.



Mission and Vision.

MISSION

Become the 'BEST PARTNER' with accumulated technology

VISION

Together with technology, Together to the world

SAMSHIN Co., Ltd. is a reliable company that prioritizes trust, belief, and faith in communicating with customers.

With over 35 years of accumulated technical expertise and diverse experiences, SAMSHIN Co., Ltd. not only ensures optimal quality but also manages precise delivery schedules meticulously.

■ EPC Solution

We can perform all stages of product design, manufacturing, management, and installation. We design, manufacture, and deliver equipment for the entire plant, not only for single-item design and manufacturing, but also through partnerships with various specialized companies in various fields that we have been working with for a long time.

■ Leading the future industry

We demonstrate our expertise and advanced technical capabilities in the production of cathode materials, a growing industry in the future, and in the field of secondary battery recycling facilities. In particular, we can provide integrated solutions for sintering and drying equipment, which are key components of cathode material plants and secondary battery recycling plants.

■ Quality First! Customer Satisfaction Priority

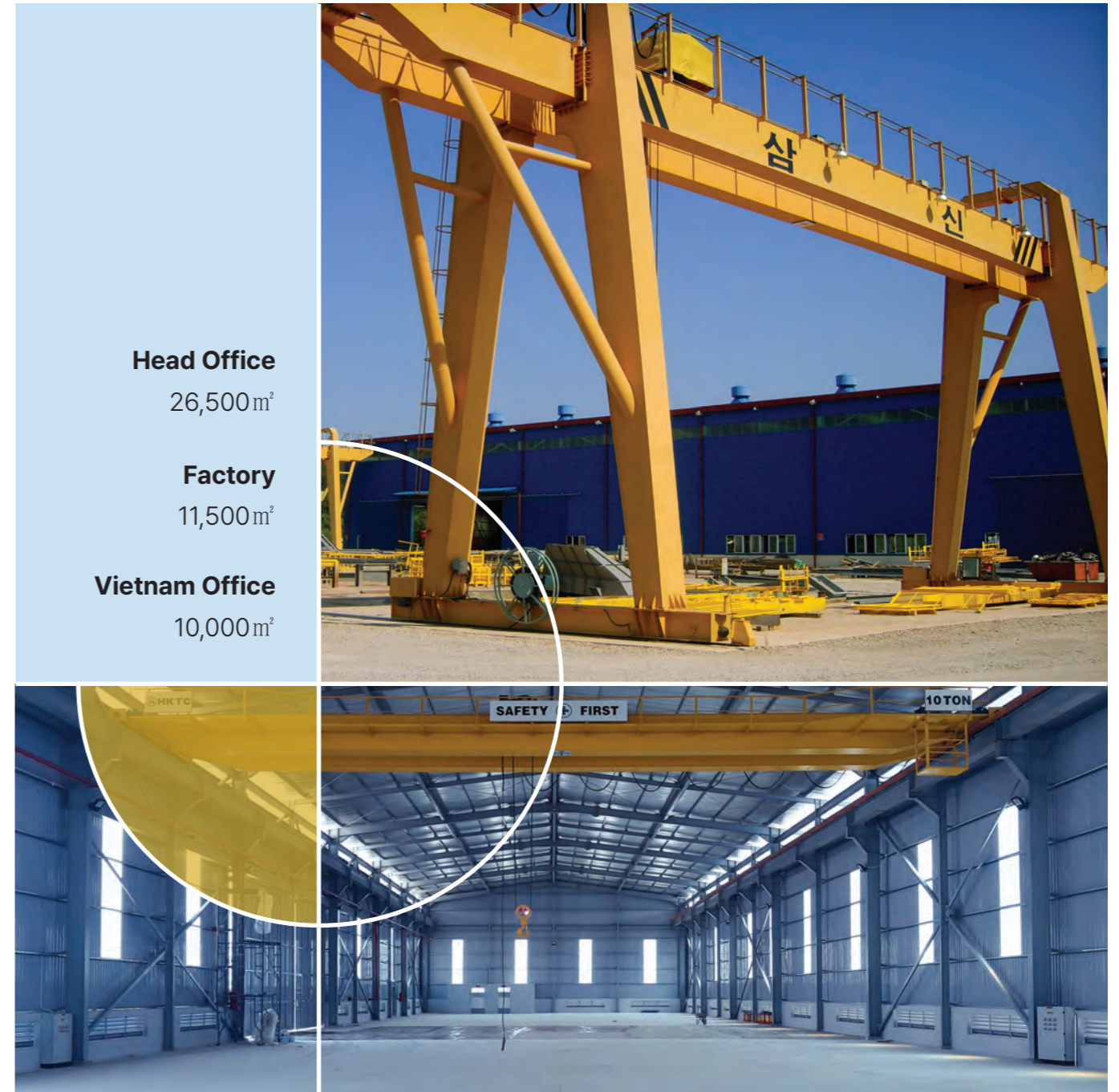
We are committed to continuous efforts in differentiation and innovation, aiming for zero defect manufacturing and the highest quality. This includes obtaining international certifications. Furthermore, we strictly focus on quality improvement and control from manufacturing management to delivery, going beyond that to ensure quality assurance. With our unparalleled own technical expertise, we promise systematic customer support through an efficient after-sales management system.

■ Establishment of Vietnam subsidiary

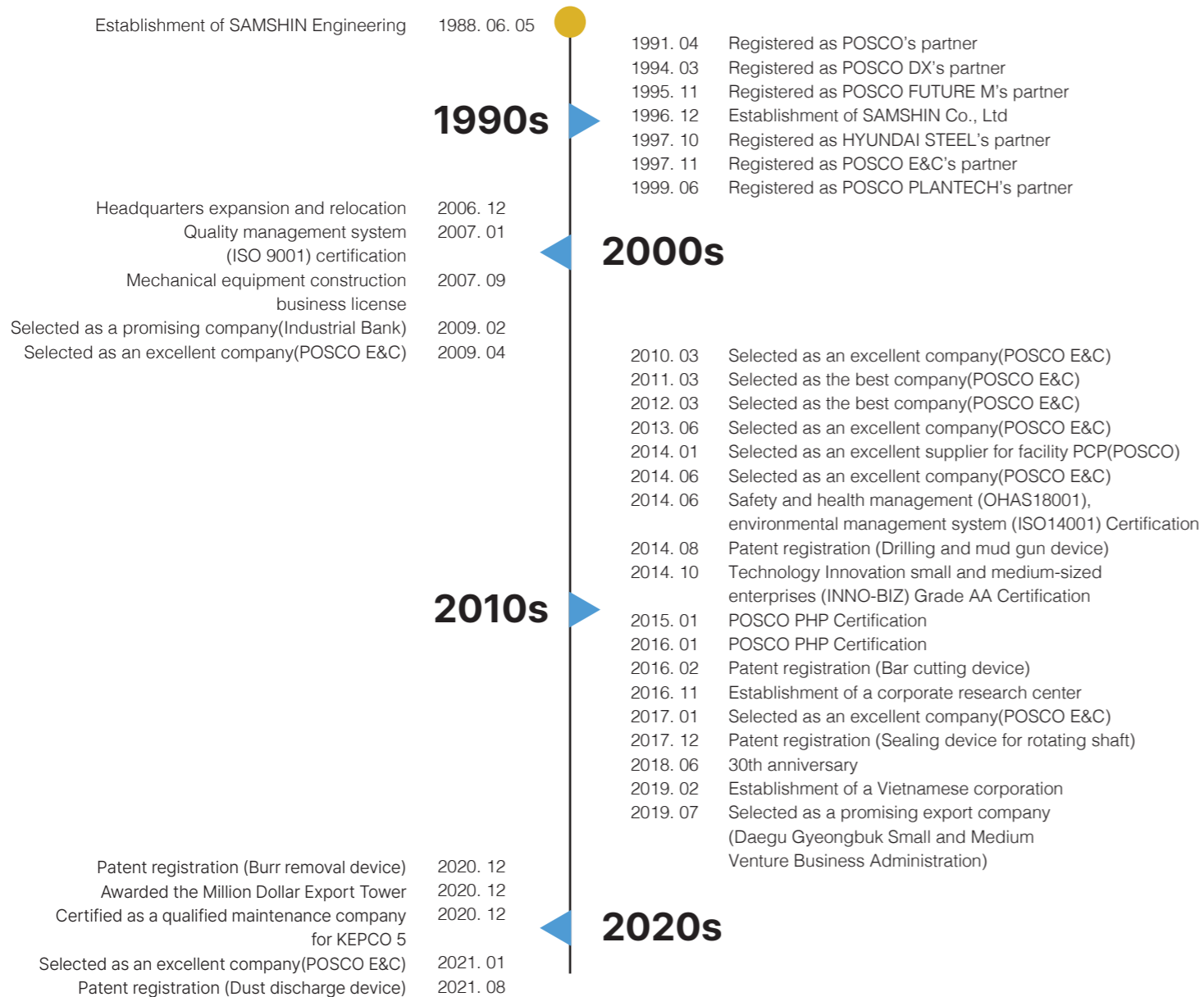
In February 2016, our Vietnam subsidiary was established, and in March 2019, we constructed a factory. To date, we have operated with a local workforce of over 30 employees, successfully executing various overseas projects in the Southeast Asian and Middle Eastern markets through local production for cost reduction. Through this, we are building a more efficient and rational production system.

