

Company Information

NITTOKU CO., LTD.
NITTOKU CA., LTD.



Profile

NITTOKU

Establishment September 28, 1972

Stated Capital 6,884,928,042 yen

Representative President (CEO) : Sumito Sasazawa

Employee Approximately 500 (Consolidated: approximately 1,180)

Principal Office 2-292-1, Azuma-cho, Omiya-ku, Saitama City, Saitama

Factory Fukushima Factory (winding machine development, production)

Nagasaki Factory (FA development, production)

Shenzhen Factory

(winding machine, peripheral equipment production, service)

Suzhou Factory

(winding machine, peripheral equipment production)

European Factory

(winding machine, peripheral equipment production)

NITTOKU SINGAPORE PTE. LTD.

NITTOKU (THAILAND) CO., LTD.

NITTOKU ENGINEERING VIETNAM CO., LTD.

NITTOKU PHILIPPINES, INC.

Business Details Development, manufacturing and sale of automatic winding

machines and parts.

Management Philosophy

From a global point of view

Give shape to customer's expectations

Provide cutting-edge technology

Contribute to society through innovation

Action Guidelines

Concentration and distribution

Challenge towards worthy creation

Despite its small structure,
NITTOKU is a reputed brand name world wide

Quality Policy

Value added creation for complete customer satisfaction

Increase customer satisfaction through value

Continuous organization and management improvement

Transparent management policy

Environment Policy

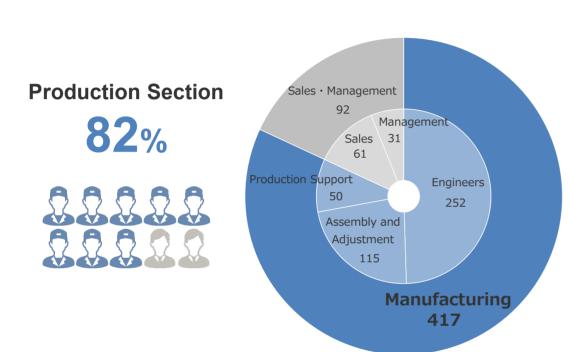
Committed to promoting a recycling-oriented society and coexistence with the global environment.



Employees (non-consolidated)

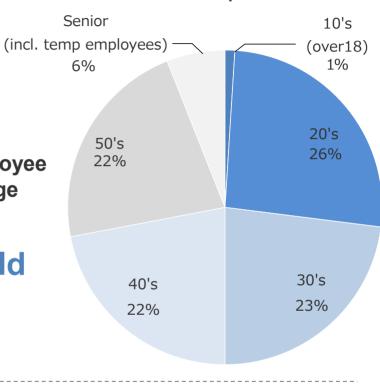
NITTOKU





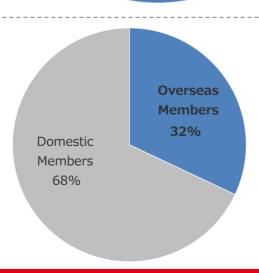
Regular employee
Average age

38
years old



Overseas members (Consolidated)

32%



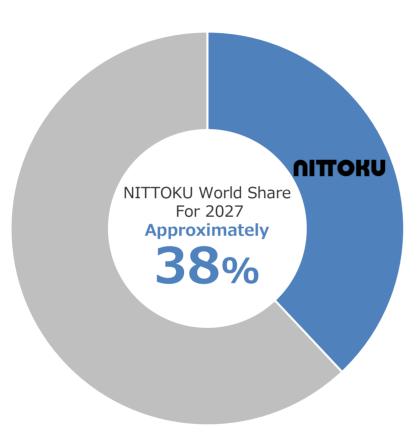




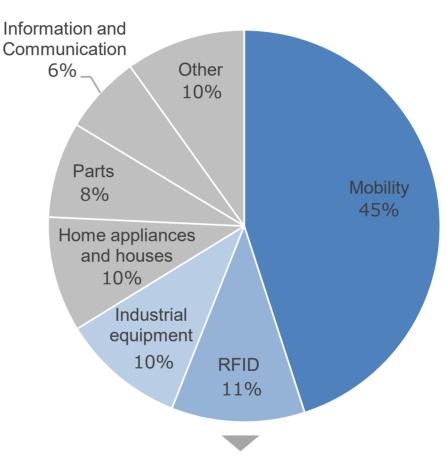


Winding System Industry

Sales by Industry



Selected as "100 global niche company selection" by Japan's Ministry of Economy, Trade and Industry. (2014 and 2020 for two consecutive years) Selected as "The Driving Company for the regional future" by Japan's Ministry of Economy, Trade and Industry. (2017 years)



