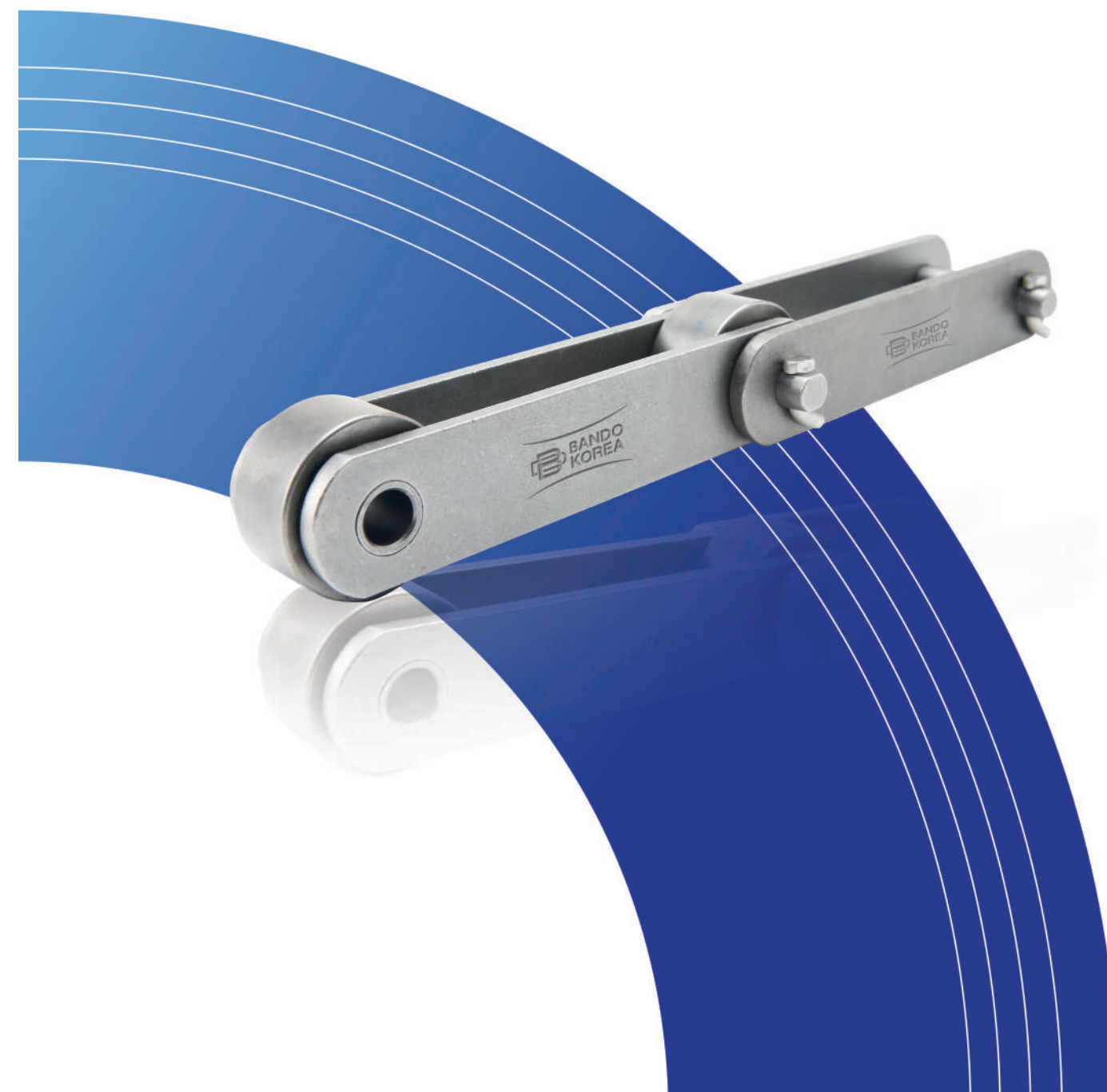




CONVEYOR CHAIN SPECIALIST  
Chain & Sprocket



**BANDO CHAIN IND. CO.,LTD.**

176 Daegotbuk-ro, 395 Beon-gil, Daegot-myeon, Gimpo-si, Gyeonggi-do, 10028 Korea

TEL. +82-31-984-4435 FAX. +82-31-984-4452

Our greatest power is technology.  
Bando chain rewards with  
**"Innovative Quality"**

## Contents





## Bando chain that reward customer's 'trust' with 'quality'

Customer productivity as our greatest 'value'  
Our greatest 'efficiency' in customer 'trust'  
Bando chain rewards with 'Innovative quality'

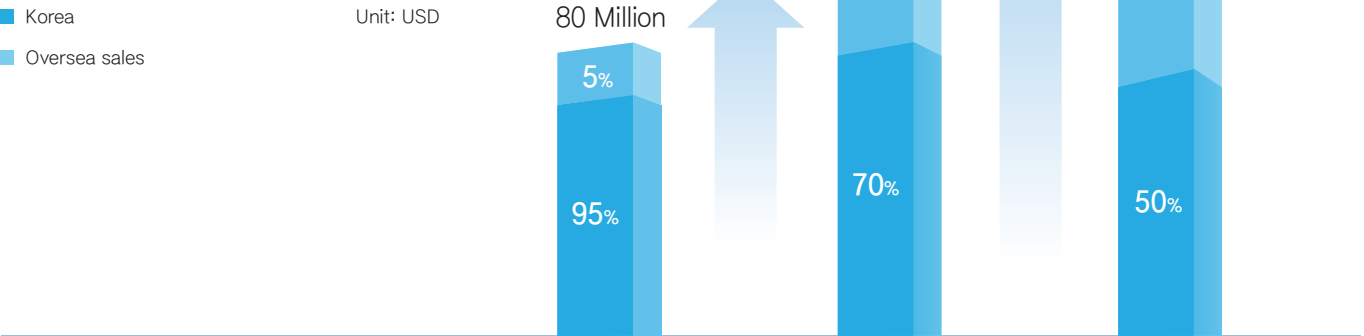


## Overview

Name	BANDO CHAIN IND. CO.,LTD
Establishment	1990. July
Headquarters	176 Daegotbuk-ro, 395 Beon-gil, Daegot-myeon, Gimpo-si, Gyeonggi-do, 10028 Korea TEL +82-31-984-4435 FAX +82-31-984-4452
Branch	Paju factory, Kobe office(Japan), Bucheon office
Capital	5 Million USD
Line of business	Conveyor chains, sprockets, related parts etc.
WEB	www.bandochain.com

## Sales amount

Annual increase !!  
Over the last three years.