■ R&D Institute

We continuously drive relentless research and technological development on top of the accumulated expertise. To achieve this, we operate an R&D institute and continuously release new products utilizing high-value-added products and core technologies. Additionally, we wholeheartedly support creative research and development, resulting in the possession of numerous industrial machinery patents. Through these efforts, we strive to consistently provide the best products and services.



History.

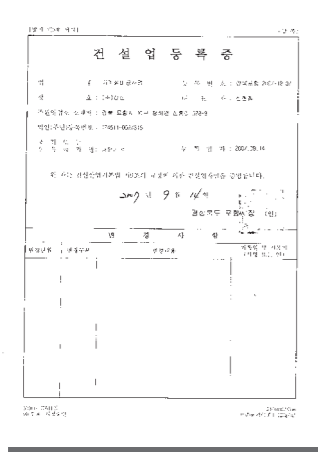


Global Partners.

With the world's leading global companies



Certifications.



Construction Business Registration Certificate
2007



Credit Rating
2020-2022



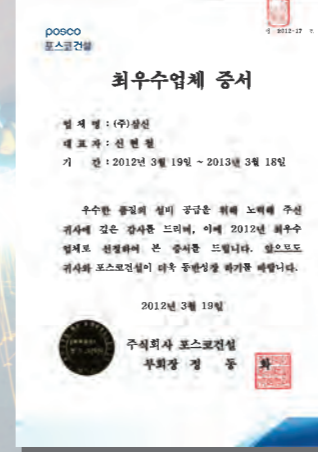
Certificate of Patent
2016



Certificate of Patent
2018



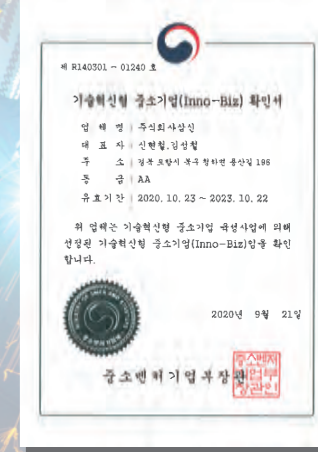
Certificate of Patent
2021



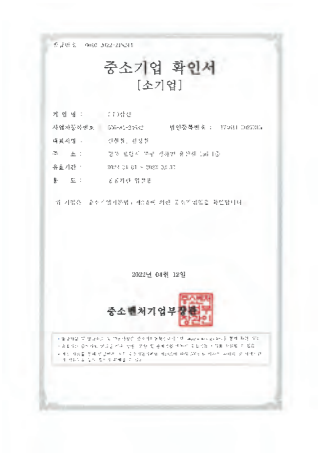
Certificate of best company (POSCO E&C)
2011, 2012



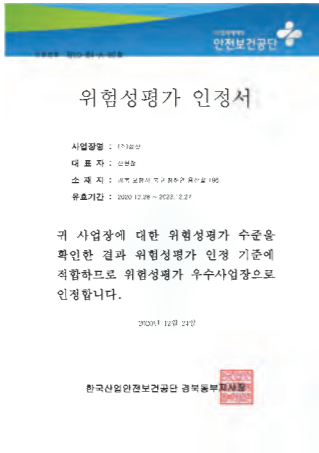
Certificate of PHP (POSCO E&C, POSCO)
2008~2021



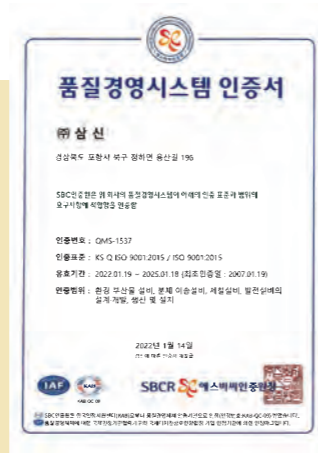
Certificate of Inno-Biz
2020-2023



Certificate of Small & Medium Enterprise
2020-2022



Certificate of Risk Assessment
2017-2023



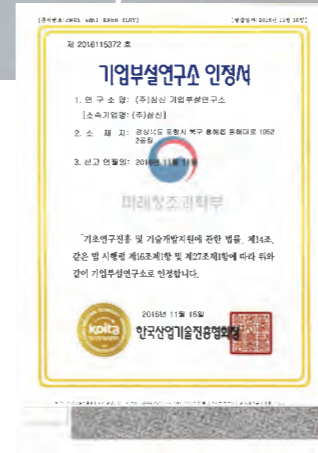
Certificate of Quality Management System (ISO 9001:2015)
2022-2025



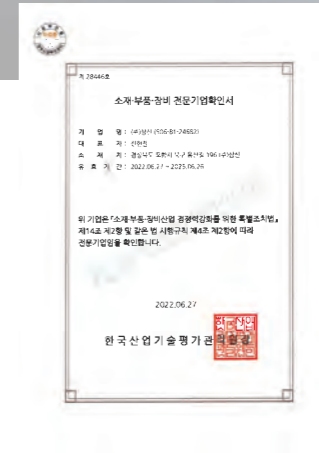
Certificate of Environmental Management System (ISO 14001:2015)
2020-2023



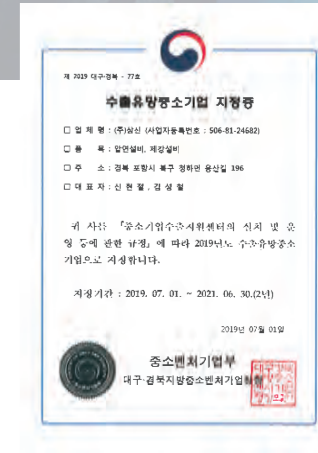
Certificate of Occupational Health and Safety Management System (OHSAS 18001:2007, ISO 45001:2018)
2017-2023



Certificate of Research institute
2007



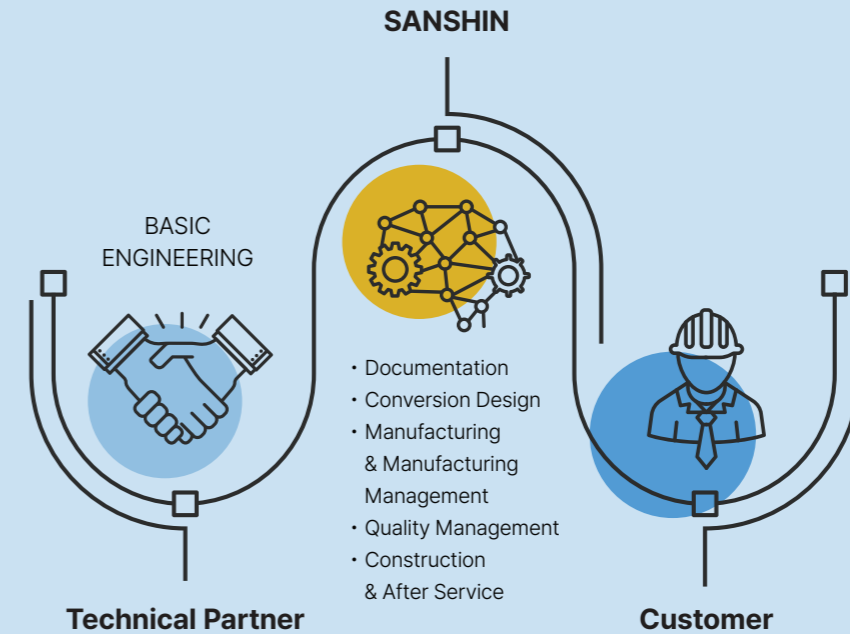
Certificate of Specialized Company for Materials, Parts, Equipment
2022-2025



Certificate of Promising Small and Medium Enterprise in Export
2019-2021

Partnership & MOU for Technology Collaboration.

We are providing stable and efficient advanced technology through technical cooperation with overseas companies with extensive engineering experience in the field of anode and cathode production facilities.



MOU Status

**Xi'an Sunrise Chaoding
New Energy Technology Co., Ltd.**

Technology

Cathode material production
& Secondary battery recycling
Calcination & Roasting process

Main Item

ROTARY KILN

**Si Chuan ZhongKeBeiTe
Nano Technology Co., Ltd.**

Technology

Cathode material production
& Secondary battery recycling
Pulverization Process

Main Item

AIR JET MILL

Our Business.

**Based on trust, belief, and faith,
we achieve customer satisfaction.**

We provide optimal solutions to customer issues through excellent technical expertise, systematic quality management and consistent communication with customers. We will maintain a strong industrial partnership in the global era.



We promise to impress our customers with skilled expertise and diverse know-how.

We will demonstrate the best partnership through continuous technology development and customized services according to customer needs.

Plant Engineering



The core of SAMSHIN's unique technology from designing to manufacturing industrial machinery & equipment

Project experience in various fields related to equipment was made possible by SAMSHIN's unique strategic design and integrated management.