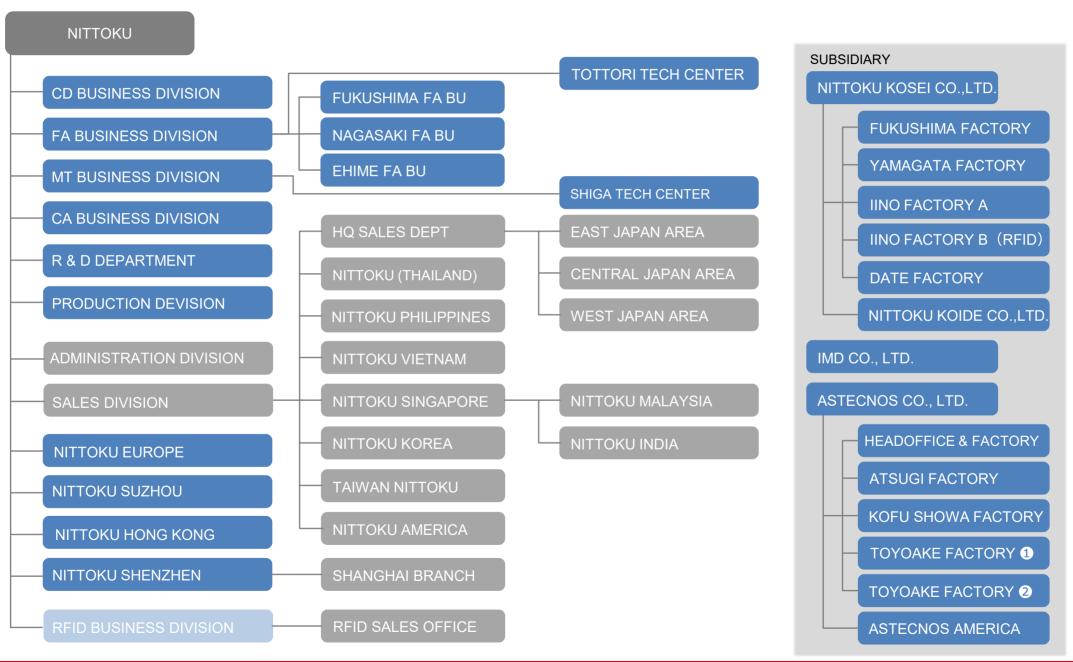
Machine sales of automotive components were strong.

(Coil, main engine / auxiliary motor, battery, assembling machine)



Organization of NITTOKU

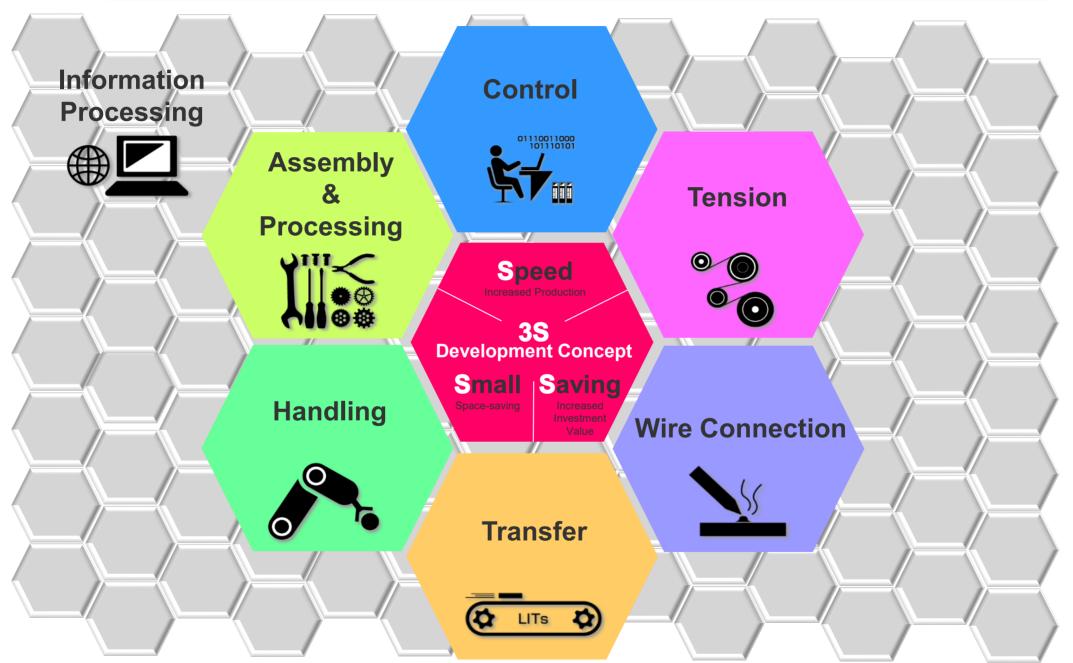






Core Competencies

NITTOKU









Assembly & Processing Technology Improvement of machine accuracy and durability

➤ Solid Casting

> Fabrication

Solid Casting by 5-face machining

- Excellent accuracy and maintainability
- > Superior rigidity

NITTOKU recommends solid casting for customer product quality stability.

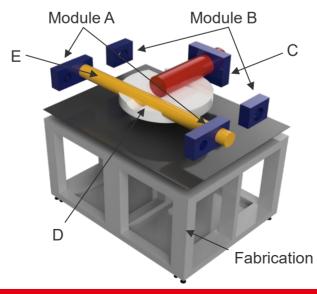
- > Solid Construction
- 5-face machining equipment

- > Compound structure
- Combination of steel and aluminum modules and fabrication



Compound machining







5-axis machining center



NITTOKU



Control Technology

- ➤ High speed winding
- ➤ Multi-axis synchronous control
- ➤ Self-developed perfect layer winding software



Information processing Tech

IoT (real time) M2M (connect)

- ➤ Production management system
- > Remote operation management
- > Predictive maintenance

Complex machine operation can be easily undertaken using our multi-axis synchronous controller.

Software developed in-house.

Achieve optimal process operation.

Original program support software

Visualization of manufacturing process.

IoT and M2M allow for production management and quality control.

The **NITTOKU CENTRAL SYSTEM** is an original production management system which provides vital monitoring information such as operational performance, productivity, quality trends and traceability.

