

Spirits53

Pursuit of our own way

niko
NIKO MANUFACTORY Co.,Ltd.

Certified for Nadcap "Welding" and for
JIS Q9100 Quality management for the aerospace industry

We always fulfill our promises.

Our organization and processes under the strict quality control system being in compliance with applicable standards and being certified to the applicable standards endorse our absolute capability of satisfying your demands, not to mention the high-precision, high-quality processing with high-level requirements for aircraft and marine onboard components.

Total Quality Assurance

From our philosophy of reliability and quality assurance,
we strive to improve the quality of our business to the highest extent.

This high reliability is the result of our extensive knowledge and numerous advanced technologies accumulated over more than 65 years of continuous business, which has led to unqualified praise from our many customers.

Total Quality Assurance is a source of pride for us.

We will continue our unceasing pursuit of Total Quality Assurance for all time.

Leading-edge Welding

On top of MIL and AMS standards, being certified for Nadcap (welding) an international process certification program for the aerospace and defense industries; we practice welding in highest quality meeting the standards applied to aerospace and defense industries.



**TIG, Arc, Argon, YAG, Co2
Spot
Electron beam
Fiber laser**

MIL
Standards
Compliant
Processes

SPOT: MIL-W-6858D
MELT: MIL-STD-1595A other

AMS
Standards
Compliant
Processes

SPOT: AMS-W-6858A
MELT: AMS-STD-1595A other

See page 6 for Welding

Unceasing pursuit of Total Quality Assurance

Niko Manufactory responds to high-level quality requirements in the aviation, space and defense fields through JIS Q 9100 quality management for the aerospace industry. Our personnel in Quality Assurance Department diligently pursue excellence and are certified for QC KENTEI (over 60% of staff).



See page 8 for Quality Assurance



JQA-EM4149
Iwatsuki Plant



JQA-IM1406
Iwatsuki Plant

For other products, including general civilian products, we have established management systems in accordance with the JIS Q 9100 quality standard, ISO 14001 environmental standard, and ISO 27001 information security standard.



Niko Manufactory's Combined Processing

Niko Manufactory's strength lies in its combined processing capabilities, including welding together sheet metal and machined metal products, beyond separated processes such as sheet metal punching, bending, and pressing, or machining processes such as cutting metal blocks. We offer an integrated metal processing service from design through to assembly.

Technological Strengths

In-house integrated machining is possible of a wide range of products from small to large and including product housings. We can address a wide range of market needs regardless of quantity. Services offered extend from design to machining and assembly, and we can also perform special processing such as surface treatment and handle general civilian products as well. We are active in various defense-related industries including aircraft, marine, and land based equipment and can perform electronic warfare and aviation equipment assembly. Based on more than 60 years' experience, we can respond to needs for sheet metal machining, high-precision machining operations, and reliable quality assurance.

Products Handled

For Airplanes

- Airplane onboard parts
 - MIL-STD-1595A certification acquired (melt welding)
 - MIL-W-6858D certification acquired (spot welding)

For Ships

- Radar consoles for ships
- Machined sheet metal parts for ship radar
- Antennas (7 feet to 14 feet) for ships
- Machined sheet metal parts for ship BS antennas
- Equipment parts for naval vessel deployment
- VTS (radar) cases and mechanism parts

Other

- Control boxes, parts, and assemblies of construction vehicles
- Cases, assemblies, and mechanism parts of equipment for bank paperwork
- Cases, parts, and assemblies of controllers for machine tools
- Cases, parts, and assemblies of OA equipment
- Cases and mechanism parts of industrial measuring instruments
- Parts of communication equipment
- Various other cases
- POS
- Deep drawing (maximum press of 300 tons)
- A variety of precision sheet metal machining
- Precision manufacturing by machine tool