Industrial Machinery



Continuous technology development for better quality
Research on technology to create differentiated customer value

SAMSHIN Co., Ltd. will do our best to meet the needs of our customers with the know-how accumulated through partnerships with major domestic companies.

Technology Laboratory

Plant Engineering.

We promise to impress our customers with skilled expertise and diverse know-how.

Best Quality
Reasonable Price
Customized Solution



[Plant Engineering]

Secondary Battery Plant

As a field that requires various technologies including powder handling, conveying, and thermal treatment, we have the best team of experts in Korea who can provide solutions.

- ✓ Experience in Lithium Hydroxide Production Facility
 - ✓ Performance of lithium carbonate drying, milling and packaging facility package for a secondary battery recycling project
 - ✓ EPC integrated solution for production and recycling plants related to cathode materials

- **SAMSHIN's Solution**

- Cathode Material Production Solution**

- Lithium Calcination • Roasting Solution
- Lithium Drying Solution

- Secondary Battery Recycling Solution**

- Waste battery shredding and sorting solution
- Drying Solution of Lithium Recyclin



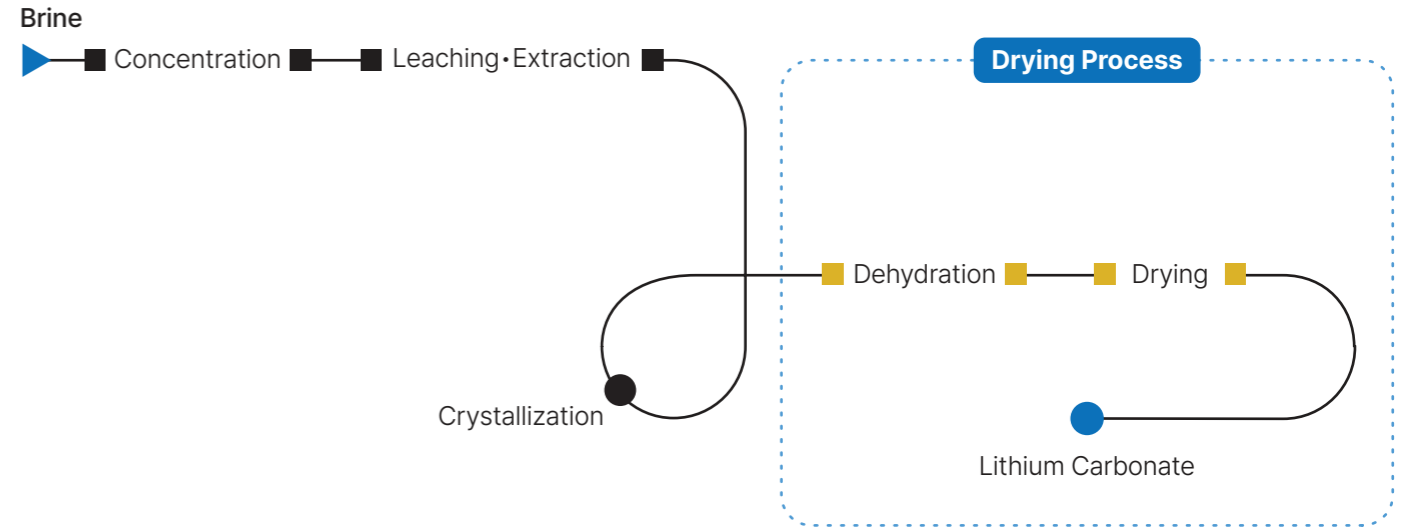
[Plant Engineering]

Cathode Material Production Solution

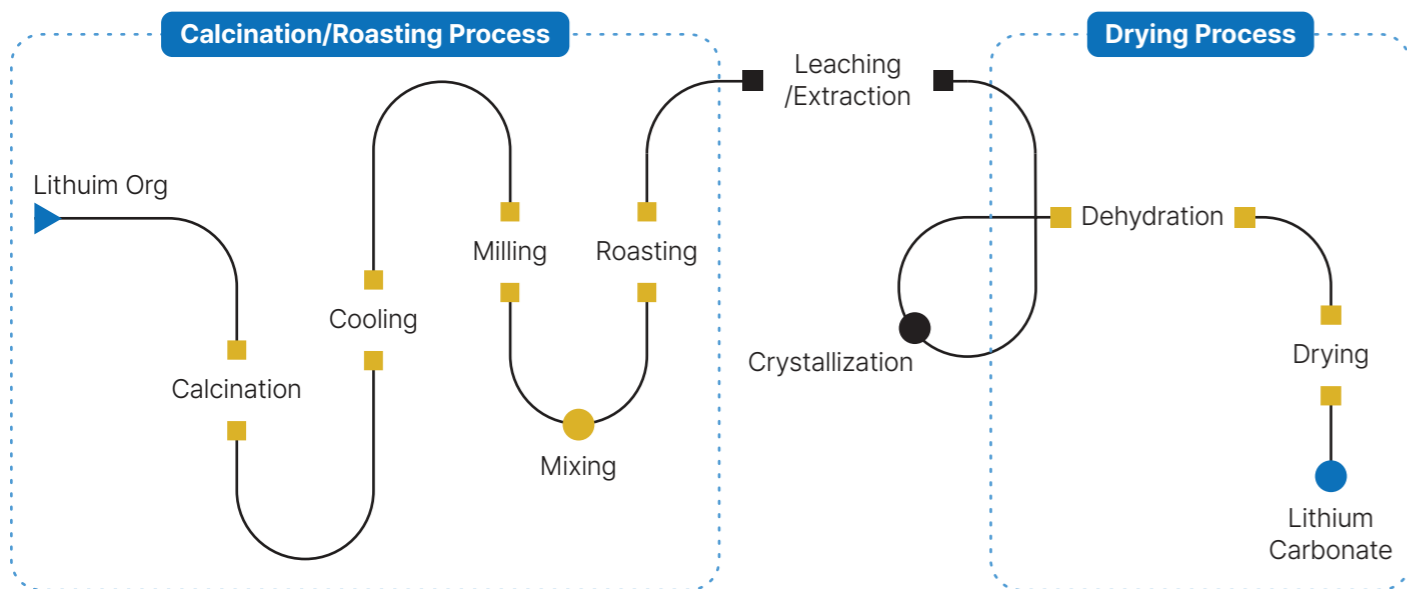
The process of calcinating, roasting, drying lithium, one of the key raw material for cathode materials



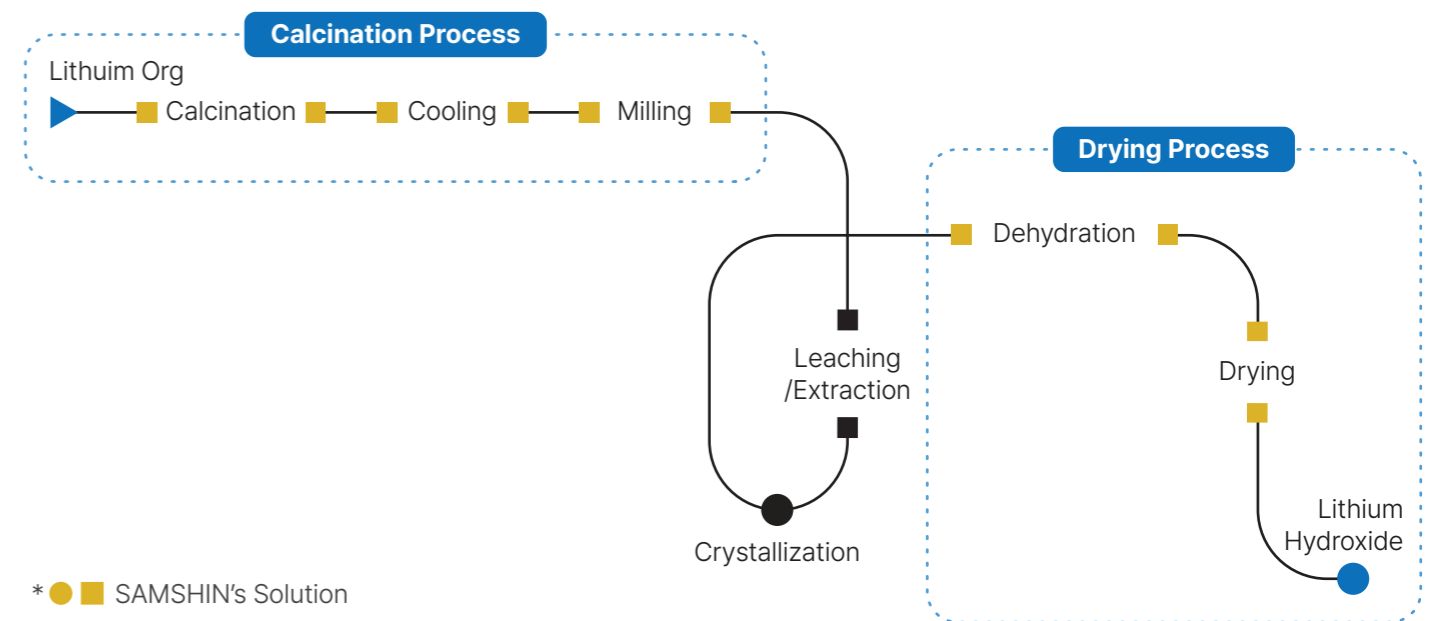
* Brine



* Hard Rock (Acid Roast Method)