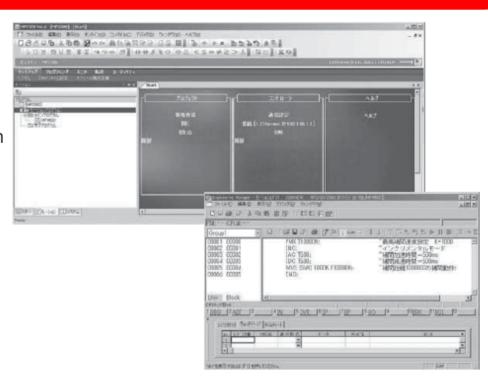




Confirm Production Production and Quality
Status Charts

1a2b3...

Serial No. Search





Tension Technology



Maintain high product quality High machine productivity

- ➤ Extra fine wire applicable
- ➤ Tension Variability Function

Stable Tension

Tension Copper

: Min. 0.5 g ~

Winding speed : Max. 50m/sec

Non Copper

Tension

: Min. 0.3 g ~

Winding speed : Max. 33m/sec

Film

Tension

· Min 15N/300mm

Winding speed : Max. 10m/sec

Material

- > Aluminum Copper
- > SUS ➤ Steel
- > Formed (Film, Fibers)
- ➤ Gold, Platinum, etc.

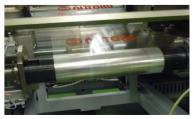
Material shape

- ➤ Round Wire ➤ Square Wire
- ➤ Stranded Wire ➤ Edgewise
- > Flat Wire (Ribbon Wire), etc.

Feed method Tension device









NITTOKU



Wire Connection Technology

Accurate Stripping and Connection

- ➤ Lead-free applicable
- ➤ Minute material applicable

Optimal bonding / Stripping methods

Solder

- ➤ Dip
- ≻lron
- ➤ Sleeve
- ➤ Wave
- ➤ Laser

Welding

- > Fusing
- ➤ Micro-arc
- > TIG
- > Thermo-compression
- ➤ Laser
- > USW

Stripping

- ➤ Diamond Chip
- ➤ Laser
- ➤ Polishing (grindstone)
- ➤ Heat

Glue Application

➤ Micro Dispensing

Highly accurate minute dispensing Synchronized operation and dispensing control











Transfer Technology

High-speed and high-accuracy

> Flexible line construction

Only-one line concept

Transfer Systems

- > Free flow method
- > Index method
- ➤ Linear motor Method
- > LITs shuttle method

FA Base System

- > LITs method
- ➤ Vacuum LITs transfer
- ➤ FLEX-1 method





Handling Technology



- > Various workpiece applicable
- ➤ Multi-axis pitch conversion
- ➤ Sensing > Alignment

JET Handler

> N-JET with AOI (2 or 6 sides)

Parts Feeder

- > Supplies minute and uniquely shaped parts
- > Solid bowl design made from optimal material

High-speed Loader

➤ High-speed transfer of 0.6sec is realized using servo control/CAM.

Gripping

➤ Industry smallest electric gripper (ultra-fine wire applications)

High-speed CAM Top Mounted SCARA Robot











Winding Machines and Systems

From miniature coils to specialized motors.

Coil type and size vary depending on the use and product.

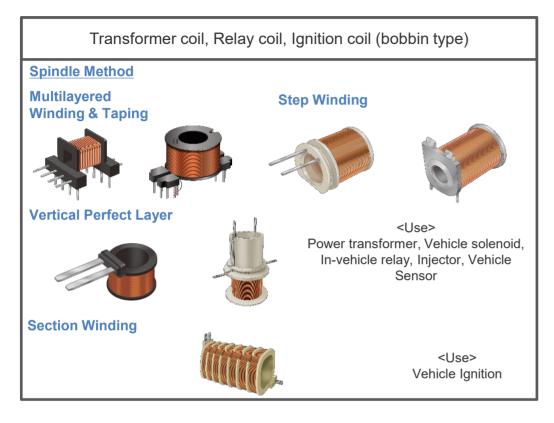
We have long and varied expertise in the coil winding sector at NITTOKU.



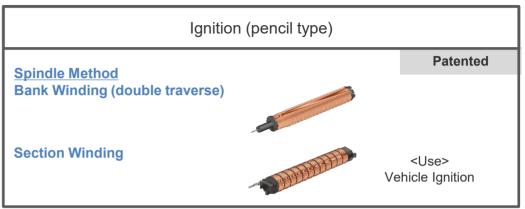


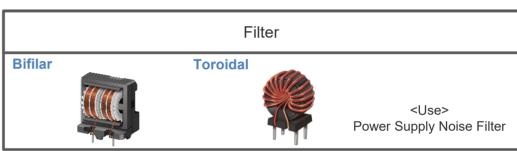
Bobbin Winding Methods 1

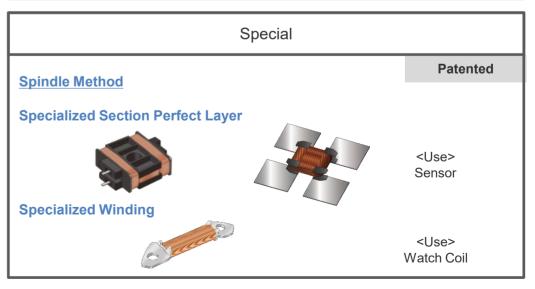
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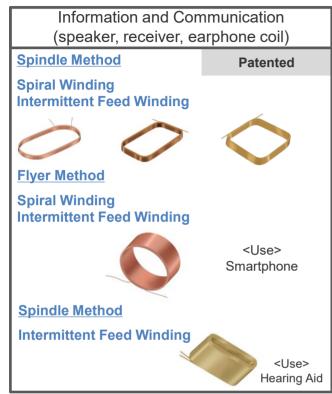