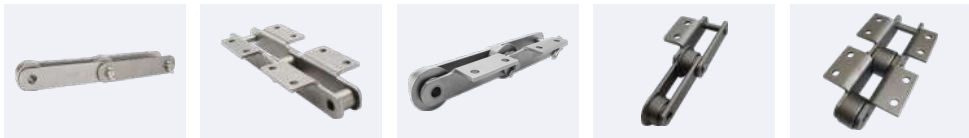


## History

- |  |                                      |   |  |
|--|--------------------------------------|---|--|
| 1990   Established BANDO CHAIN   | 2003   Completion of the Gimpo plant | 2011   Registered 5 patents related to conveyor chains. | 2017   Authorized economic operator/<br>Import and Export Safety Management<br>Certificate of Excellence (AEO) |
| 1992   100% Succeeded in domestically producing<br>complete conveyor chain | 2008   ISO9001                       | 2014   Exhibit at the M-TECH (Tokyo, Osaka)             | 2018   Exhibit at the METALEX (Bangkok)/<br>Established a KOBE office in Japan                                 |
|  | 2010   Research institute            | 2015   Certified promising company                      | 2020   Completion of the Paju plant  |
|  |                                      | 2016   Certified venture company                        |  |

# MAIN PRODUCTS

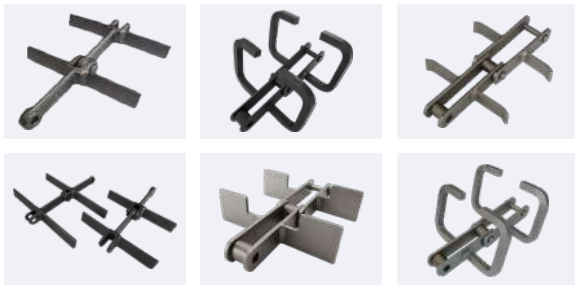
STANDARD CHAINS



BUCKET ELEVATOR CHAINS



FLOW CHAINS



BNFTYPE CHAINS



BDDTYPE DIRECT TRANSFER CHAINS



WATER TREATMENT CHAINS



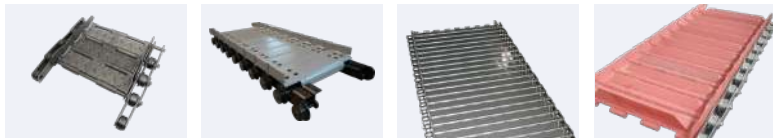
LOW FRICTION HEAVY DUTY CHAINS



BROTYPE HEAVY DUTY ROLLER CHAINS



APRON CHAINS



SPROCKETS



## BY INDUSTRY

STEEL MILL



CEMENT



AUTOMOTIVE



WATER TREATMENT / POWER PLANT



OTHERS



## Short lead time

Reduce production time with a system that can complete the entire process in our factory.

## Cost down

Cost down by "Optimal process control" and "Automation production."



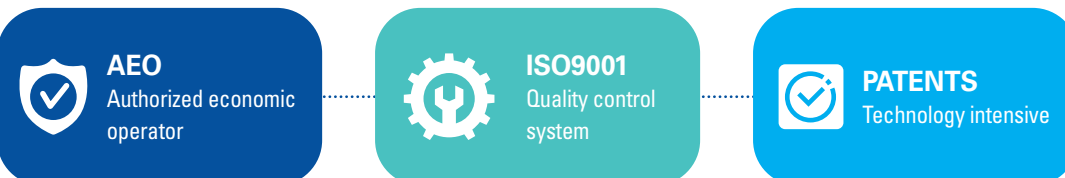
## Technical Support Services

Technical support to customers who have difficulty managing due to lack of application specifications.

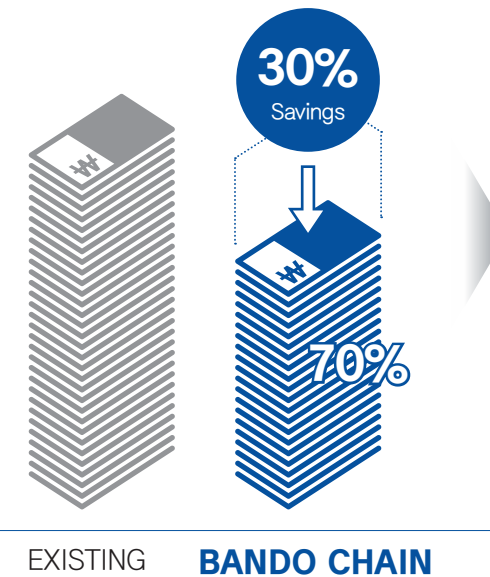
## Customization

Realize the extension of life by selecting various forms of optimal specifications for the environment of use.

## Management system



## Cost savings



### Develop forged mold

► Pipe pull-out line at "N" Steel mill in Japan: **40% SAVING**

### Custom designed

► Dust collection line at "H" Steel mill in Korea: **10-15% SAVING**

### Improvement specification of needle bearing

► Thick plate transportation at "J" Steel mill in Japan: **50% SAVING**

### Optimization for process

► Continuous ship unloading bucket at a Steel mills, Power Plants in Korea, Japan: **50-70% SAVING**

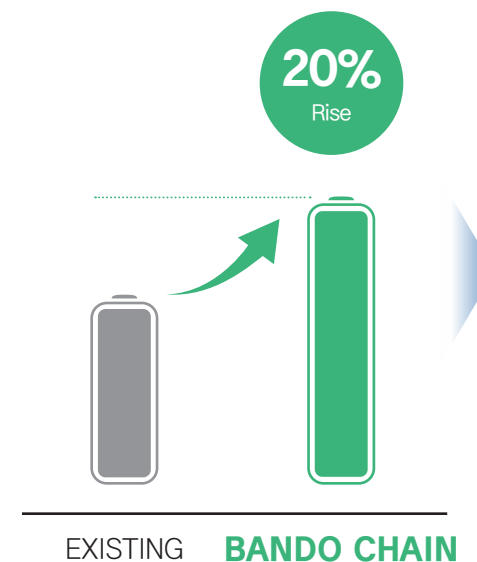
### Develop automated production process

► Coal and other raw materials transportation lines: **20% SAVING**

### Develop automated production process

► Rice processing line in Korea: **20% SAVING**

## Extend life span



### Improved needle bearing structure (heat resistant spec over 350°C)

► Hot - rolled line at "K" Steel mill in Japan: **200% IMPROVING**

### Improved seal structure

► CSU at "H"(Korea), "K"(Japan) Steel mills and K Power Plant: **20% IMPROVING**

### Applying new material technology for dust collectors

► Dust collection line at steel mill, power plants in Korea, Japan: **40% IMPROVING**

### Improvement of material and heat treatment

► Cement production line at Korea, Japan: **30% IMPROVING**

### Developed stainless steel heat treatment technology

► Sewage treatment in Korea: **40% IMPROVING**

### Improved structure (Anti-sticking, chain bending, roller rotation)

► Sintering line in Korea: **20% SAVING**



# GLOBAL BANDO CHAIN

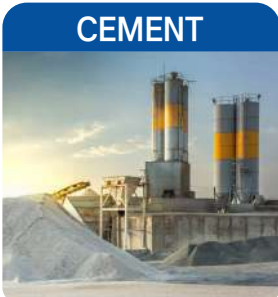
The global leader  
Tireless challenger  
Trustworthy Manufacturer



