# SANKO CO., LTD.

Over Half a Century with Passion towards Craftsmanship



## **Pride of SANKO**

We have continued being active to achieve to provide high-added-value products to our customers, not only manufacturing simple products. Our belief we have been having in any social situation is to face all sections with pride: equipment, tooling technology, productive technology, and growing human resources to supply more reliable products to our customers. As a result, we permanently keep doing business activities in society. In addition, we are proud that we manufacture products in response to social requirements.

As corporate social responsibility (CSR), we will, directly and indirectly, conduct to reduce CO<sub>2</sub> to curb global warming.

Moreover, we will contribute to society by utilizing renewable energy and supplying automobile parts for the electric vehicles (EVs).

Kiyoshi Takemura

President, Member of the Board of Directors

### **Corporate Profile**

Company Name: SANKO CO., LTD.

Head Office: 959 Hirooka Nomura, Shiojiri city, Nagano, Japan 399-0782 TEL: +81-263-52-2918 Establishment: September 2nd, 1963 Capital: ¥3,779,110,000

Business Content: • Manufacture of pressed products, die and jig

- Manufacture of plastic products and mold
- OA, AV, mechatronic products

Number of Employees: 498 (Consolidated as of March 2022) Stock: Tokyo Stock Exchange, Standard Market (Securities Code: 6964)

### **Our History**

- Sep. 1963 Established in Okaya city, Nagano, and capitalized at 16 million yen under the degree of Sanko Co., Ltd. as a purpose of each precious press die, jig and tooling, precious stamping processing, etc.
- Jul. 1983 Established Horigane Factory where is specializing in automated labor-saving large precision presses in Horigane village, Minami Azumi-gun, Nagano.
- May 1988 Moved Head Office to Shiojiri city, Nagano.
- Aug. 1989 Established Mita Factory for plastic injection molding in Horigane village, Minami Azumi-gun, Nagano.
- Dec. 1999 Listed the standard market of the Tokyo Stock Exchange.
- Oct. 2000 Established Fukuoka Mino Factory for mainly press stamping processing.
- Apr. 2003 All factories acquired ISO9001 certification for 2000.
- Apr. 2004 All factories acquired ISO14001 certification.
- Jul. 2006 Head Office, Head Office Factory, Horigane Factory, Azusagawa Factory, Mita Factory, and Nagoya Sales Office acquired ISO/TS16949 certifications.
- Jan. 2011 Established THAI SANKO CO., LTD. in Ayutthaya, Thailand.
- Sep. 2021 Acquired IATF16949 certifications (Horigane Factory, Mita Factory, Fukuoka Mino Factory, and THAI SANKO).

## **Manufacturing Locations**



[Head Office] 959 Hirooka Nomura, Shiojiri city, Nagano 399-0782 TEL +81-263-52-2918 Manufacture of die and mold



[Horigane Factory] 3558-3 Horigane Mita, Azumino city, Nagano 399-8212 TEL +81-263-72-7273 Press and assembly products



[Mita Factory] 3570-2 Horigane Mita, Azumino city, Nagano 399-8212 TEL +81-263-72-9353 Plastic and assembly products

#### THAI SANKO CO., LTD.

Rojana Industrial Park Zone 2, 488 Moo 4, Tambol U-Thai, Amphur U-thai, Pranakorn Sri Ayutthaya 13210, THAILAND TEL +66-3574-6488 Press, plastic, and assembly products



[Fukuoka Minou Factory] 726-3 Tanushimarumachi Takatori, Kurume city, Fukuoka 839-1202 TEL +81-943-74-7500 Press, plastic, and assembly products



### **Other Locations**

### [Azusagawa Warehouse]

4131 Azusagawa Yamato, Matsumoto city, Nagano 390-1701 TEL +81-263-78-4818

#### [Anjo Sales Office]

Nishikimi Building 6th Floor, 2-11-7 Mikawa-Anjo Honmachi, Anjo, Aichi 446-0059 TEL +81-566-74-8476

## **Management Policy for SDGs Achievement**

We are aware that global conservation is one of our business missions, and remain in harmony with global society, always striving for "environmentally-friendly manufacturing". We will contribute to a recycling-oriented society under the international philosophy of "sustainable development".