* Hard Rock (Lime Roast Method)



* ● ■ SAMSHIN's Solution

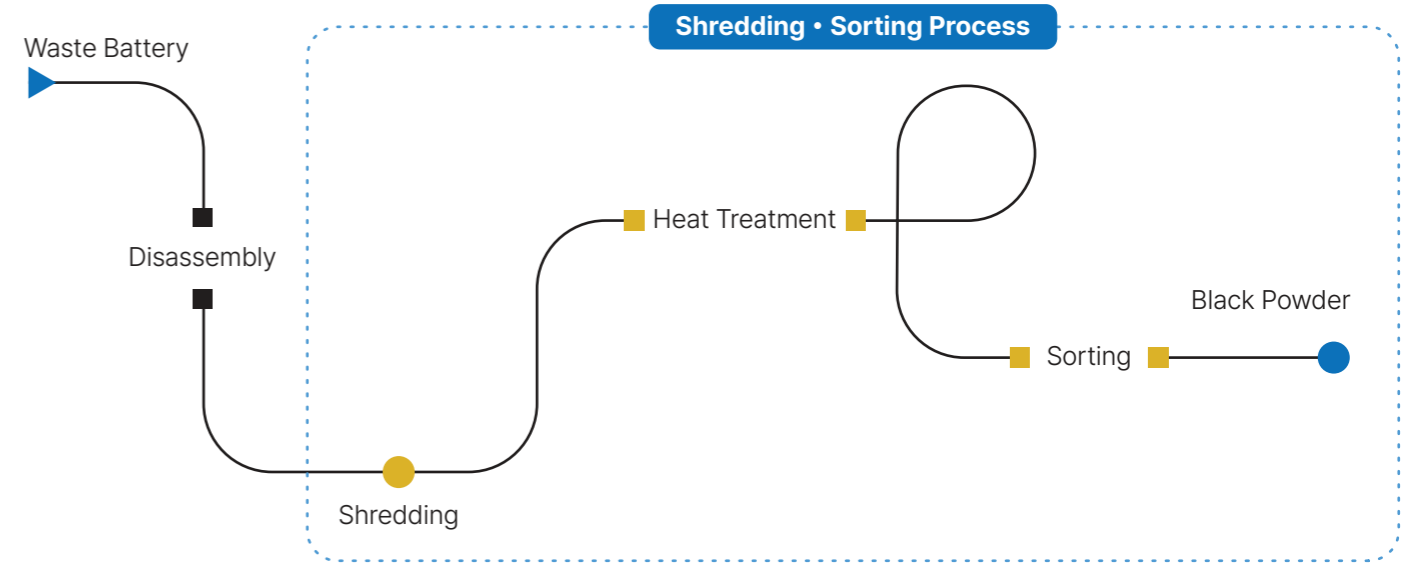
[Plant Engineering]



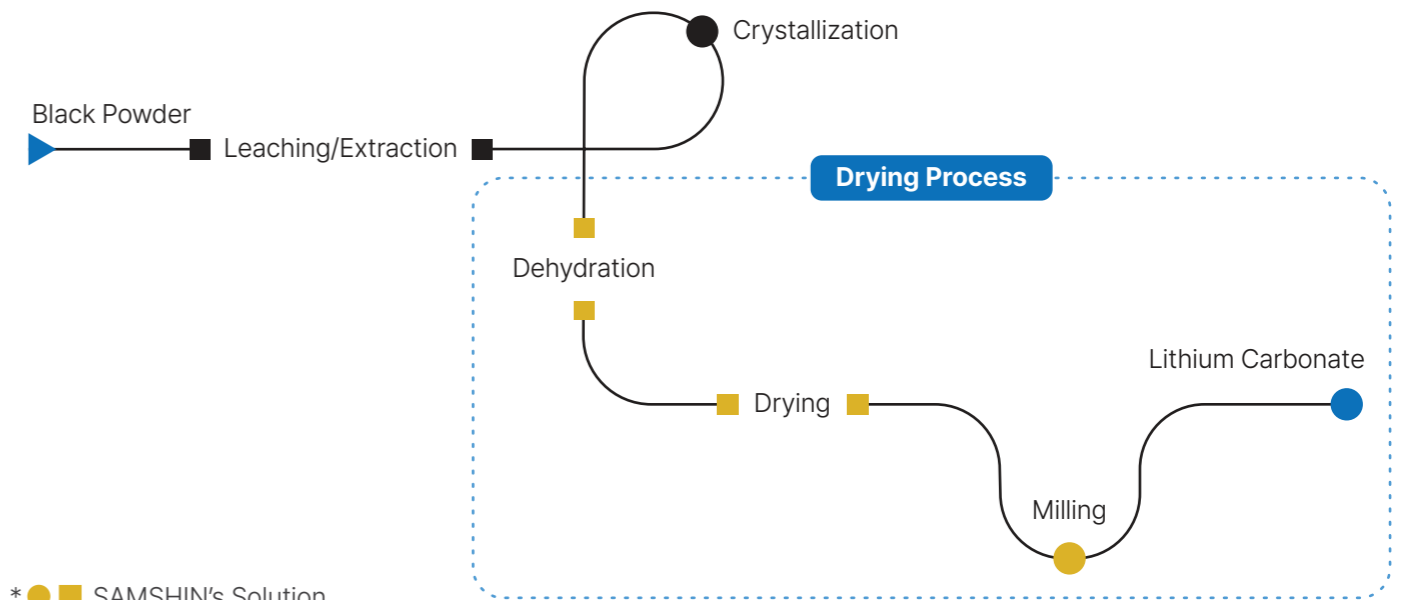
Secondary Battery Recycling Solution

The process of recovering contained lithium from waste battery through physical and chemical treatments

* Pre-treatment Process



* Post-treatment Process (Hydrometallurgy)



* ● ■ SAMSHIN's Solution

Related Performance

2018

POSCO PosLX ME CO
Upstream Calcination and
Roasting Process

OVERVIEW

Facilities that calcines and
crushing lithium ore, mixes it
with sulfuric acid, and roasts it

ITEM

Rotary Kiln, Rotary Cooler,
Ball Mill, Paddle Mixer,
Screw Conveyor,
Bucket Elevator, ETC

CLIENT

POSCO

2021

POSCO HY Clean Metal Co. Ltd.
Lithium Carbonate
Productization Facility

OVERVIEW

Facilities that dehydrates,
dries and pulverizes lithium
carbonate slurry to make
and pack lithium carbonate

ITEM

Centrifugal Separator,
Rotary Kiln, Screen, Air Mill,
Air Mixer, Screw Conveyor,
Packing Machine, ETC

CLIENT

POSCO HY CLEAN METAL

2022

Ore Lithium
Commercialization PJT
_ Plant 2
Leach Refinery (EP Contract)
Input Equipment

OVERVIEW

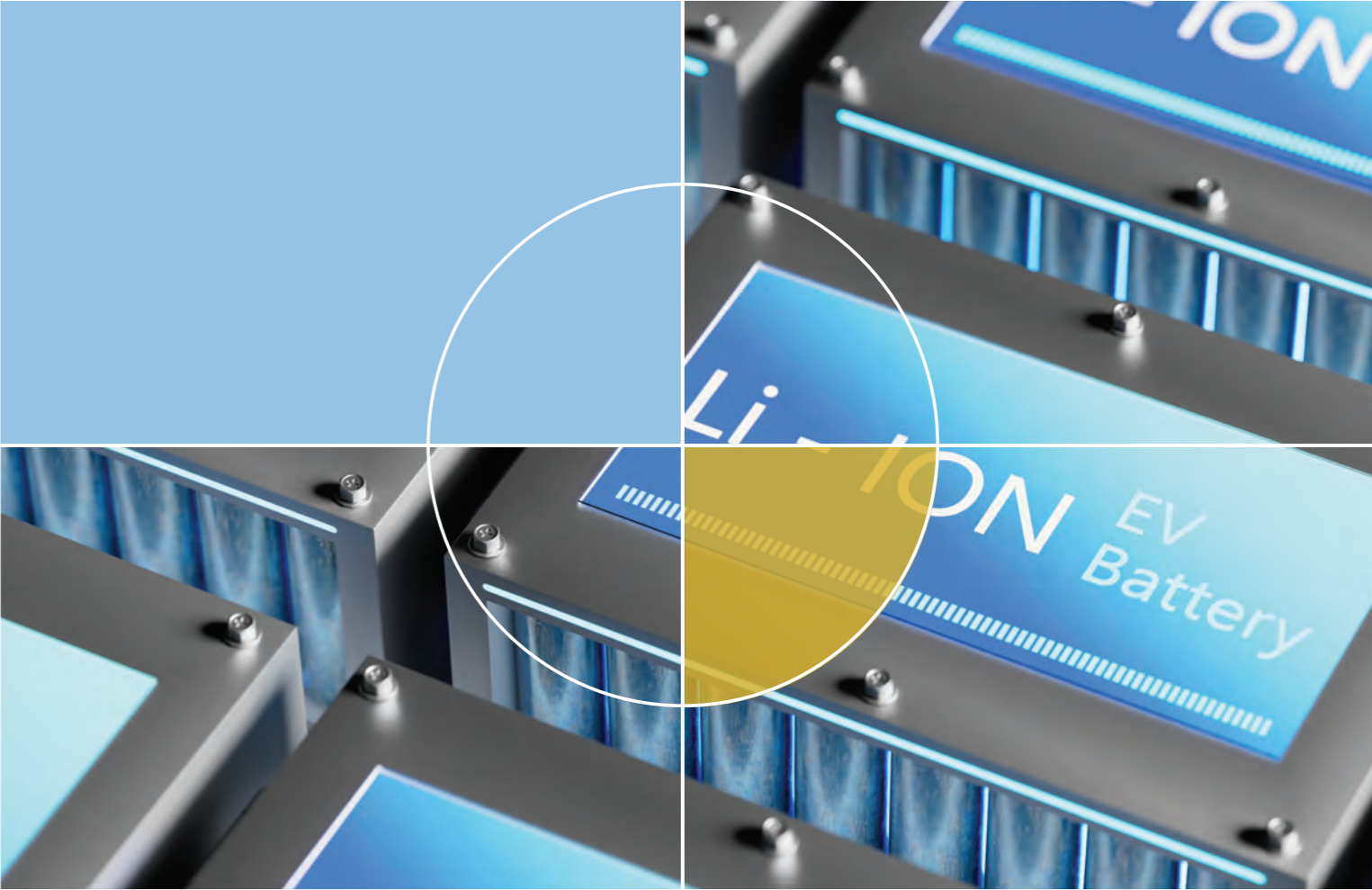
Equipment that inputs
subsidiary materials prior to
the lithium leaching process