STEEL MILL



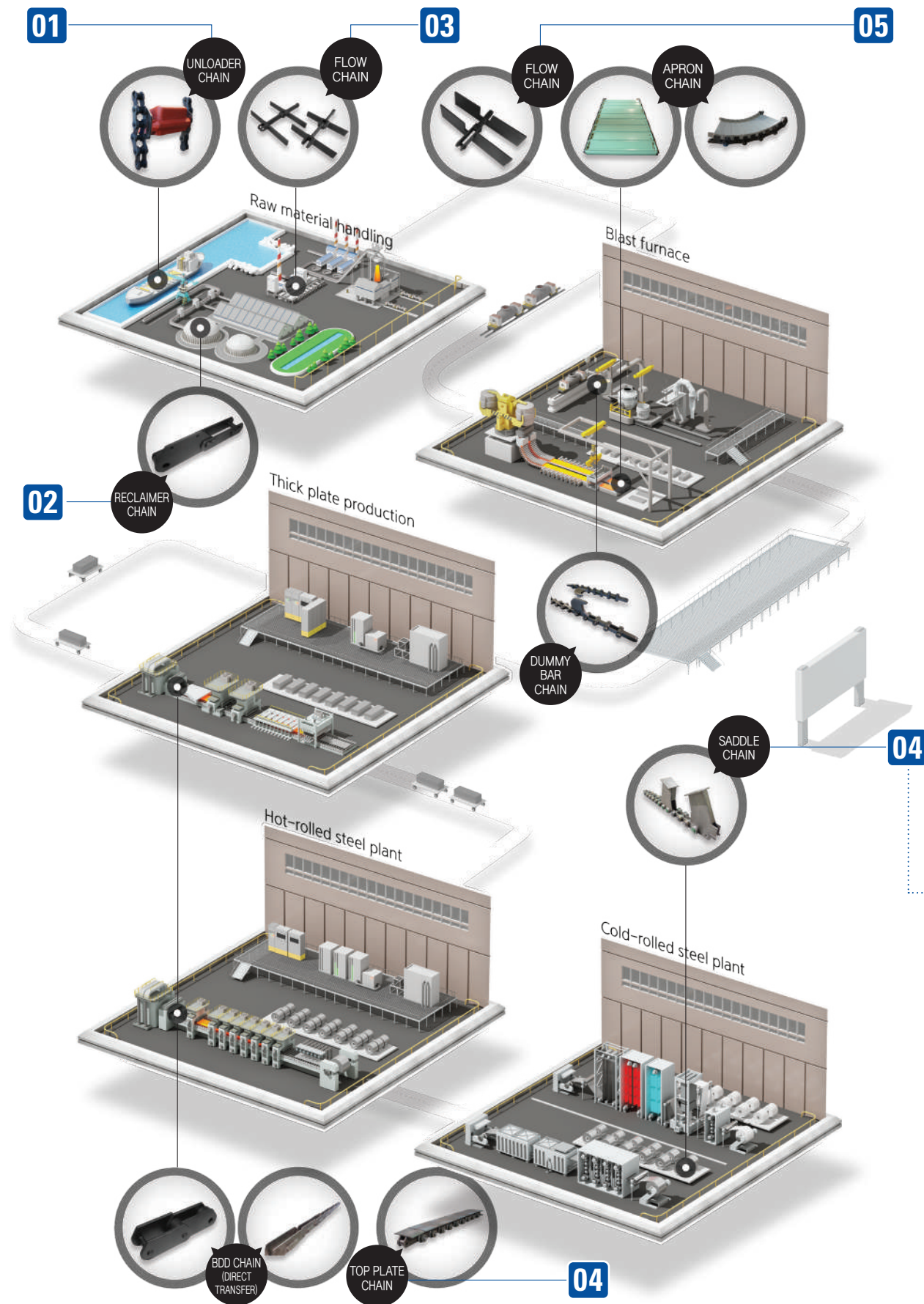
AUTOMOBILE



CEMENT







## STEEL MILL

Conveyor chain used in all processes of the steel mills from raw material handling to the final process.

### 01 CONTINUOUS SHIP UNLOADER (CSU)

**PURPOSE** | Continuous unloading of raw materials such as coal and iron ore.

**FEATURE** | Strong wear resistance and corrosion resistance.

Bando Chain's unique 'SEAL' technology maximizes wear resistance and provides excellent corrosion resistance.



### 02 RECLAIMER CHAIN

**PURPOSE** | Supply of raw materials from the storage yard to each process.

**FEATURE** | Strong wear resistance and impact resistance.



### 03 BUCKET CHAIN, FLOW CHAIN

**PURPOSE** | Supply of raw materials to the blast furnaces and transport after process dust.

**FEATURE** | Wear resistance and heat resistance.



### 04 SADDLE CHAIN, TOP PLATE CHAIN

**PURPOSE** | Carry large, heavy objects such as slabs, thick plates, coils, etc.

**FEATURE** | Abrasion resistance and heat resistance.

Bando chain's exceptional bearing helps to minimize friction.



### 05 FLOW CHAIN, APRON CHAIN

**PURPOSE** | Transport the generated dust, scraps, etc.

**FEATURE** | Corrosion resistance and abrasion resistance.

Bando chain's skillful technic helps to minimize loss of the carried material.



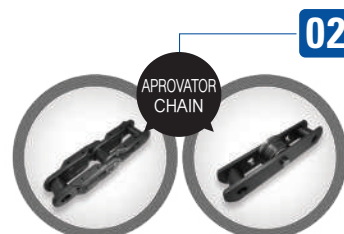


# CEMENT

## 01 / QUARRY



01



APPROVATOR CHAIN

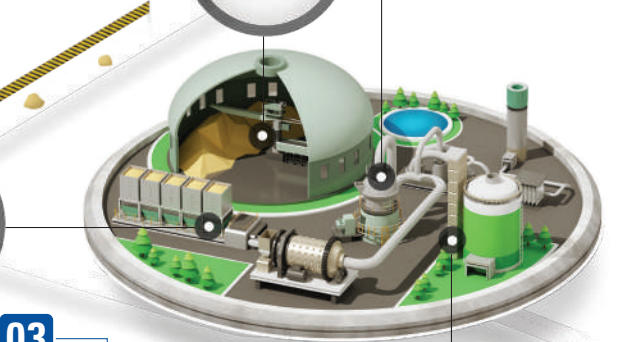
02

## 02 / CRUSH & STORE



FLOW CHAIN

04



03



BUCKET CHAIN



BUCKET CHAIN



## 03 / KILN

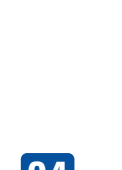
03



BUCKET CHAIN



BUCKET CHAIN



04



FLOW CHAIN

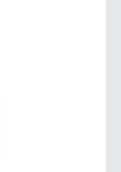


## 04 / PRODUCTION

03



BUCKET CHAIN



## CEMENT

Conveyor chain used in all processes from raw material crushing to the final process.