Combined Processing

Design

Design relating to sheet metal, machining, pressing, and assembly

2D/3D CAD: CATIA V5, solid works, sheet works, PTC Creo, other

Precision sheet metal machining

| | |
|-----------------|--|
| Punching | NC turret punch press (up to 3,050×1,525 mm) and laser machining tool (up to 3,070×1,550×100 mm), SUS 304: up to 20 mm |
| Pressing | Pressure (up to 300 t) and ram (1,800×1,200 mm) |
| Bending | Pressure (up to 300 t), length (up to 4,300 mm) and depth (up to 700 mm) |

Precision machining

| | |
|-----------------------------|---|
| Machining Operations | 5-axis machining center (650 dia. ×500 mm, 550×1,000×500 mm, main axis 50–14,000 rpm) Machining center (1,500×780×750 mm) |
|-----------------------------|---|

Welding

Special machining (certification for welding aircraft parts has been obtained from a number of certifying bodies)

| | |
|---------------------|---|
| Spot welding | MIL-W-6858D, AMS-W-6858A, AWS-D17.2/D17.2M:2013 |
| Melt welding | MIL-STD-1595, AMS-STD-1595A, other |

Surface treatment

| | | |
|-----------------------|----------------|---|
| Heat treatment | Coating | Coating (baking, powder, electrodeposition, and others) |
| Plating | | Special Processing (MIL-C-55 41, AMS-QQ-P-35, and others) |

Assembly

| | | |
|----------------------|------------------------------|---|
| Machine parts | Electronic components | Extensive experience with general civilian components, electronic warfare equipment and aviation equipment assembly |
|----------------------|------------------------------|---|

Quality Assurance

| | | |
|---------------------------|--------------------------|-----------------|
| Dimensions | Surface treatment | Exterior |
| Materials analysis | Radioscopy | Circuits |
| Other | | |

Precision sheet metal machining

Wide range of machines feasible long size material even of 4,000 mm

Sheet Metal Machining Equipment

- Integrated NC turret punch press and fiber laser machine
- Integrated NC turret punch
- Fiber laser processing apparatuses
- Press
- Robot bender
- Bender

Machining Materials Handled

- Hot rolled steel sheet SPHC, SPHD, SPHE
- Cold rolled steel sheet SPCC, SPCE, SPDC
- Galvanized sheet iron SPG
- Colored galvanized sheet iron SCG
- Electro galvanized steel sheet SECC, SEHC, SEHD
- Lightweight shaped sheet for general construction SSC

- Stainless steel sheet SUS
- Cold rolled silicon steel sheet S
- Tough pitch steel sheet TCuP
- Brass sheet BsP
- Nickel silver sheet NSP
- Aluminum AxxxxP
- Permalloy PC, PB
- Titanium Ti-6Al-4V, Other

Punching



Bending



Pressing



Precision machining

State-of-the-art machining for any metal

Precision machining Equipment

- 5-axis vertical machining center
- Turning center
- Machining center
- 5-axis machining center
- Wire cutting machine

Machining not limited by material

- Aluminum alloys
- Stainless steel
- Titanium alloys
- Magnesium alloys, Other



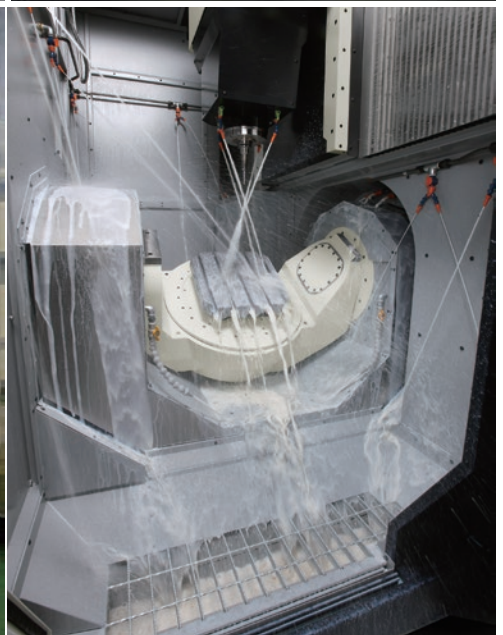
Multiple-Surface/Simultaneous 5-axis Machining Center [VARIAXIS i-800T] (Mazak)