ITEM

Bag Breaker, Feed Hopper,
Dust Collector, Storage Bin,
Rotary Valve, Agitator,
Steel Structure

CLIENT

SNNC



[Plant Engineering]

Calcination /Drying /Incineration Plant

**Customized
Engineering Solutions
for Calcination, Drying
and Incineration**

- ✓ Design aligned with global standards
 - ✓ Steady order performance and technology
 - ✓ From customized design to construction and meticulous post-management.



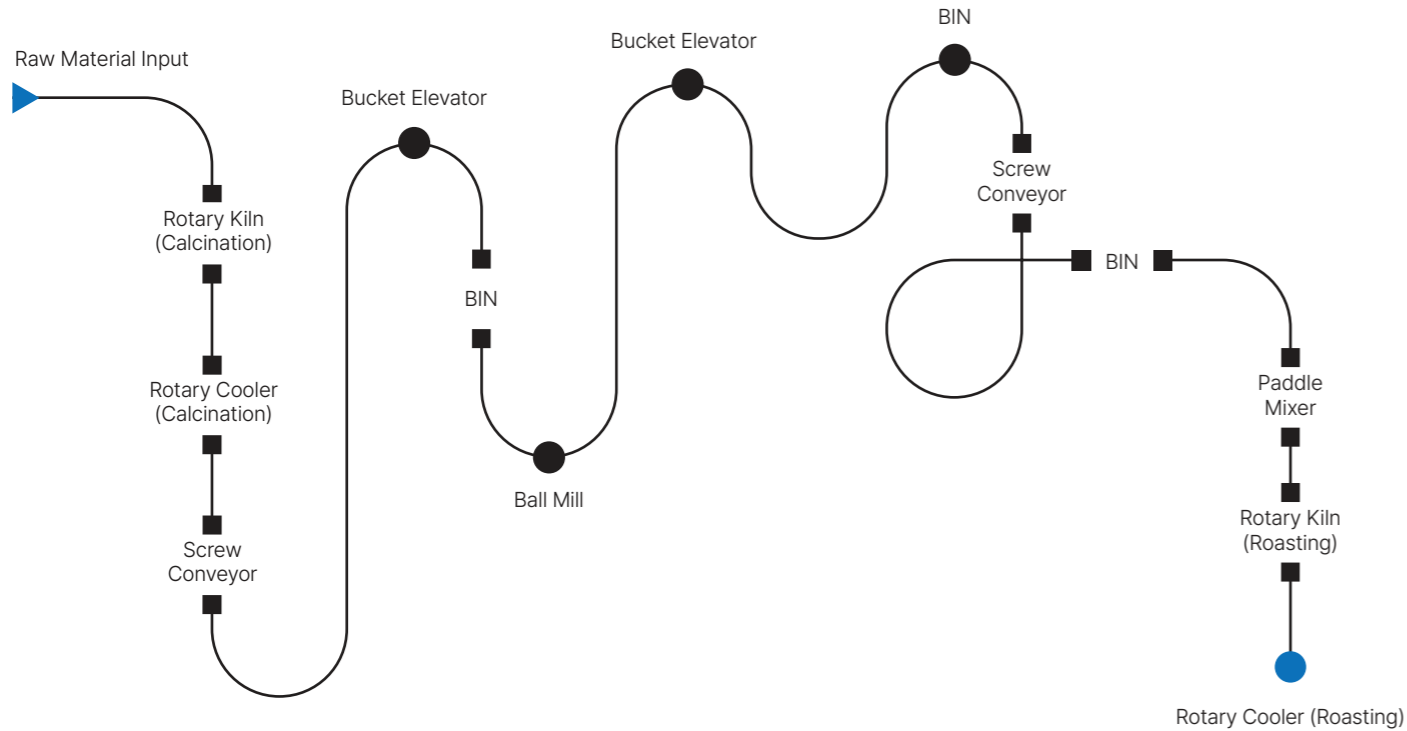
Calcination · Drying · Incineration Solution

We supply complete systems for calcination, drying and incineration plants for a variety of materials, from powder-type products to slurries for recycling and waste sludge.