## Approach to Environment and ISO and IATF Certified

### IATF16949







- Oct. 1994
- ISO 9001 certified (press die) Apr. 2001
  - ISO 14001 certified (whole factory)
- May 2003 ISO 9001 certified (whole factory)
- Oct. 2008 ISO 9001/ISO 14001 integration (whole factory) Sep. 2021
- IATF 16949 certified (whole factory)

### Characteristics

SANKO builds great trustful relationships as a partner in the position of cooperated development with our customers. We carry out concept designs, drawing of plans, reliability assessment, manufacturing tooling, and mass production and support our clients in any processes.

## **Tooling Technology**

Our tooling technology developed over half a century. We promise the best products using the most appreciate tooling with rich achievements and ideas.

### Press

Press products in Sanko are very diverse not only in cutting and bending of general processing but also drawing and cold forging.

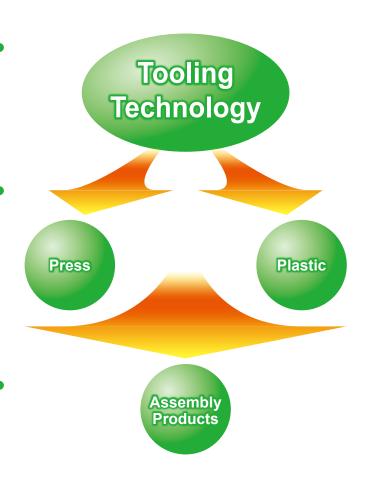
Moreover, we can carry out stable production from small to large lot products with great equipment capacity and production technology.

### Plastic

Of course, we produce single parts, even manufacture composite products combined with press products of our company. We can make our customer business efficient and the cost of quality management deducted. It is possible to procure parts for particularly composite products.

## **Assembly Products**

All processes are consistently conducted from unit developments to assemblies in our company. We provide our customers with excellent products in response to their needs.



## **Tooling Technology**

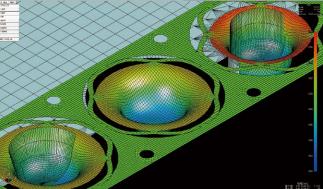
Equipment NameProduct Name



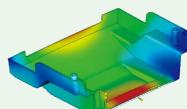
Machining Center (5-Axis)







• Press Forming Simulation (JSTAMP, LS-DYNA)





Plastic Flow Analysis System

### SANKO's Tooling Technology

- Our proud tooling technology for press and plastic has a history of half a century.
- The designing tooling support with the newest press forming simulation. The prototype reduction and the best material removal are realized in response to the complicated drawing shapes.
- We equip numerical control machining. Our engineers' experience and creative originality make high-precision tooling in a short delivery time possible.

Plastic Mold

## **Press Products**



Progressive Presses Line with Conveying Robot

Robot Welder

- Automotive Safety Parts

Automotive Mounting Brackets









Automotive Electrical Parts

Busbars



### **Press Products**

- We have various press equipment and response from the small products of a degree of several millimeters to the large products.
- It is possible to carry out drawing processing, cold processing, and other assembly products. We can be flexible about VEVA.
- In the case of assembly products combined with press and plastic products, we assure high quality with unified management.

## **Plastic Products**

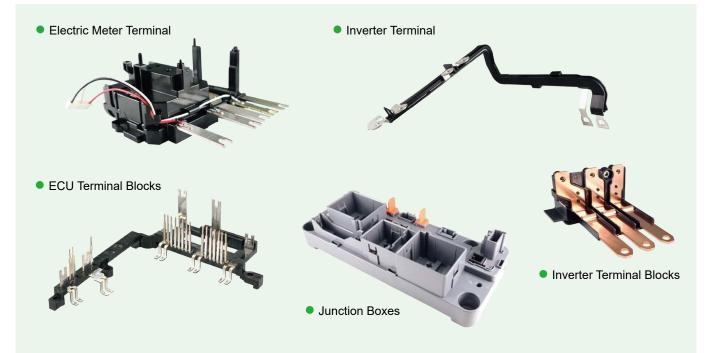




Electric Horizontal Molding Machine



Articulated Robot



### **Insert Molding Products**

Our company challenges various specific kinds of assembly products with the cooperation of our press section. In addition, thanks to the unique processing techniques, we pursue high-added-value products.

### Proposal of the Best Method

We confirm customer requirements and propose the best way of mass production. We consider the best method to match their needs from various way inserts molding, assembly molding, and press-fitting fusion.