Wire cutting machine[AQ537L] (Sodick)



5-axis vertical machining center [D500] (MAKINO)



5-axis machining center[MAM72-63V] (Matsuura)



Machining center [V.Plus-1500] (Matsuura)



Turning center [INTEGREX i-200] (Mazak)

Welding

Sophisticated technology satisfying the requirements for aircraft welding

Welding Equipment

- Electron beam machining tool (Vacuum furnace welding)
- Fiber laser welding machine (6-axis poly-articulated robot)
- YAG laser welding machine
- Co2 welding machine
- TIG laser welding machine
- Arc welding machine
- Argon welding machine, other

Approved standards

- Spot welding machine
 - MIL-W-6858D
 - AMS-W-6858A
 - AWS-D17.2/D17.2M:2013
 - MIL-STD-1595A
 - AMS-STD-1595A, Other

Tig, Arc, Argon, YAG, Co2



Processes compliant with AMS and MIL Standards

| Specialty Process | | Applicable Standards | Categories (Type, Class) | Number of Certified Workers |
|----------------------|------------------------------|--------------------------------|---|---------------------------------|
| Melt welding workers | Aluminum alloy melt welding | MIL-STD-1595A AMS-STD-1595A | TIG welding Group IV, Class B Sheet thickness: 0.67 - 8.0 mm | Number of certified workers : 9 |
| | Stainless steel melt welding | MIL-STD-1595A AMS-STD-1595A | TIG welding Group IIa, Class B Sheet thickness: 0.67 - 8.0 mm | Number of certified workers : 6 |

Spot



Spot welding machines

Processes compliant with AMS and MIL Standards

| Specialty Process | | Applicable Standards | Categories (Type, Class) | Number of Certified Devices |
|-------------------------------------|------------------------------|---|---|---------------------------------|
| Spot welding equipment & processing | Aluminum alloy spot welding | MIL-W-6858D AMS-W-6858A AWS-D17.2/D17.2M:2013 | Group 1, Class B Sheet thickness: 0.8 - 3.2 mm | Number of certified devices : 4 |
| | Iron spot welding | MIL-W-6858D AMS-W-6858A | Group 2, Class B Sheet thickness: 0.8 - 3.2 mm | Number of certified devices : 2 |
| | Stainless steel spot welding | MIL-W-6858D AMS-W-6858A | Group 2, Class B Sheet thickness: 0.8 - 3.2 mm | Number of certified devices : 3 |