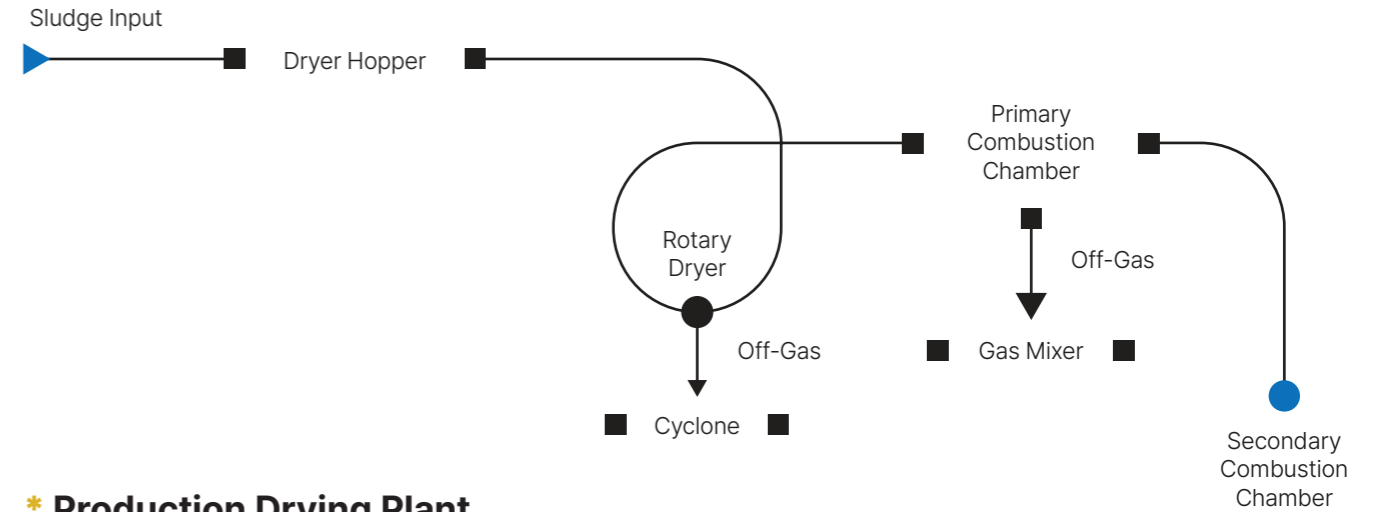
Core Process

- ✓ Calcination (Drying, Incineration)
- ✓ Cooling
- ✓ Dust Collection

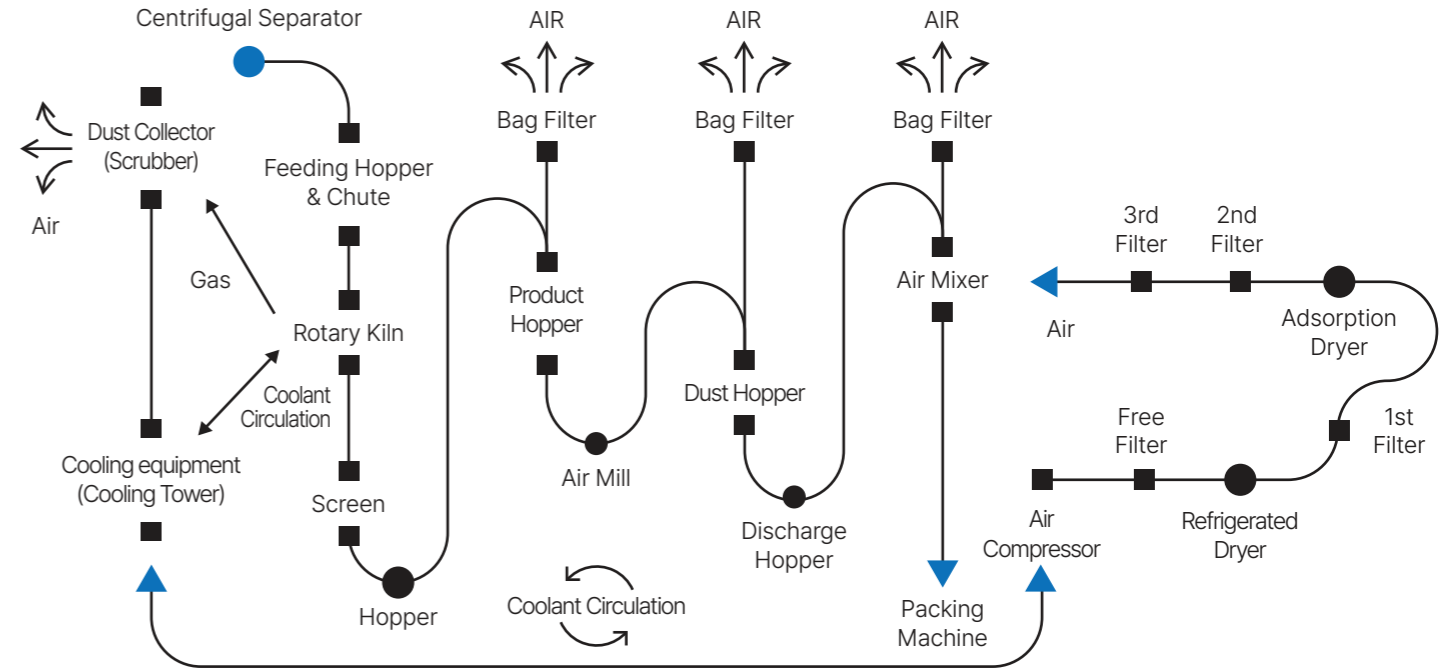
* Raw Material Calcination Plant



* Sludge Incineration Plant



* Production Drying Plant



Related Performance

2013

STS 1 Steelmaking Byproduct Wet Sludge Drying Facility Installation

OVERVIEW

Reuse plant for
drying and briquetting
SUS by-products
(Raw material residue)

ITEM

Belt Conveyor,
Flex wall Conveyor,
Rotary Kiln, Dust Collector

CLIENT

POSCO

2014

Plament Project OSTC & Feeding System _CHILE

OVERVIEW

Heating and melting
equipment for
copper sludge (SLIME)

ITEM

Furnace, Burner,
Transfer Car, Screw Conveyor,
Dust Collector

CLIENT

LS-MnM

2022

RDMP RU-V Balikpapan PJT (Sludge)

OVERVIEW

Equipment that
incinerates waste sludge

ITEM

Dryer,
Combustion Chamber(1st, 2nd),
Dust Collector

CLIENT

HYUNDAI ENGINEERING

2023

Fabrication, Transportation, and Installation of the Torrefaction System

OVERVIEW

Facility for torrefaction
by heating sugar cane
by-products after pelletizing

ITEM

Chain Conveyor, Pelletizer,
Screen, Bucket Elevator,
Rotary Kiln, Gas Mixer

CLIENT

INSTITUTE FOR
ADVANCED ENGINEERING

[Plant Engineering]



Material Handling Plant

Comprehensive solution for material transfer and supply of products, including conveying equipment and integrated front and rear equipment.

- ✓ Differentiated competitiveness built up through years of performance
- ✓ Package proposals from experts with creativity and passion
- ✓ Realization of technological innovation through perfect design

Material Handling Plant

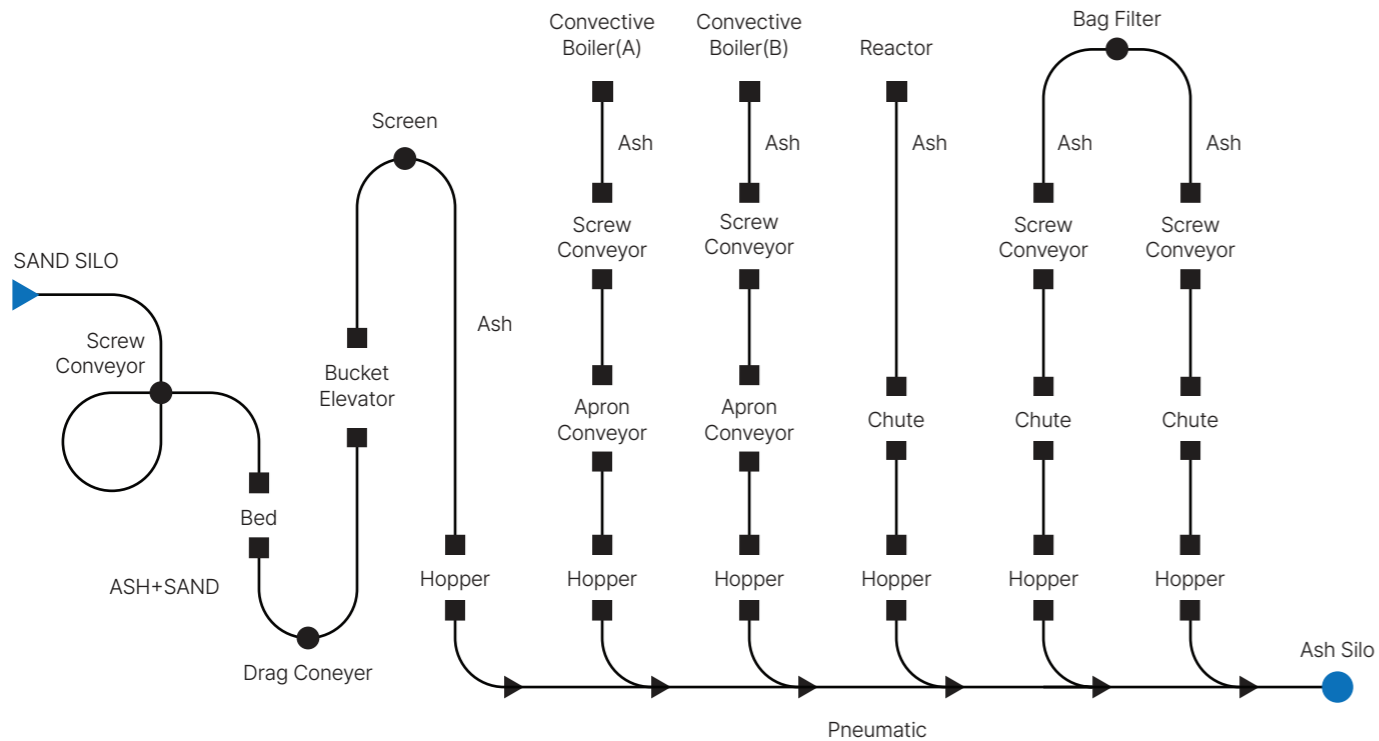
[Plant Engineering]

We provide a comprehensive package of storage equipment, transfer equipment, screening equipment, supply equipment, environmental equipment and packaging equipment necessary for raw material supply and product disposal.