Battery Modules

Equipment Name
Product Name

## **Assembly Products**



Assembly Line with Cooperative Robots and Humans



- We strongly support our customers' development from concept designs and drawings of plans to drawing details and experiment assignments to realize shortened development terms.
- We advise positive technology and pursue cost and productivity in the initial stage of design. In addition, we supply high-added-value products with high quality and competitive products.
- We conduct the simulation with a structural analysis system and ensure the quality from the start of the drawing of the plan. Moreover, we actualize the cost and the time reduction by reducing the number of test production.



Slide Mechanical Units



## Expansion of Business Overseas for the Next Generation

In 2011, our company established a new factory in Ayutthaya, Thailand where lots of Japanese corporations have expanded business operations.

We supply high precision and high quality products at a competitive price and inherit the craftsmanship in JAPAN SANKO to THAI SANKO.



Servo Press Machine (300t)



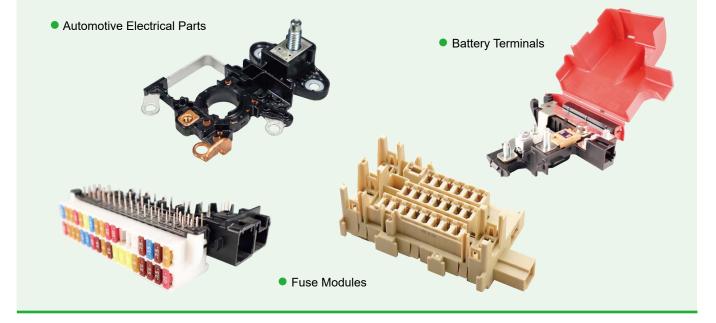
 Hydrocarbon Washing Equipment



 Injection Molding Machine (180t)



 Vertical Injection Molding Machine (100t)



## Main Equipment

## Press Die and Plastic Mold Manufacturing Equipment • Technical Department

Machine name	Maker name	Remarks	Number of units
CAD/CAM	C&G Systems		27
Structure analysis	Ansys		1
Press forming analysis	JSOL		1
Flow analysis system	Autodesk, SOLID WORKS		2
Wire-cut electrical discharge machine	Mitsubishi electric, Sodick		12
Wire-cut electrical discharge machine with pallet changer	MAKINO		4
Engraving electric discharge machine	Sodick, MAKINO		2
Machining Center	YASUDA, DMG Mori Seiki		4
Machining center with pallet changer	Mitsui Seiki, DMG Mori Seiki		3
Hydraulic surface grinder	Nagase, Kuroda Precision, Okamoto		7
Forming grinder	Okamoto, Nikko Kikai, Kuroda Precision		10
Carbide tooling grinder	Tsugami		1
Trial progressive presses machine	AIDA	80t-250t	7
Trial Single presses machine	AIDA, Komatsu	40t-150t	16
Optical type noncontact 3D measuring machine	OGP, Mitutoyo		2
Contact type 3D measuring machine	Mitutoyo		3
Measuring Microscope	Nikon		3
3D scanner	Keyence		1

### Mass Production Equipment for Press Products

#### Horigane Factory

Machine name	Maker name	Remarks	Number of units
Progressive presses machine	AIDA, Yamada Dobby	35t-300t	34
Single presses machine	AIDA, Manufactured by own company	45t-200t	28
Stamping press lines with conveying robots	AIDA, Komatsu, AMADA PRESS SYSTEM	80t ×5machines 80t ×8machines (2 lines) 150t +100t =11machines 150t +110t=8machines	5 lines
Transfer press	AIDA	200t-300t	4
Washing machine (hydrocarbon system cleaning equipment)	KAIJO, TSUKADA		2
Washing machine (type of net conveyor)	S-tec		1
Multi-axis tapper	Manufactured by own company		21
Riveting machine	Shouku Seiki, Brother		28
Spot welder	Daihen, Chuo Seisakujo, Panasonic		14
Robot welder	Yasukawa Electric Corporation		1
YAG laser welder	AMADA WELD TECH		1
Wire-cut electrical discharge machine	Mitsubishi Electric		2
Forming grinder	Okamoto, Nikko Kikai		7
Hydraulic surface grinder	Nikko Kikai		2
Carbide tooling grinder	Tsugami		1
Optical type noncontact 3D measuring machine	OGP		3
Contact type 3D measuring machine	Mitsutoyo		3
Measuring microscope	Nikon,Mitsutoyo		5
Image measuring machine	Keyence		1