### CRUSHER CHAIN

**PURPOSE** | Crush rocks used as raw materials for cement.

**FEATURE** | Abrasion resistance and maximum wear resistance between pins and bushings.



### RECLAIMER CHAIN

**PURPOSE** | Supply of raw materials from the storage yard to each process.

**FEATURE** | Strong wear resistance.



### APPROVATOR CHAIN

**PURPOSE** | Transport the primary processed cement raw materials.

**FEATURE** | Wear resistance and heat resistance.

Bando's skillfully designed chains work energetically with two rows of chains and an apron or bucket as a set.



### BUCKET ELEVATOR CHAIN

**PURPOSE** | Transports raw material and dust from horizontal to vertical.

**FEATURE** | Wear resistance, heat resistance, and corrosion resistance are optimally specified according to the conditions of use.



### FLOW CHAIN

**PURPOSE** | Transport raw material and dust horizontally.

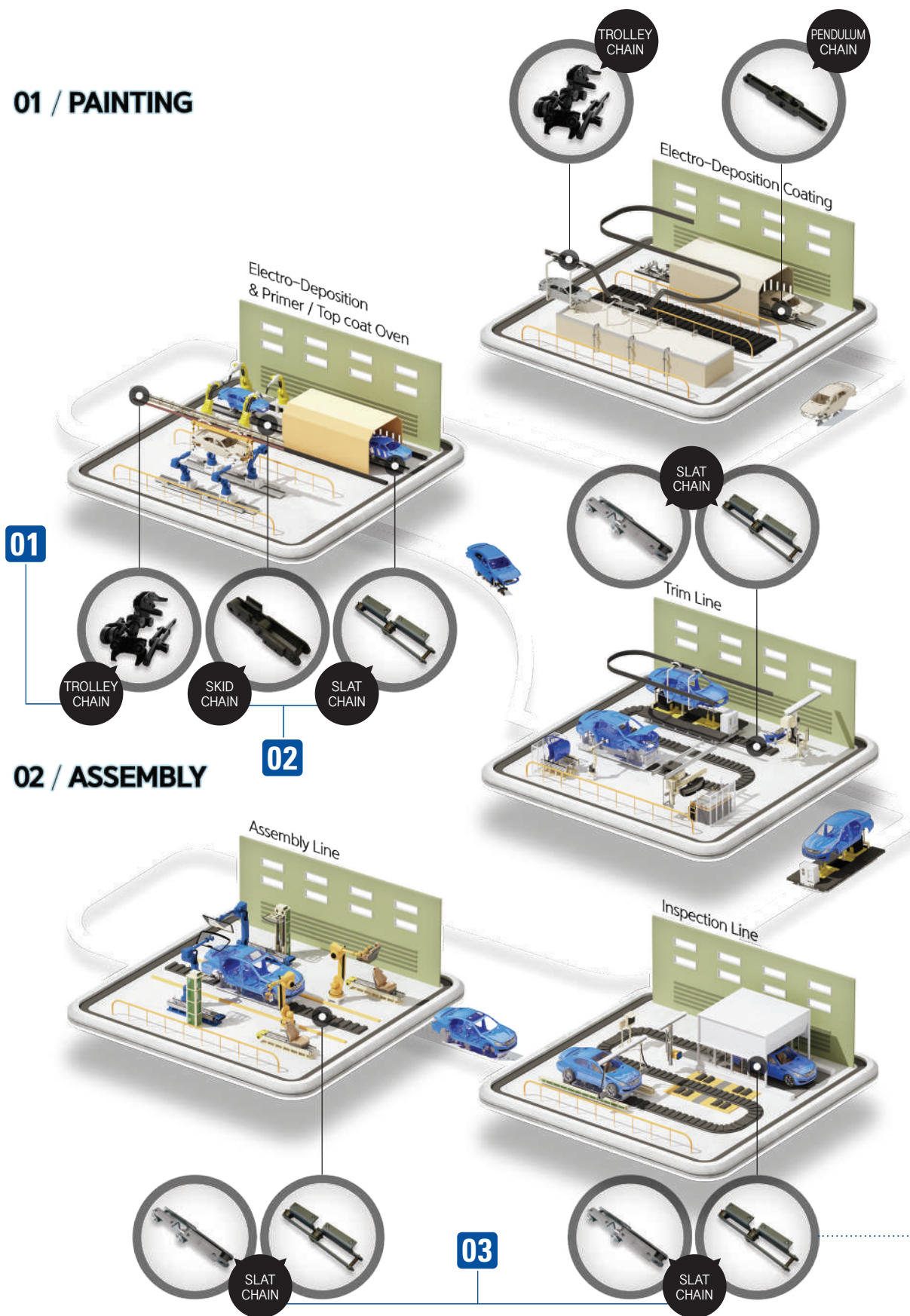
**FEATURE** | Strong wear resistance.

Bando's expertise provides the best operating specification in a sealed casing condition.





## 01 / PAINTING



## AUTOMOBILE

Conveyor chain used in all processes from the parts (forges) production and processing lines, engine assembly lines, body painting, final inspection, to the final lines of automobile manufacturing.