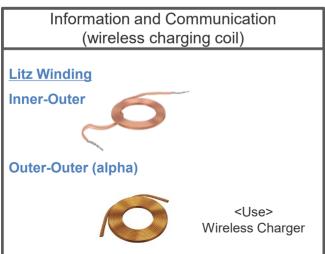


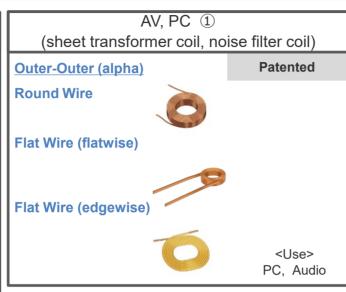


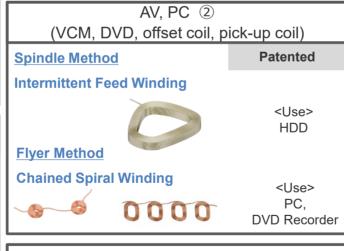
Bobbinless Winding Methods (2)

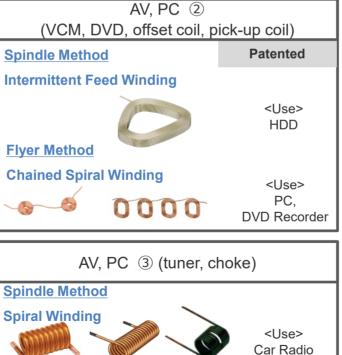
NITTOKU

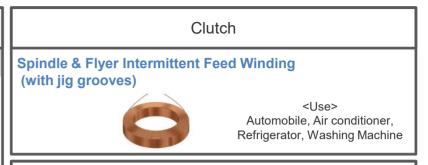




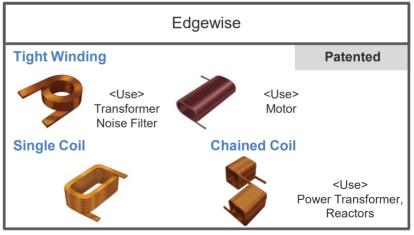










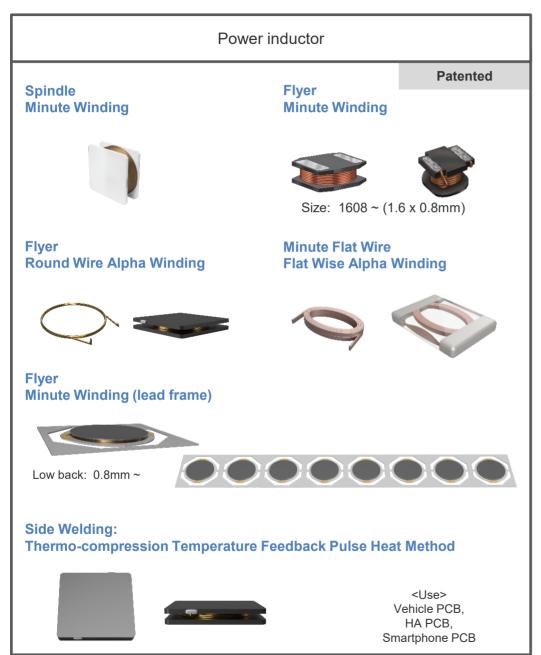


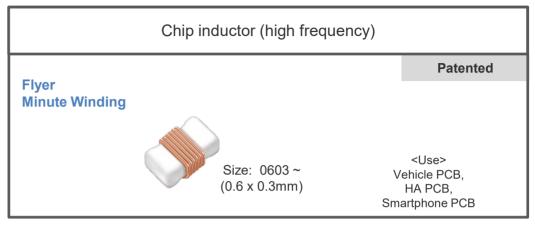


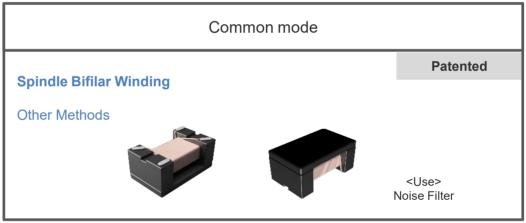


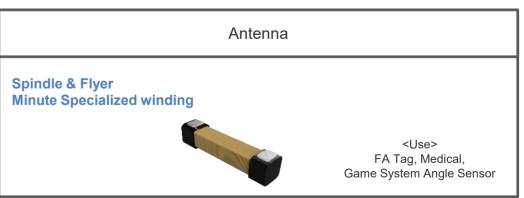
Chip Winding and Wire Connection







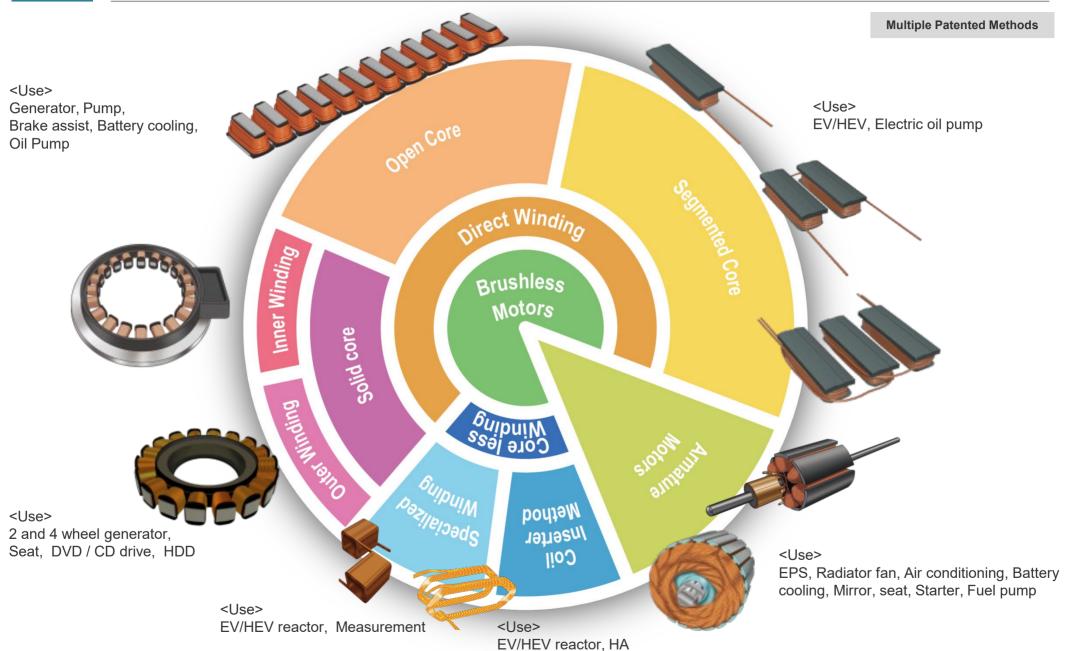






Motor Winding Methods







Next generation EV motor





Wire Handling System



RtoR

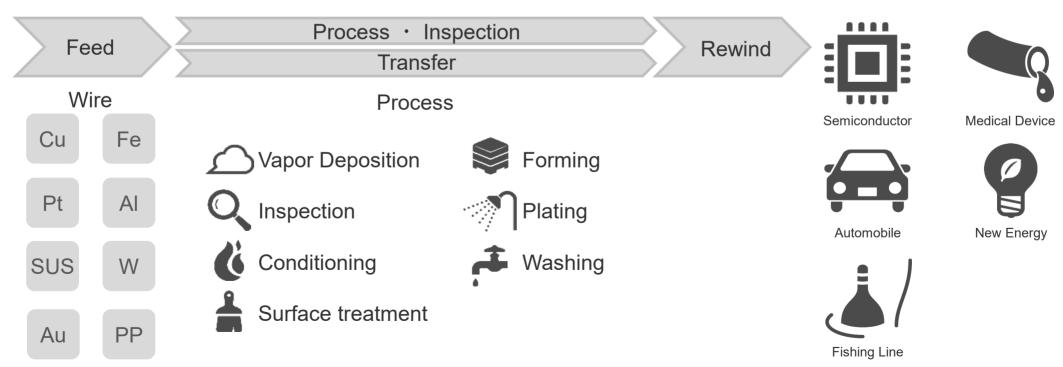
Conveys material wound off of a reel at optimal tension and speed. Precisely rewinds material after intermediate processing.