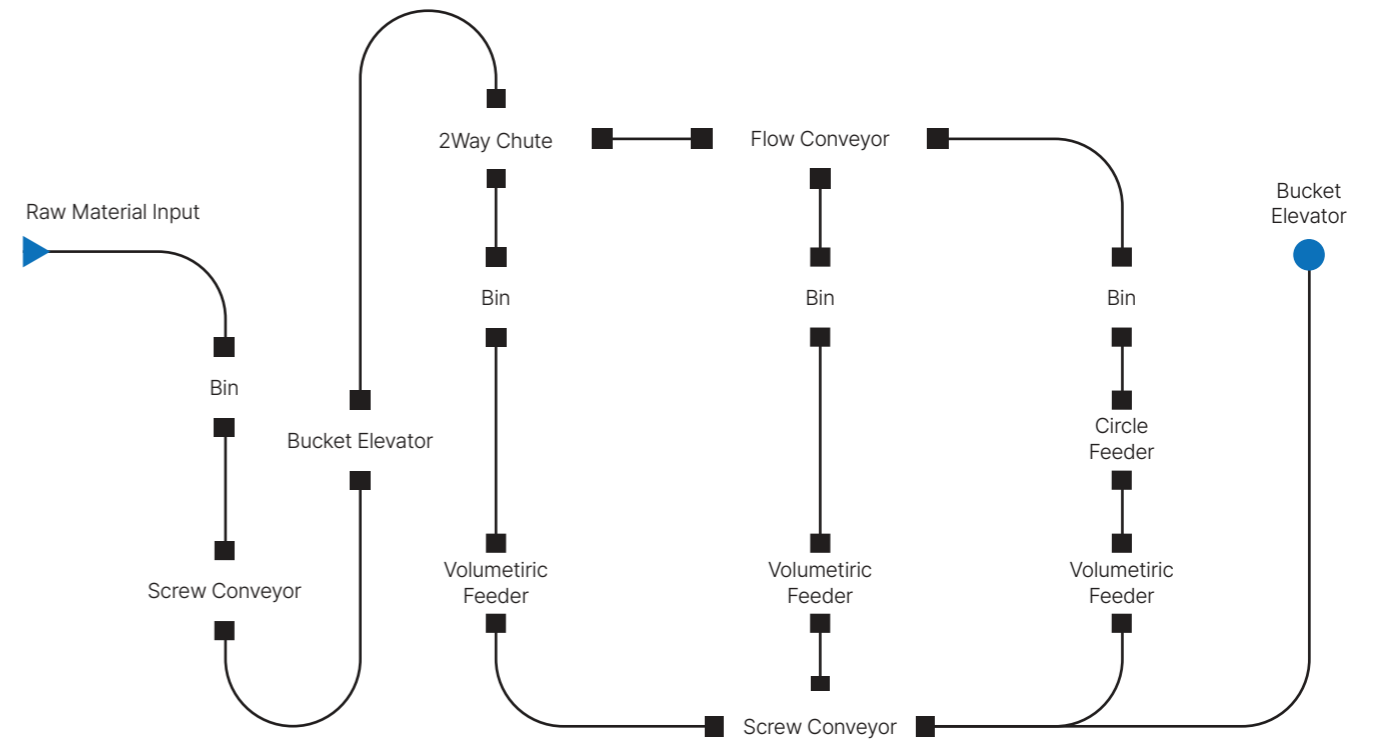
Core Process

- ✓ Storage
- ✓ Screening
- ✓ Transfer

* ASH HANDLING SYSTEM



* RAW MATERIAL HANDLING SYSTEM



2013

**POSCO SLUDGE
RETREATMENT
FACILITY**

OVERVIEW

Sludge & dust transfer
and mixing equipment

ITEM

Feeder, Belt Conveyor,
Mixer, Screen,
Bucket Elevator

CLIENT

POSCO

2014

**ASH & SAND
HANDLING SYSTEM
APRON CONVEYOR**

OVERVIEW

Facility that mixes ASH
generated after incineration
with sand and filters it
to discharge only ASH

ITEM

Silo, Chain Conveyor,
Screw Conveyor,
Screen,
Pneumatic Conveyor System,
Bucket Elevator

CLIENT

JEONJU PAPER

2022

**SEAH_M&S,
FE-MN RAW MATERIAL
COMPOUNDING FACILITY**

OVERVIEW

FE-MN raw material
mixing equipment

ITEM

Feeder,
Belt Conveyor,
Drum Mixer

CLIENT

SEAH M&S

2023

**POSLX ME CO
UPSTREAM_
RAW MATERIAL
HANDLING SYSTEM**

OVERVIEW

Facility that screen lithium ore
by particle size and moves it
to a calcining rotary kil

ITEM

Bin, Screw Conveyor,
Bucket Elevator,
Flow Conveyor,
Volumetric Feeder,
Circle Feeder

CLIENT

POSCO





Industrial Machinery.

**The core of SAMSHIN's unique technology
From designing to manufacturing industrial machinery
& equipment**

Project experience in various fields related to equipment was made possible by SAMSHIN's unique strategic design and integrated management.

- ✓ **Manufacturing know-how of Industrial machinery & equipment for powder, steel, environmental, conveying and more**
- ✓ **Design and manufacture of core equipment as well as related front and rear equipment**
- ✓ **Excellent quality and accuracy built with SAMSHIN's technology**

[Industrial Machinery]

Powder Equipment



Drying /Calcination Equipment

- Spin Flash Dryer
- Grind Classifying Dryer
- Disk Dryer
- Rotary Vacuum Dryer
- Vibration Fluidized Bed Dryer
- Rotary Kiln
- Rotary Cooler

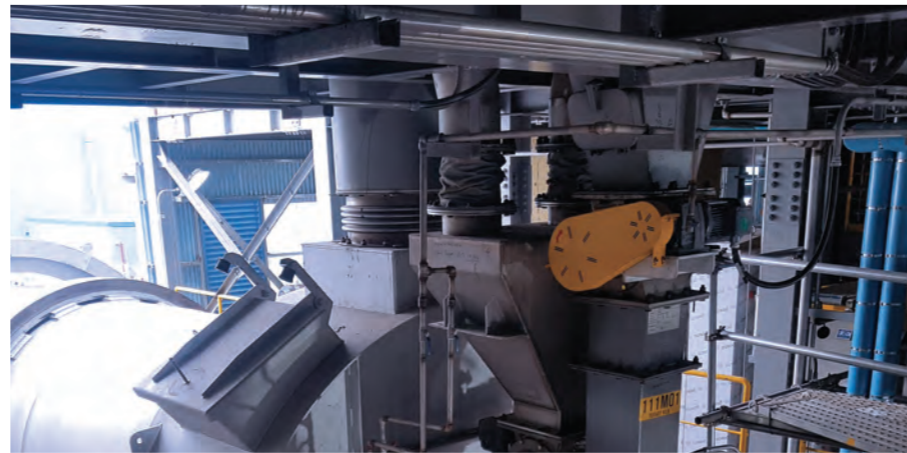
Sorting(Screening) Equipment

- Vibration Screen
- Rotary Screen



Industrial Mixer Pelletizing Equipment

- Ribbon Mixer
- Paddle Mixer
- Shovel Mixer
- Kneadeer
- Pelletizer



Water Treatment Environmental Equipment



Raw Water Treatment Equipment

Clarifier
Pressure Sand Filter
Multimedia Filter
Activated Carbon Filter
Revers Osmosis Unit
Water / Chemical Storage Tank

Demineralized Water Treatment Equipment

Ion Exchanger Tower
Degasifier
Water / Chemical Storage Tank

Waste Water Reclamation Treatment Equipment

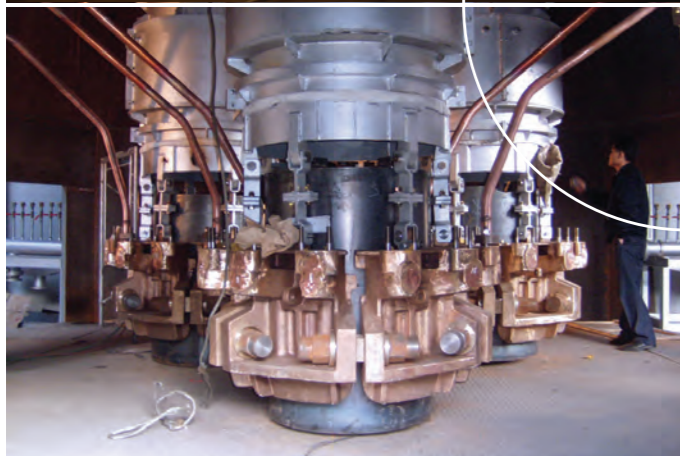
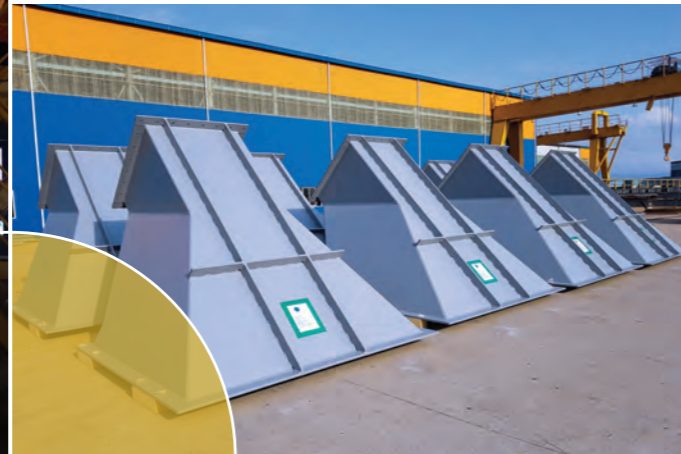
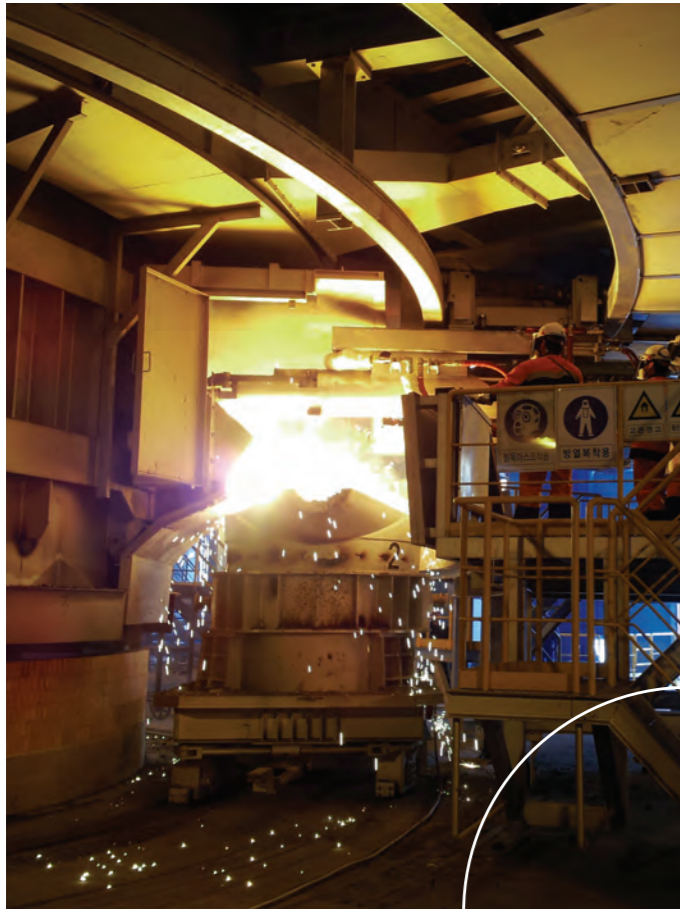
Activated Carbon Filter
Safety Filter
Reverse Osmosis Unit