## CHIP CONVEYOR CHAIN

**PURPOSE** | Transports material and machining chips, etc. in the pre- and post-processing of the product (forging).

**FEATURE** | Heat resistance.



## 01 TROLLEY CHAIN

**PURPOSE** | Transport to the individual processes via overhead to make efficient use of the factory layout.

**FEATURE** | Bando provides the thrown abrasion resistance and excellent accuracy for each part.



## 02 SKID CHAIN, SLAT CHAIN | COATING LINE

**PURPOSE** | Carry the vehicles with chains used in the pre-and post-treatment processes of the paint line.

**FEATURE** | Excellent heat resistance and durability.



## 03 SKID CHAIN, SLAT CHAIN | ASSEMBLY LINE

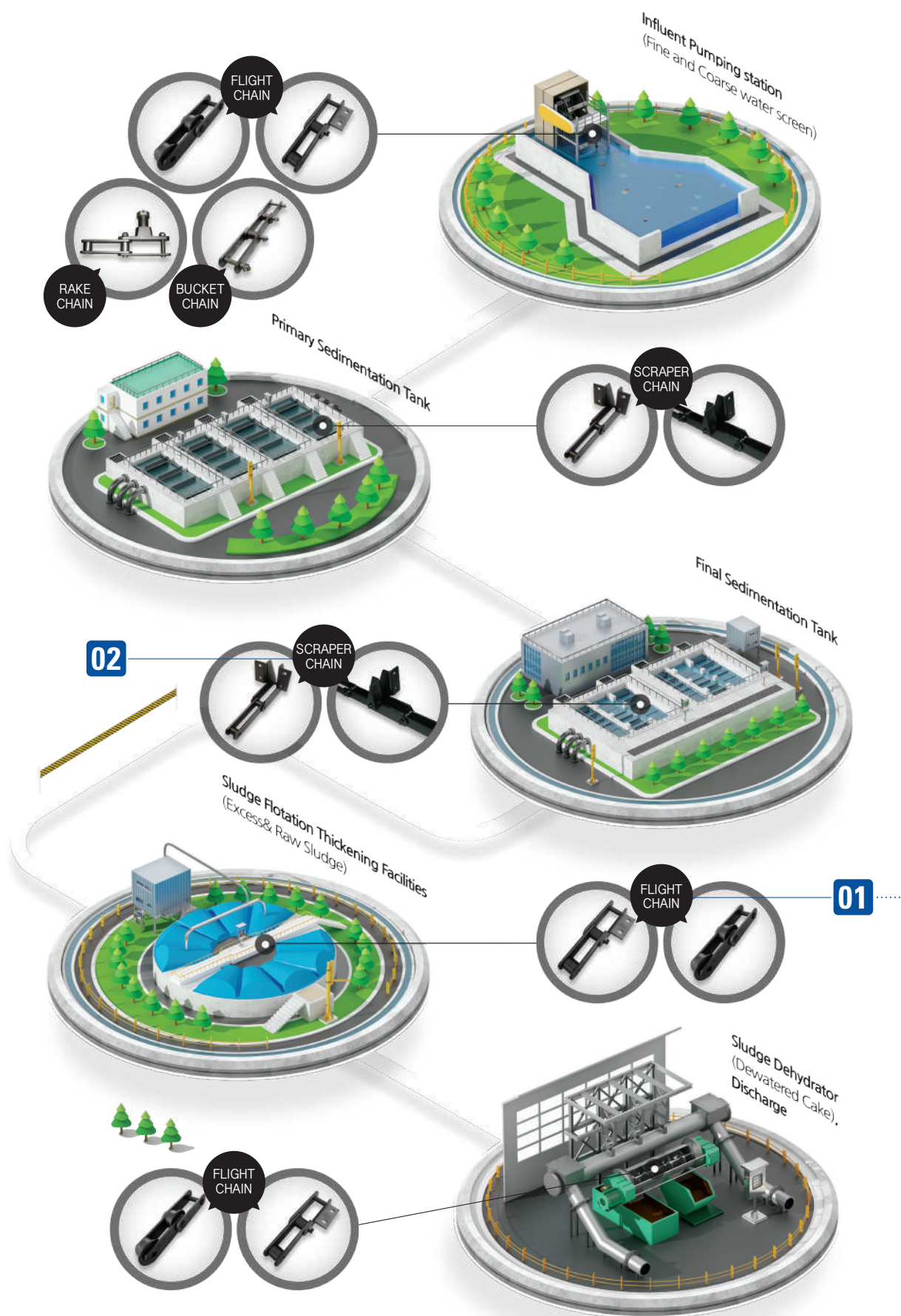
**PURPOSE** | Use on the line for assembling and inspecting the finished parts of each process, assembly line, watertight inspection line, etc.

**FEATURE** | 100% custom made depending on the environment of use. Bando offers watertight, durable, vibration-free, noise-free, depending on the environment of use.





# SEWAGE TREATMENT PLANT



## WATER TREATMENT

Conveyor chain used for overall processing from sludge, grit trap, 1/2nd sedimentation basin, etc., during water purification and sewage treatment process.

### 01 FLIGHT CHAIN | SLUDGE COLLECTOR

**PURPOSE** | Rake up the sewage sludge.

**FEATURE** | Bando chain provides corrosion resistance and wear resistance optimized for sewage treatment environments with long experienced technology.



### 02 SCRAPER CHAIN | SEDIMENTATION BASIN

**PURPOSE** | Rake up dust, sand accumulated in a sedimentation basin.

**FEATURE** | Bando helps to resist wastewater at slow speed for a long time with optimal corrosion resistance.(Use stainless steel)



### RAKE CHAIN | DUST COLLECTOR

**PURPOSE** | Rake up dust, sand accumulated in a sedimentation basin.

**FEATURE** | Bando offers excellent corrosion resistance to withstand in the waste water treatment.



### DUST REMOVING CHAIN

**PURPOSE** | Remove dust, sand accumulated in a sedimentation basin.

**FEATURE** | Bando applies corrosion resistance and excellent durability of pins, bushes, and rollers.



### DRIVE CHAIN | PROCESSING UNIT

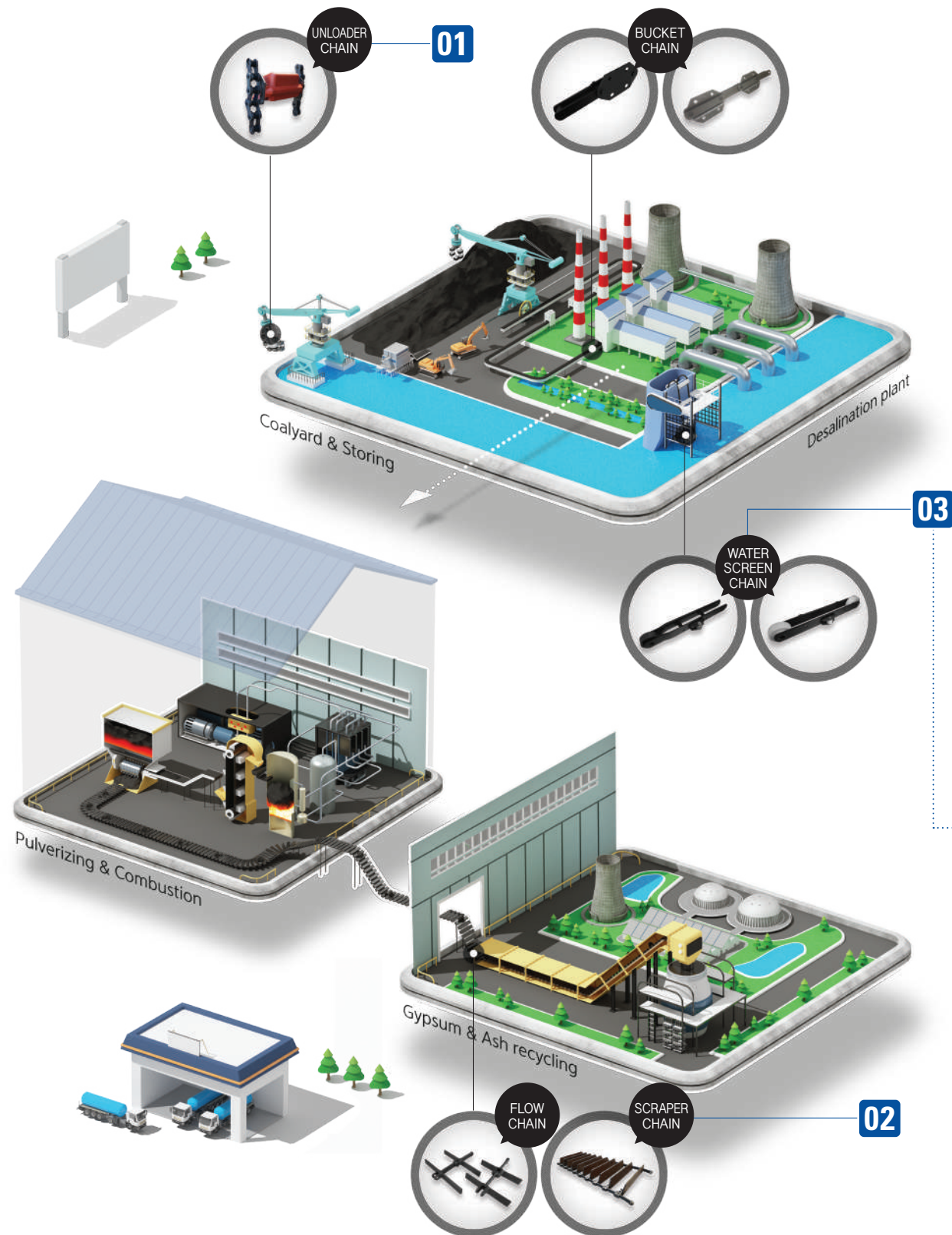
**PURPOSE** | Driving chain for a water treatment plant.