Low Tension Tension 0.3 g



Extra-fine
Wire Dia. 5µm









R₂R

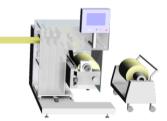
Conveys material wound off of a roll at optimal tension and speed. Precisely rewinds material after intermediate processing.

Low Tension

Tension 1.5N / 300mm

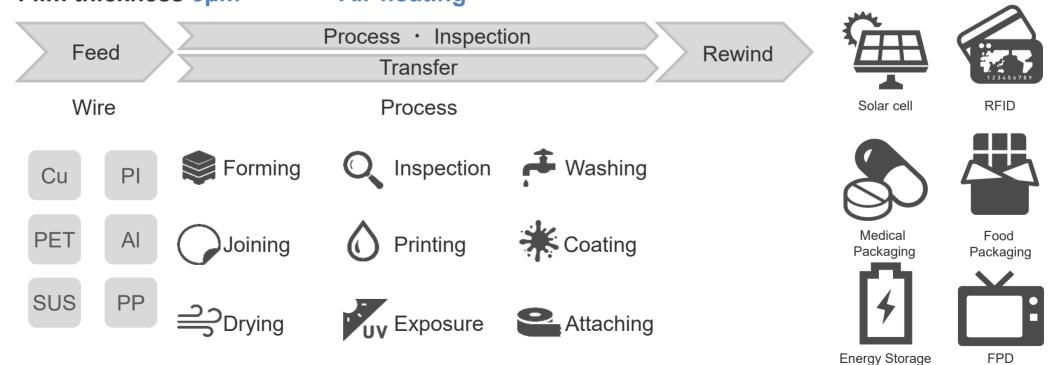
High-speed Speed 10m/sec





Ultra-thin Film thickness 3µm

Non-contact Air floating



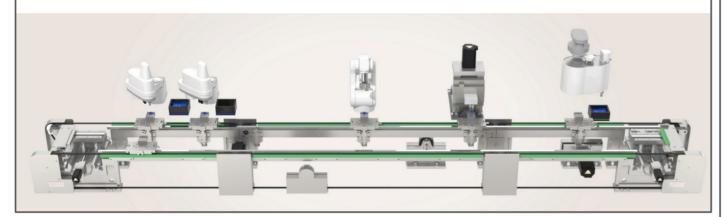


Lineup of FA-based LITs

NITTOKU

Horizontal circulating transport

Ideal for precision machining of small and minute parts and long distance highspeed transfer!



Vertical circulating transport

Connector cables, etc. Perfect for processing long work-pieces!