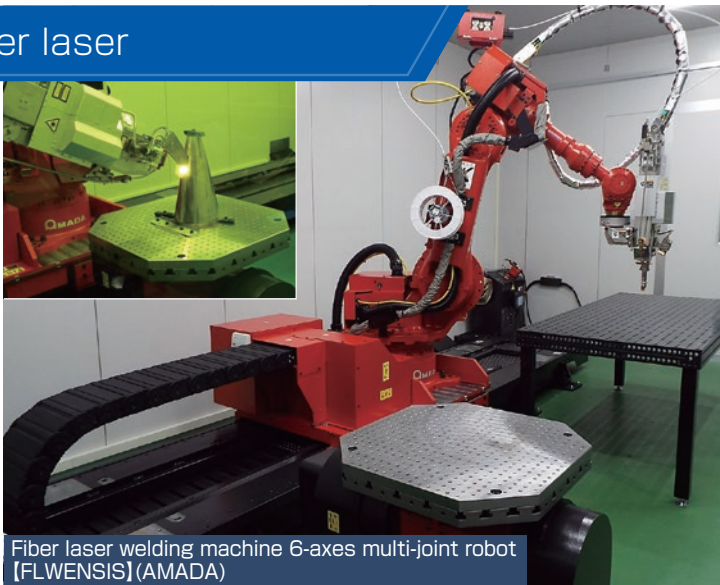
JQA-AS0028
Iwatsuki Plant/Hirata Plant

Electron beam

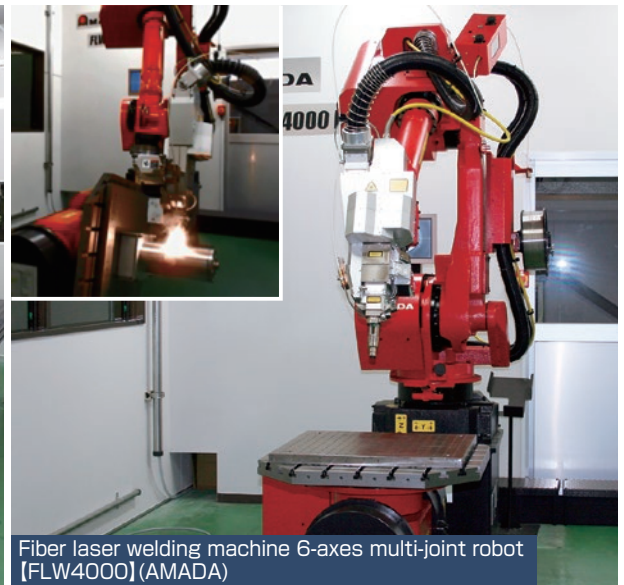


Electron beam machining tool (vacuum furnace welding)

Fiber laser



Fiber laser welding machine 6-axes multi-joint robot [FLWENSIS] (AMADA)



Fiber laser welding machine 6-axes multi-joint robot [FLW4000] (AMADA)

Surface treatment



Blast Machine [Neuma Blaster: SGK-4LDS-401-J899] (Fuji Manufacturing Co., Ltd.)

Degreasing washer for metal parts [DASSY400] (AMADA)



Alkaline Cleaning System



Inspection Equipment

- Coordinate measuring machine
- X-ray fluorescence spectrometer (Component analysis)
- Roundness measuring instrument
- Compression tester
- Blank measuring instrument (infrared red ray)
- X-ray inspection system
- Surface contact resistance measuring instrument
- Digital pressure gauge for leak testing, Other

Measuring Apparatuses



High-sensitivity 3D CNC coordinate measuring machines fitted with non-contact sensors, suitable for use with computer aided verification

Roundness/cylindricity measuring system



Virtek infrared measuring instrument



Three-dimensional coordinate measuring machine

Non-destructive Inspection



Fluorescence Penetrant Inspection System

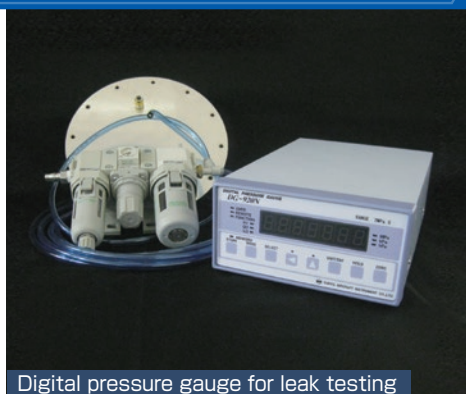


X-ray fluorescence spectrometer



Toshiba X-ray inspection system

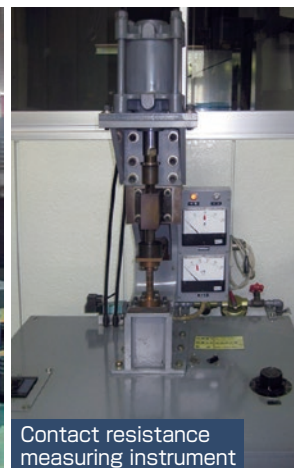
Other Inspection Equipment



Digital pressure gauge for leak testing



Compression tester



Contact resistance measuring instrument

Assembly

Content of assembly

- Extensive experience with general civilian components
- Electronic warfare equipment
- Aviation equipment assembly (Machine parts, Electronic components)



Company Overview

Trade name: NIKO Manufactory Co., Ltd.