**FEATURE** | Bando chain provides corrosion resistance and high strength due to high operating speed and exposure to corrosive environments.





# THERMAL POWER PLANT



## POWER PLANT

Conveyor chain for raw material transport, dust transport, desalination plants such as thermal power plants and nuclear power plants.

### RECLAIMER CHAIN

**PURPOSE** | Supply of raw materials to each process from the stockyard.

**FEATURE** | Strong wear resistance.



### 01 CONTINUOUS SHIP UNLOADER (CSU)

**PURPOSE** | Unload raw materials from ships.

**FEATURE** | Strong wear resistance and corrosion resistance.



### 02 FLOW CHAIN, SCRAPER CHAIN

**PURPOSE** | Collect dust during the process.

**FEATURE** | Bando offers the designed products to be corrosion resistant, abrasion resistant, and to facilitate the unloading of inter-part conveyances.



### 03 SCREEN CHAIN, RBS, TWS

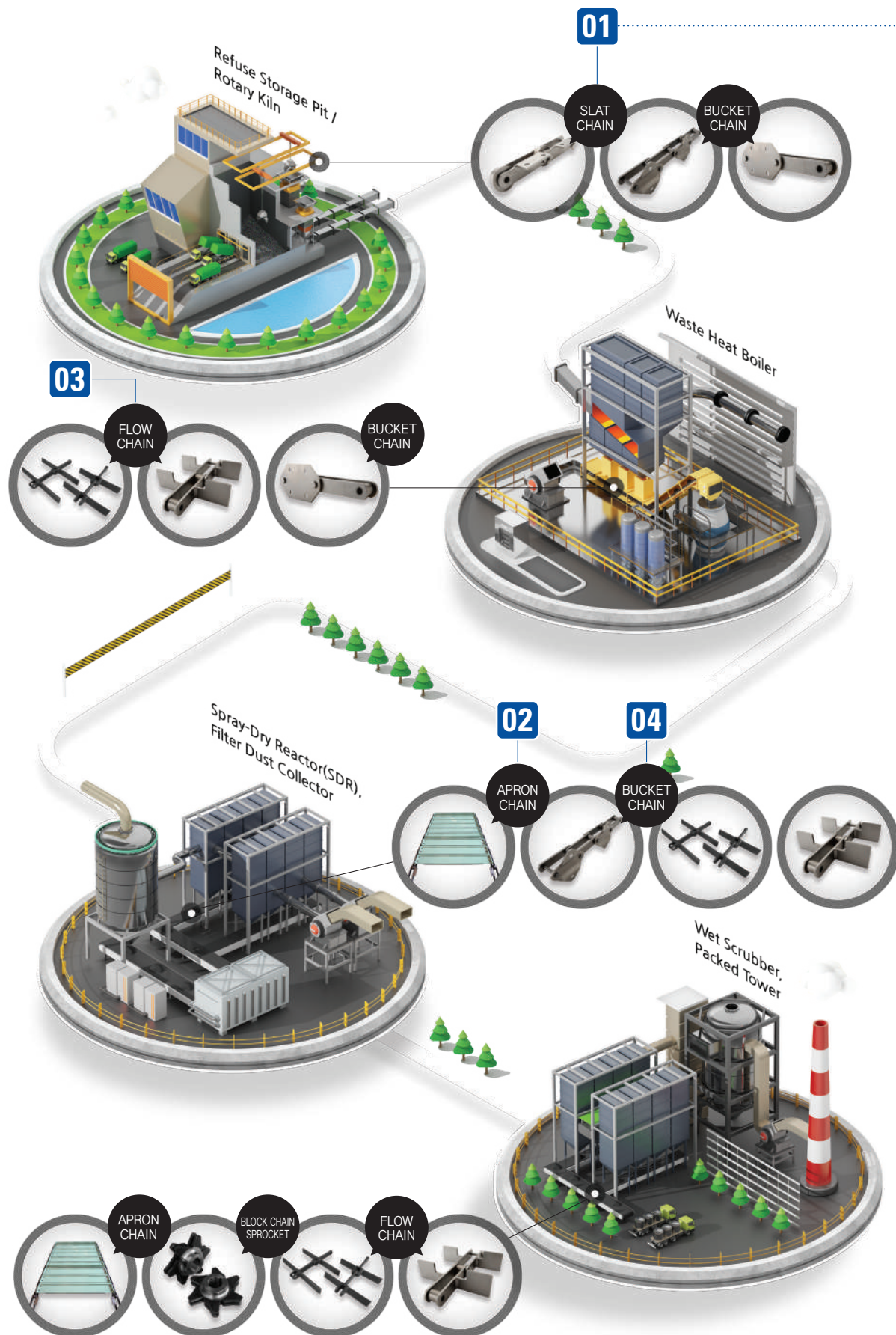
**PURPOSE** | Filter various wastes that flow, while using seawater to cool the heat generated by the power plant.

**FEATURE** | Bando chain helps with the optimal specification for use in seawater.





# INCINERATION PLANT



## RECYCLING & INCINERATION

Conveyor chains for recycling centers and incinerator treatment processes

### 01 SLAT CHAIN

**PURPOSE** | Convey collected waste.

**FEATURE** | Operate with slat or apron. Bando chain provides corrosion resistance and wear resistance optimized for collected waste environments with long experienced technology.