Suction type circulating carrier

Ideal for appearance inspection and assembly of minute parts!

Ceiling type



Shuttle transfer

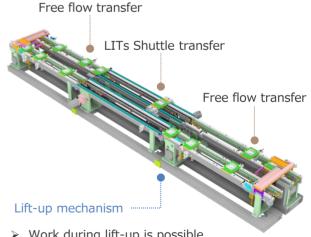
Ideal for processes with different cycle times!



FLITs transfer

Ideal for multi-product production lines where you want to simultaneously produce products with different specifications.

It is a hybrid transportation system combining free flow transportation with flexible pallet arrangement and LITs shuttle transportation with high-speed positioning.

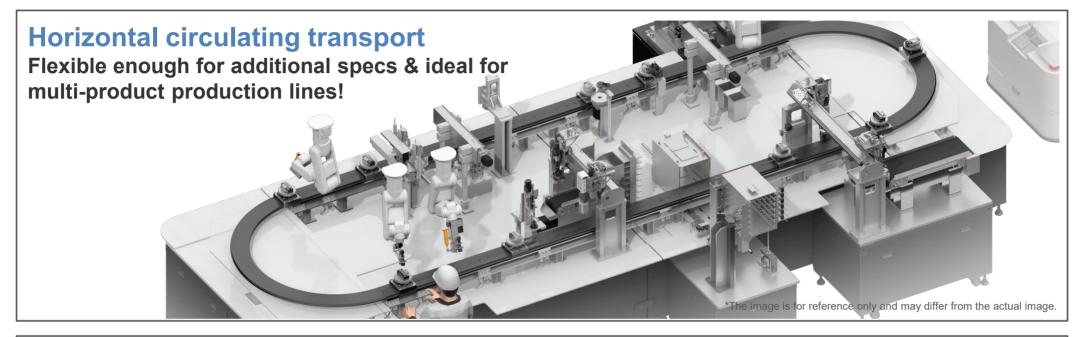


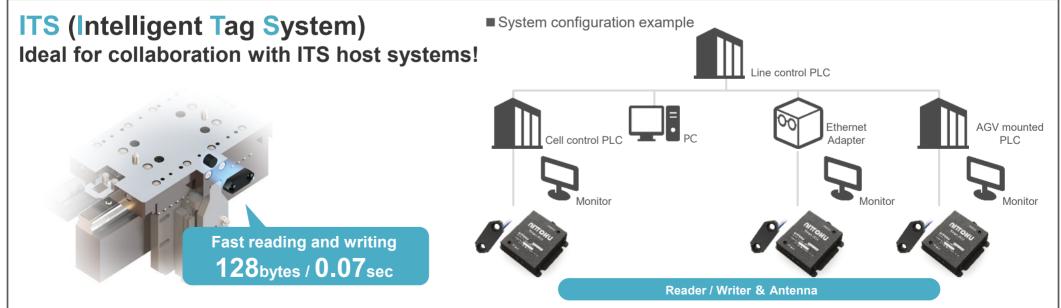
- > Work during lift-up is possible.
- > This reduces waiting time.
- > It can be used for various variable lines.



FA-based system FLEX-1 and LITs

ΠΙΤΙΟΚΟ







RFID (IC Tag and IC Card) Business

We propose a high performance RFID unit by winding antenna construction method.

Antenna for IC Card Inlet IC Card ➤ Rewrite Card IC Tag ➤ Seal Tag ➤ Laminated Tag ➤ Molded Tag ➤ Metal Compatible Tag







NITTOKU Module Components



Use NITTOKU equipment modules to help solve customer problems.



Handling Module



Transfer Module



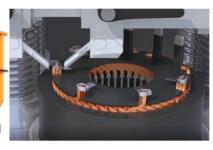
Additive Module













Vision Module



Information Gathering Module



BCP Measures





Antenna









Customer Service



Reliable NITTOKU Service



Close to Customer

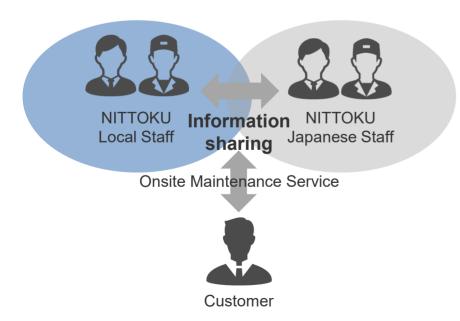


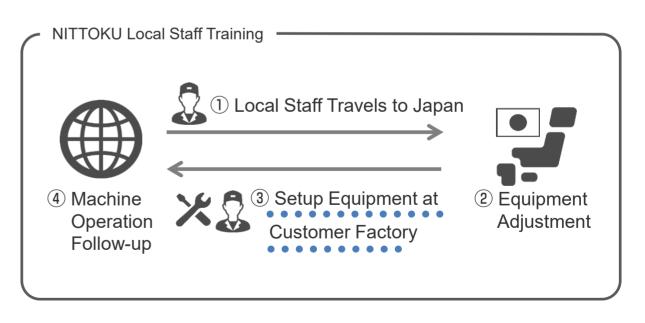


Quick Response

NITTOKU manages remaining amounts of approved components to ensure [Continuous Production]