Company established: November 20, 1953

Established: July 1, 1955

Business operations:

【Precision sheet metal machining, Press machining, Machining operations, Design, Assembly】
Aerospace Equipment, Defense equipment, Communications equipment, Currency changing machine, Various types of OA equipment, Vending machines, Medical equipment, Precision sheet metal machining such as for ship radar

Locations: 【Headquarters, Iwatsuki Plant】

3-1-1 Funai, Iwatsuki-ku, Saitama City,
Saitama Prefecture, Japan, 339-0042
TEL : 048-797-2000 / FAX : 048-791-7715
E-mail : seahorse@nikoss.co.jp

【Hirata Plant】

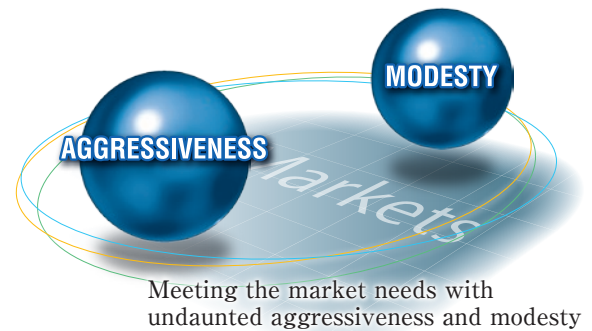
74-3 Okashiwagi Yomogida Shinden, Hirata Village,
Ishikawa-gun, Fukushima Prefecture, Japan, 963-8201
TEL : 0247-55-3266 / FAX : 0247-55-3267
E-mail : hirata@nikoss.co.jp

URL: <http://www.nikoss.co.jp>

Founding principle

We always fulfill
our promises.

Keep a Promise.
Since 1953



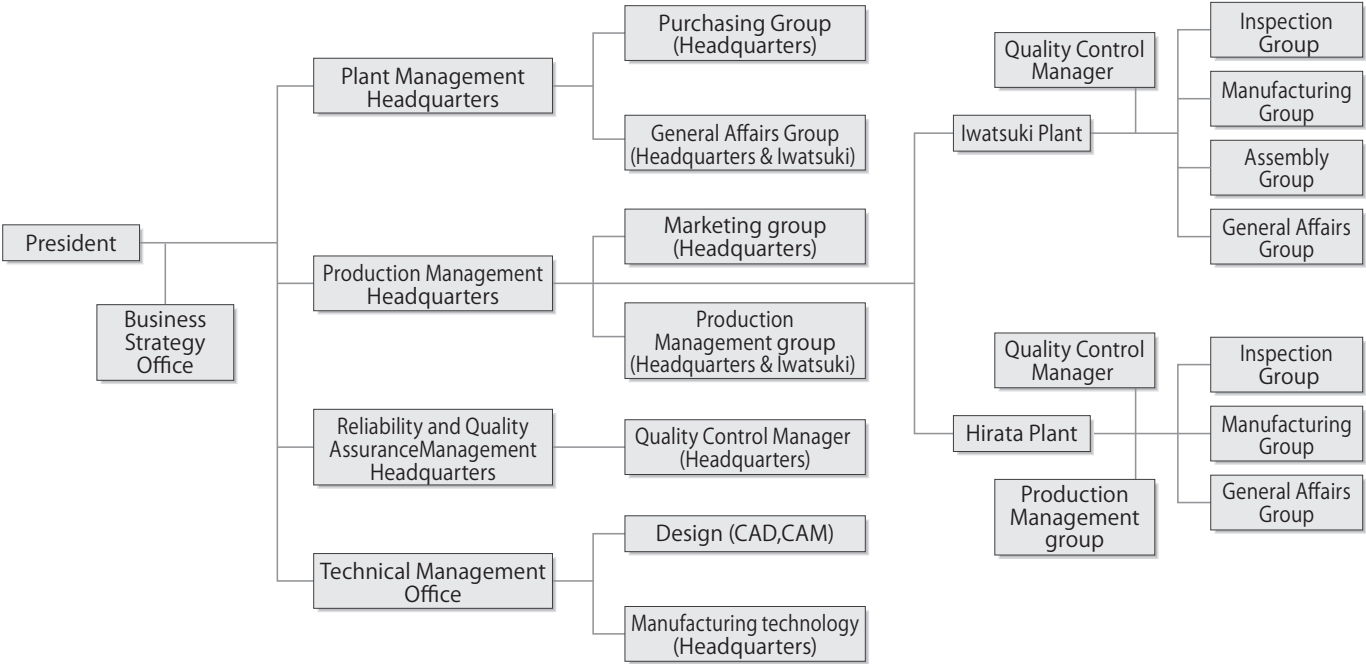
Meeting the market needs with
undaunted aggressiveness and modesty