### 02 APRON CHAIN | RECYCLING & INCINERATOR

**PURPOSE** | Convey industrial waste, waste sorting, incineration ash.

**FEATURE** | Excellent heat resistance and abrasion resistance. Bando provides chain, apron, scraper, bucket, shaft, sprocket, bearing, coupling, ect as a total solution. Save construction time with Bando's total solution.



### 03 FLOW CHAIN, SCRAPER CHAIN | DUST COLLECTOR

**PURPOSE** | Convey powder, flying ash after incineration. (Boiler)

**FEATURE** | Bando offers the designed with clearance to prevent a curving or rotation defect problems.



### 04 BUCKET CHAIN

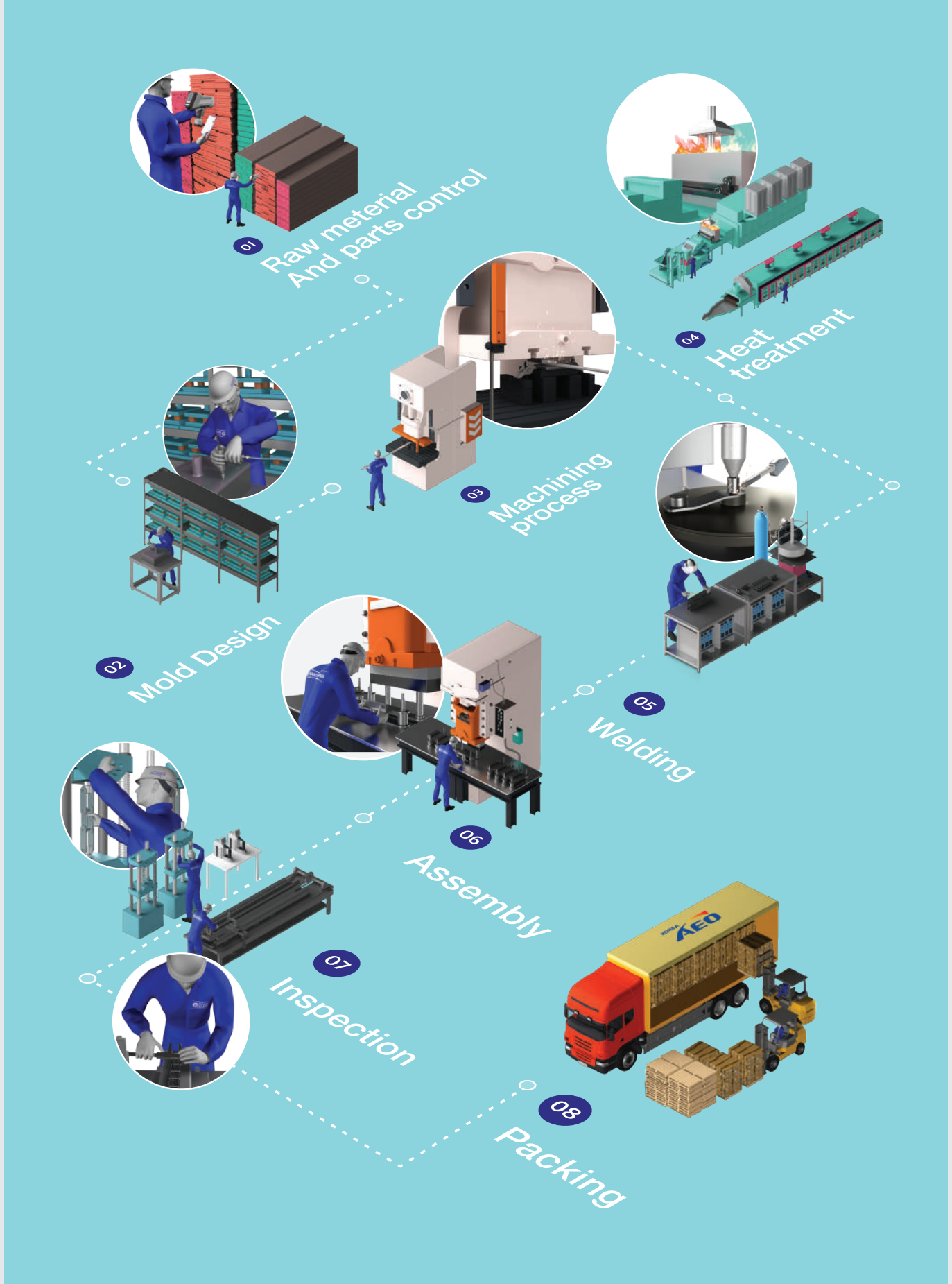
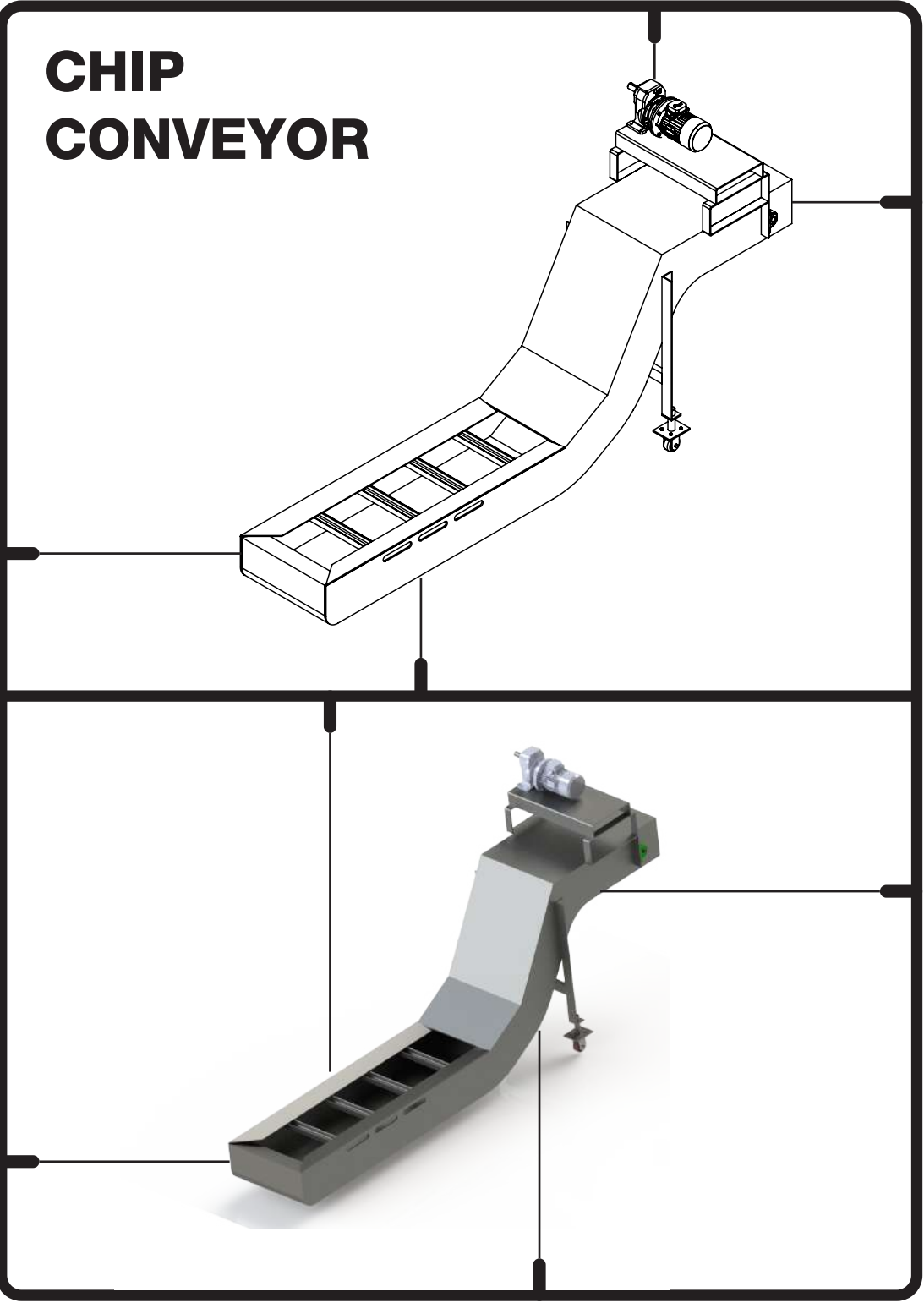
**PURPOSE** | Convey industrial waste of recycling centers.