After Service

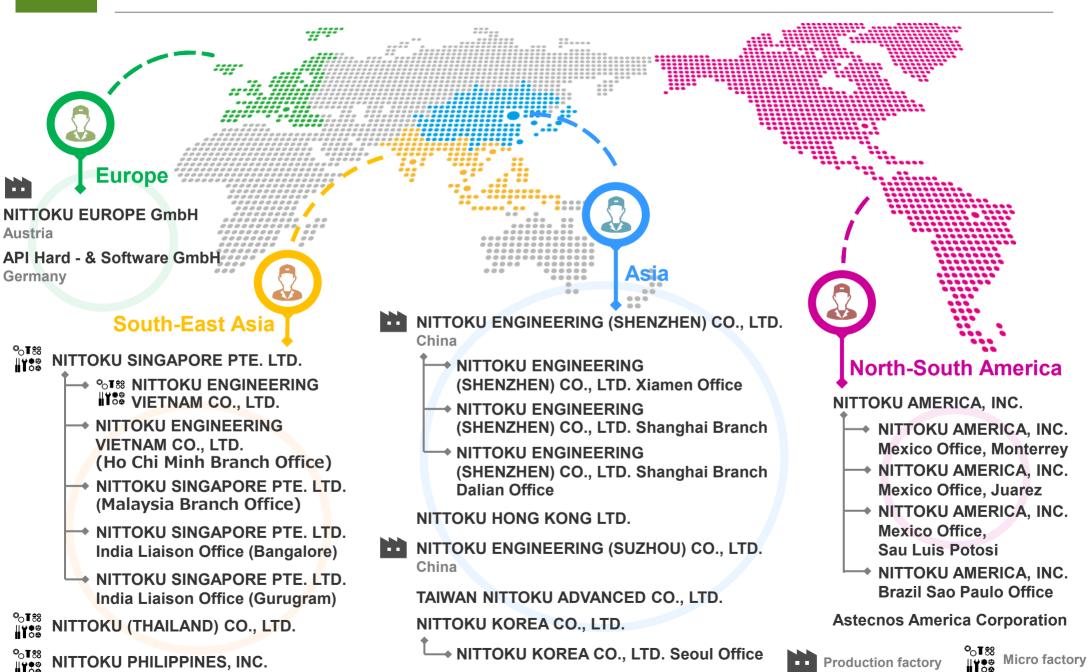






Global Network







Overseas Sales & Service Branches

NITTOKU

Asia / South-East Asia

- NITTOKU ENGINEERING (SHENZHEN) CO., LTD. 101, Building 1, Jia'an Science And Technology Park, No.2 Longchang Road, Block 67, Xingdong Community, Xin'an, Bao'an District, Shenzhen, 518000, China Tel +86 755-8602-8043
- NITTOKU ENGINEERING (SHENZHEN) CO., LTD. Xiamen Office No.17-804, Lehai Beili Road, Jimei North Ind. Distr., Xiamen, 361000, China Tel +86 592-6061482
- NITTOKU HONG KONG LTD.
 Unit 1601, 16/F., Peninsula Tower, 538 Castle Peak Road,
 Cheung Sha Wan, Kowloon, 999077, Hong Kong
 Tel +852 2512-2942 Fax +852 2512-2965
- Shanghai Branch
 2501-2502, Building A, No.,319, Xian Xia Rd.,
 Far East International Plaza, Shanghai, 200051, China
 Tel +86 21-6853-5620 Fax +86 21-3882-0642

NITTOKU ENGINEERING (SHENZHEN) CO., LTD.

Dalian Office
 Room 615, New East Mansion, Northeast 4 Rd.
 West Door Of Exempt-Zone, Economic & Technical Dept.
 Zones, Dalian, 116000, China
 Tel +86 411-3920-7956
 Fax +86 411-3920-7956

- NITTOKU ENGINEERING (SUZHOU) CO., LTD. No.3#4# Building, Lianfa Industrial Park, No.199 Tongyuan Rd., Suzhou Industrial Park, Suzhou City, 215006, China Tel +86 512-6271-3258 Fax +86 512-6271-3268
- TAIWAN NITTOKU ADVANCED CO., LTD.
 2F., No.82, Sec.1, Guangfu Rd., Sanchong Dist.,
 New Taipei City 241564, Taiwan (R.O.C.)
 Tel +886 2-2651-9388 Fax +886 2-2651-9389
- NITTOKU KOREA CO., LTD.
 4, Saebyeoksijang-ro 63beon-gil, Sasang-gu, Busan, 46980 Korea
 Tel +82 51-311-2978 Fax +82 51-311-2962
- NITTOKU KOREA CO., LTD. Seoul Office A-1713, GIDC, 43, Iljik-ro, Gwangmyeong-si, Gyeonggi-do, 14353, Korea Tel +82 1020-535-034
- NITTOKU (THAILAND) CO., LTD. 1091/335, Citylink Bldg., 5th Fl., Room 500, Soi Phetchaburi 35, New Phetchaburi Rd., Makkasan, Ratchathewi, Bangkok, 10400, Thailand Tel +66 2-255-5432 Fax +66 2-255-5434
- NITTOKU SINGAPORE PTE. LTD.
 BLK. 1092, Lower Delta Rd., #05, 14/15
 Tiong Bahru Industrial Estate, 169203, Singapore
 Tel +65 6278-3255 Fax +65 6278-0566