Dust Collection Equipment

ESP Dust Collector
Bag Filter



Steel/Non-ferrous Production Equipment



Alloy Iron Electric Furnace Equipment

Scrap Bucket
Alloy Iron(Fe-Mn) Furnace Equipment
Casting Machine
Tap Hole Mud Gun & Drill Machine

Sintering Equipment

Sinter Cooler
Wind Box
Sliding Track

Steelmaking/Rolling /Casting Equipment

Automatic Supplementary Material Feeder
Scrap Bucket, Ladle Transfer Car
Tundish, Mould Water Jacket
Dummy Bar, Torch Cutting Machine
Guide, Abrasive Cutting Machine
4-Crank Shear, Carriage Transfer
Tilting Machine
Hot Bloom Manipulator Elevator

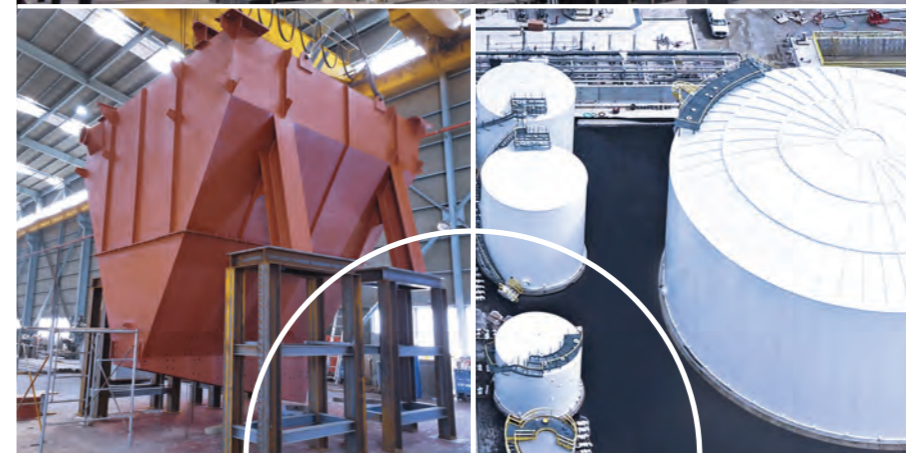
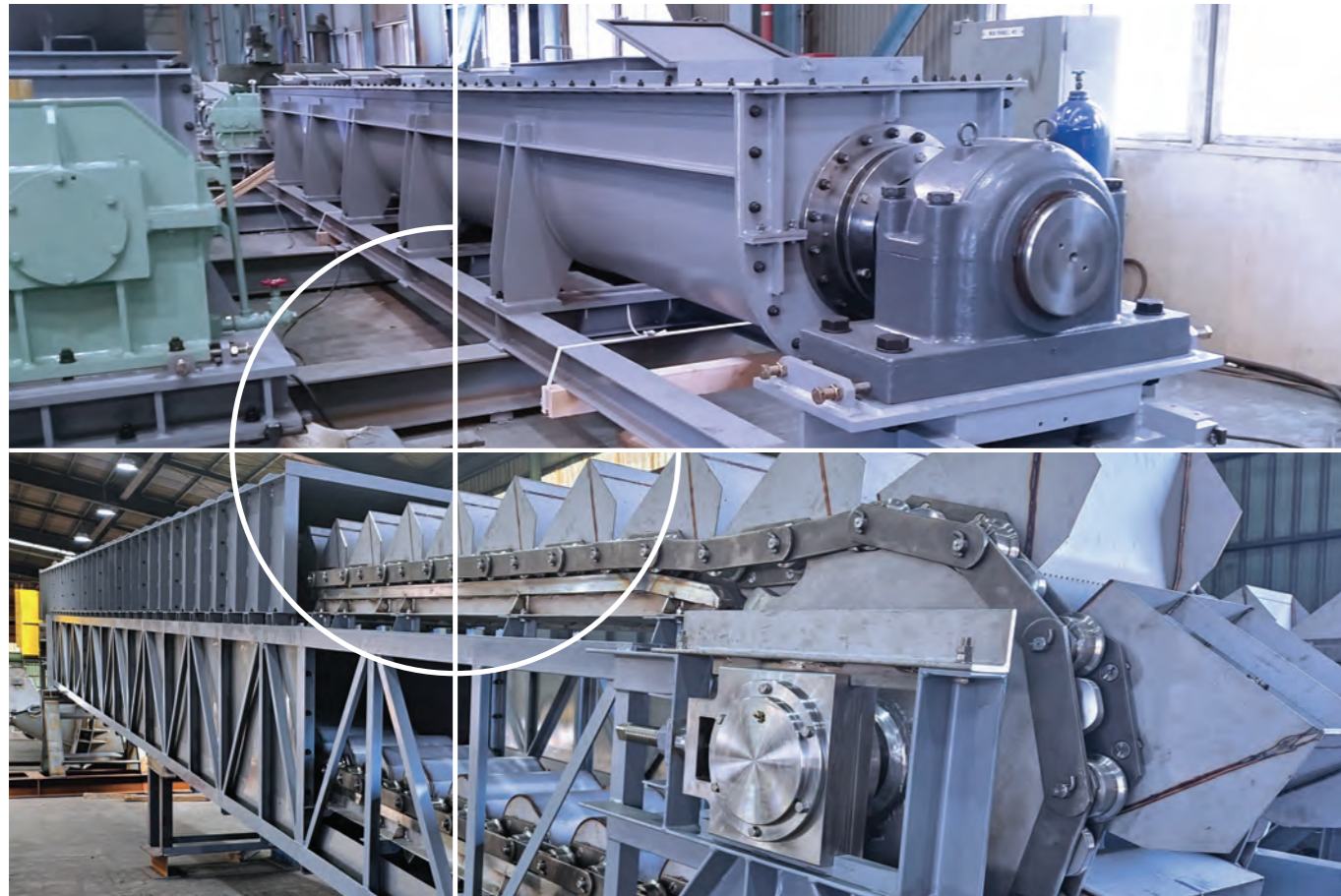
Non-ferrous Production Equipment

Copper Smelting Waste Heat Boiler(WHB)
Aluminium Heat Treatment Furnace



[Industrial Machinery]

Pressure/Storage/Conveyor Equipment



Pressure Equipment

Pressure Vessel

Storage Equipment

Hopper
Bin
Tank

Conveying Equipment

Belt Conveyor
Bucket Elevator
Screw Conveyor
Flex Wall Conveyor
Apron Conveyor
Flow Conveyor
Pneumatic Conveyor



Technology Laboratory.

RESEARCH INSTITUTE

**Continuous technology development
for better quality
Research on technology
to create differentiated customer value**

- ✓ Active Technology Development
- ✓ Customer-oriented Technology Research
- ✓ Advanced Global EPC Integrated Solution

SAMSHIN established a corporate research center in November 2016 and continues to invest in advancing its existing technologies and developing new ones. In addition, we are actively promoting the development and introduction of new technologies in the field of secondary battery plants in addition to our existing business, and have won various orders.

SAMSHIN has the best competitiveness to carry out all processes from consulting to error-free design and reliable construction according to customer needs. This competitiveness has been strengthened through technological research.

SAMSHIN will do our best to meet the needs of our customers with the know-how accumulated through partnerships with major domestic companies. We look forward to your support.



Thank you & inquiry.

Contact Us

● Head Office

- ✓ 196, Yongsan-gil, Cheongha-myeon, Buk-gu, Pohang-si, Gyeongsangbuk-do, Republic of Korea #37518
- ✓ +82-(0)54-256-2229
- ✓ sseng29@daum.net

● Factory

- ✓ 1952, Donghae-daero, Heunghae-eup, Buk-gu, Pohang-si, Gyeongsangbuk-do, Republic of Korea #37531
- ✓ +82-(0)54-256-3330

● Business Office

- ✓ A-1406, 767, Sinsu-ro, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Korea #16827
- ✓ +82-(0)31-8025-7111
- ✓ info@samshineng.com

● Vietnam Office

- ✓ lot I-4B, My Xuan B1- Tien Hung Industrial Park My Xuan Ward, Phu My Town Ba Ria - Vung Tau Province, Viet Nam
- ✓ +84 254 392 2939
- ✓ leeje2020@naver.com