Iwatsuki Plant (steel frame): 3,242.59 m²
site area : 4,567.78 m²



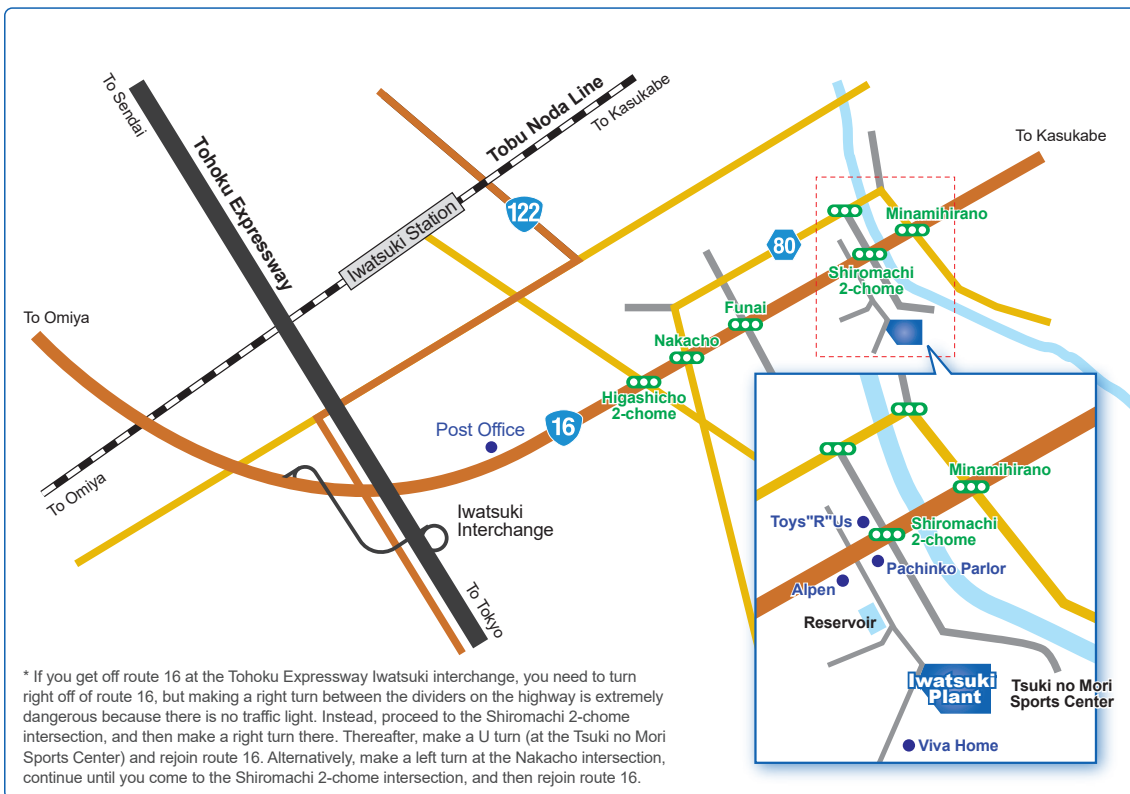
Organizational Diagram



Access to our Plants

●Headquarters, Iwatsuki Plant

3-1-1 Funai, Iwatsuki-ku, Saitama City, Saitama Prefecture, Japan, 339-0042
TEL:048-797-2000



●Hirata Plant

74-3 Okashiwagi Yomogida Shinden, Hirata Village, Ishikawa-gun,
Fukushima Prefecture, Japan, 963-8201
TEL:0247-55-3266