- NITTOKU ENGINEERING VIETNAM CO., LTD. Unit 6A, RBF area, No.2, Street BH5, Vietnam Singapore Industrial Park Bac Ninh, Phu Chan Ward, Tu Son city, Bac Ninh province, 222308, Vietnam Tel +84 90-281-6369
- NITTOKU ENGINEERING VIETNAM CO., LTD. (Ho Chi Minh Branch Office)
 F5 SCS building (Sacom-Chip Sang building), Lot T2-4, D1 Road, Hi-Tech Park, Tan Phu Ward, Thu Duc City, Ho Chi Minh City, 70000, Vietnam Tel +84 222-361-1996
- NITTOKU PHILIPPINES, INC.
 124 North Science Avenue, SEPZ, Laguna Technopark,
 Binan City, Laguna, 4024, Philippines
 Tel +63 960-113-7126
- NITTOKU SINGAPORE PTE. LTD.
 (Malaysia Branch Office)
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 46150 Petaling Jaya, Selangor Darul Ehsan, Malaysia
 Tel +60 3-5631-5320 Fax +60 3-5631-5330
- NITTOKU SINGAPORE PTE. LTD.
 India Liaison Office (Bangalore)
 309, Krishna Summit, Above Khazana jewelers,
 Marathahalli Junction, Bangalore, 560037, India
 Tel +91 99-0254-5452
- NITTOKU SINGAPORE PTE. LTD.
 India Liaison Office (Gurugram)
 512A, 5th Floor, Suncity Business Tower,
 Sector-54, Golf Course Road, Gurugram, 122002, India
 Tel +91 96-1169-2748



Overseas Sales & Service Branches

North-South America / Europe

- NITTOKU AMERICA, INC.
 3600 Commerce Drive, Suite 610, Baltimore, MD, 21227, U.S.A.
 Tel +1 410-574-4960 Fax +1 410-574-7083
- ♦ NITTOKU AMERICA, INC. Mexico Office, Monterrey Plaza Eloy 2401 Av. Eloy Cavazos #2401 Local 84, Fraccionamiento Las Villas, Guadalupe, N. L., C. P. 67170 Mexico Tel +52 812-350-7766
- NITTOKU AMERICA, INC. Mexico Office, Juarez Ejercito Nacional 5435 7 Plutarco E Calles Jardin De San Jose, C.P. 32600 Cd. Juarez Chih., Chih., Mexico Tel +52 656-314-7264
- NITTOKU AMERICA, INC. Mexico Office, San Luis Potosi AV. INDUSTRIAS #1620, Local D, ARDINES DEL SUR, SAN LUIS POTOSI, SLP, CP78399, Mexico Tel +52 444-838-0602
- NITTOKU AMERICA, INC. Brazil Sao Paulo Office
 Av. Prof. Carlos Ferreira Lopes, 703, Sala 710,
 Vila Mogilar, Mogi Das Cruzes, Sao Paulo, 087773-490, Brazil
 Tel +55 11-4790-6839
- Astecnos America Corporation
 193 Computrex Drive, Nicholasville, KY 40356, USA
 Tel +1 859-881-3217 Fax +1 859-881-0352

- NITTOKU EUROPE GmbH
 Ebentalerstrasse 140, A-9020 Klagenfurt, Austria
 Tel +43 676-89-70-20-200 Fax +43 676-89-70-20-222
- API Hard & Software GmbH
 Am Weichselgarten 26 91058 Erlangen Bayern, Germany
 Tel +49 9131-92-399-20 Fax +49 9131-92-399-21



Domestic Sales and Service Branches



NITTOKU CO., LTD.

Head Office, Tokyo Sales Office Saitama-shi, Saitama

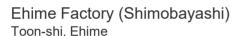


Fukushima Factory, Fukushima Sales Office Fukushima-shi, Fukushima

Nagoya Satellite Nagoya-shi, Aichi

Osaka Sales Office Osaka-shi. Osaka

Nagasaki Factory Omura-shi, Nagasaki





Tottori Technical Center Tottori-shi, Tottori

Shiga Technical Center Kusatsu-shi, Shiga





Yamagata Factory, Yamagata Sales Office Higashitagawa-gun, Yamagata

lino Factory Fukushima-shi, Fukushima

Date Factory Date-shi, Fukushima





IMD CO., LTD.

Head Office Nakatsugawa-shi, Gifu

Astecnos Co., Ltd.



Atsugi Interchange Factory Atsugi-shi, Kanagawa

Kofu Showa Interchange Factory Nakakoma-gun, Yamanashi

Toyoake Interchange Factory No.1,2 Tovoake-shi. Aichi





Production factory



Head office, Domestic offices, Subsidiaries

HEAD OFFICE

Established August, 2019

Personnel 50 people

Size 2,091 m²



NAGASAKI FACTORY

Established April, 2013

Personnel 100 people

Size 6,266 m²



FUKUSHIMA FACTORY

Established December, 1991

Personnel 310 people

Size 20,076 m²



NITTOKU KOSEI CO., LTD.

Established November, 1974

Personnel 100 people

Size 5,916m²

Business details R&D, Manufacturing, Sales, & Service of :

Automated Loading / Unloading M/C,

Electrical Control & Automation Equipment.

NITTOKU KOIDE CO., LTD.

Established January, 1974

Personnel 30 people

Size 1,145m²

Business details R&D, Manufacturing, Sales, & Service of :

Factory Automation M/C





Overseas Facilities

NITTOKU ENGINEERING (SUZHOU) CO.,LTD.

Established July, 2002

Personnel 60 people

Size 9,350 m²



NITTOKU ENGINEERING (SHENZHEN) CO., LTD.

Established June, 2005

Personnel 60 people

Size 2,600 m²



NITTOKU EUROPE GmbH

Established May, 2015

Personnel 150 people

Size 7,200 m²



NITTOKU (THAILAND) CO.,LTD.

Established July, 1996

Personnel 20 people

Size 500 m²