#### Fukuoka Minou Factory

Machine name	Maker name	Remarks	Number of units
Progressive presses machine	AIDA, Komatsu, Yamada Dobby	35t-400t	19
Single presses machine	AIDA, Yamada Dobby	20t, 45t, 60t, 80t, 150t, 200t	12
Stamping press lines with conveying robots	AIDA, Komatsu, AMADA PRESS SYSTEM	110t +80t=6machines 110t ×10machines	2 lines
Transfer press	AMADA PRESS SYSTEM	300t	2
Hydrocarbon washing equipment	Mikuni kougyou		1
Alkaline ionized water washing machine	Takahashi Metal Industries		1
Multi-axis tapper	Manufactured by own company		6
Spot welder	Chuo Seisakusho		6
Robot welder	Yasukawa Electic Corporation		3
Machining Center	MAKINO		1
Wire-cut electrical discharge machine	Mitsubishi Electric	FA30, MV2400R	2

Machine name	Maker name	Remarks	Number of units
Engraving electric discharge machine	Mitsubishi Electric		1
Hydraulic surface grinder	Nagase Integrex		1
Forming grinder	Nikko Kikai, Okamoto, Kuroda Precision		4
Carbide tooling grinder	Tsugami		1
Optical type noncontact 3D measuring machine	OGP		2
Measuring microscope	Nikon		2
Small-spring testing machine	Aikoh Engineering		1
Noncontact 3D measuring machine	Mitutoyo		1
NC milling machine	MAKINO		1
Small-hole electric discharge machine	Sodick		1

### Mass Production Equipment for Plastic Products • Mita Factory

Machine name	Maker name	Remarks	Number of units
Electromotive injection molding machine	FANUC, Sumitomo Heavy Industries, Sodick, TOYO	15t, 30t, 50t, 60t, 75t, 100t, 150t, 180t, 280t, 300t, 450t	47
Hydraulic molding machine	Sumitomo Heavy Industries, Japan Steel Works	100t, 350t	4
Vertical injection molding machine	Japan Steel Works, Sodick	100t, 150t	7
NC Milling Machine	MAKINO		1
Forming grinder	Nikko Kikai		1
CNC image measurement system	Nikon, Mitutoyo		2
Contact type 3D measuring machine	TOKYO SEIMITSU, Mitutoyo		2
Measuring microscope	Mitutoyo		1
Gear mesh tester (JGMA)	Osaka Seimitsu		1
Gear measuring machine (JIS)	Osaka Seimitsu		1
X-ray tomography devise	RF		1

#### Fukuoka Minou Factory

Machine name	Maker name	Remarks	Number of units
Electromotive injection molding machine	TOYO, FANUC, Sumitomo Heavy Industries, Japan Steel Works	18t, 30t, 50t, 100t, 150t, 180t	12
Hybrid injection molding machine	Sodick	40t	1
Gloss meter	KONIKA MINOLTA	GM-60PLUS typed	1
Spectrum colorimeter	KONIKA MINOLTA	GM-600 d	1

### THAI SANKO CO., LTD.

Machine name	Maker name	Remarks	Number of units
CAD/CAM	C&G Systems		2
Hydraulic surface grinder	Okamoto		1
Forming grinder	Nikko Kikai		2
Carbide tooling grinder	Tugami		1
Wire-cut electrical discharge machine	MAKINO		1
Progressive presses machine	AIDA, Komatsu	80t, 110t, 150t, 150t servo, 160t, 200t servo, 300t servo	16
Single presses machine	AIDA, Komatsu	35t, 45t, 60t, 80t, 110t, 110t servo, 150t servo	13
Stamping press lines with conveying robots	AIDA, AMADA PRESS SYSTEM	80t×5, 250t servo×5	2lines
Hydrocarbon washing equipment	CLEANVY		1
Multi-axis tapper	TOYOSK, Manufactured by own company		7
Barrel finishing machine	IMAHASHI		1
Heat treatment furnace	YMP		1
Spot welder	Daihen, AMADA WELD TECH		7
YAG laser welder	AMADA WELD TECH		2
Electromotive injection molding machine	Japan Steel Works, TOYO, FANUC	50t, 100t, 180t, 280t, 350t	11
Vertical injection molding machine	Japan Steel Works	75t, 100t	3
Riveting machine	Brother		18
Optical type noncontact 3D measuring machine	OGP		1
Contact type 3D measuring machine	Mitutoyo		2
Measuring microscope	Mitutoyo		1