**FEATURE** | Bando's expertise provides the best operating specification with abrasion resistance and corrosion resistance.





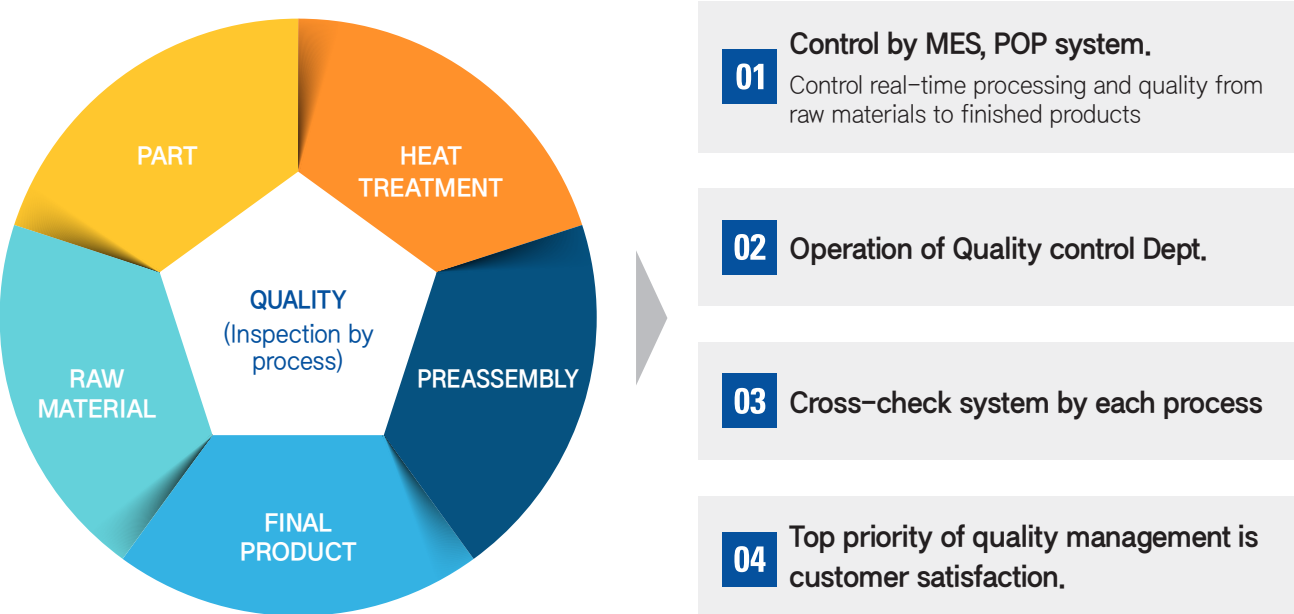
CHIP CONVEYOR CHAIN AND RELATED COMPONENTS



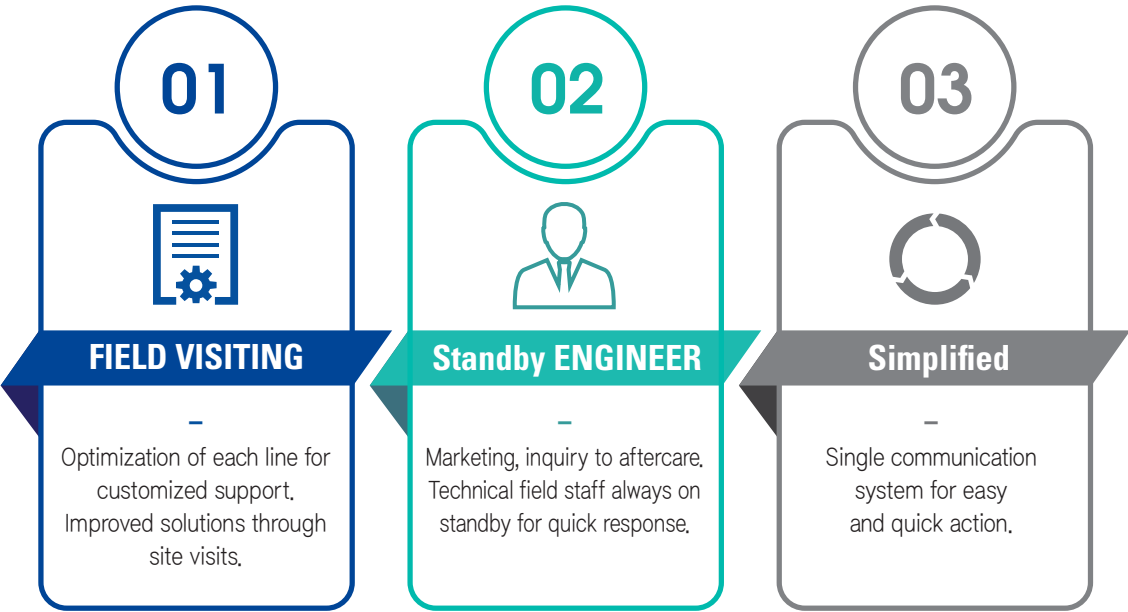


# QUALITY CONTROL SYSTEM

## QUALITY Management



## Support



# BUSINESS NETWORK

