

Overseas Branch

Name	Kyowa NT (Thailand) Co., Ltd.
Address	1/85, 1/87 Moo 5, Rojana Industrial Park, Rojana Rd., T. Kanharm, A. U-Thai, Ayutthaya 13210 THAILAND (TEL) +66 35-330-431 (FAX) +66 35-330-433
Establishment	March 2013
Capital	62,200,000 THB
Representative	President : Mr. Masaaki Morozumi
Employee	200 Persons
Main Business	Precision machining and finishing by CNC lathe/machining center
Product Line	Automotive parts, electronic parts, aerospace parts and other machining parts in general
Web Site	www.kwnt.co.th



Machine List

CNC Auto Lathe (66 m/c)	B0205-II, 206-III BS20B-V B020F BM165 SR-32J II Type A SR-20J Type C SB-20R/G, /GB SR-10J Type C BL-12V K16, K16E -VIIIP C-16VII A20-VIPL A20-3F7, 3F7C A25-3F7 B20 L25E-2M9	7 TSUGAMI 7 TSUGAMI 4 TSUGAMI 2 TSUGAMI 5 STAR 5 STAR 10 STAR 3 STAR 2 CITIZEN CINCOM 3 CITIZEN CINCOM 1 CITIZEN CINCOM 3 CITIZEN CINCOM 4 CITIZEN CINCOM 5 CITIZEN CINCOM 1 CITIZEN CINCOM 4 CITIZEN CINCOM
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NC Lathe (22 m/c)	X-10i X-10 Hi server GSL-15, 10H QTN-150/500 BND-20S5 TC-200	5 TAKAMAZ 2 TAKAMAZ 10 TAKAMAZ 1 MAZAK 3 MIYANO 1 TAKISAWA
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Machining Center (27 m/c)	Robodrill α-D14MiA Robodrill α-T21iFe Robodrill α-T14iFse EV360T, BE130 TC-S2C-0, S2B-0 TC-S2A R450X1	6 FANUC 4 FANUC 5 FANUC 2 ENSHU 5 BROTHER 1 BROTHER 4 BROTHER
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[Other]		
General Purpose Lathe	TAL-450	1 TAKISAWA
ID Grinding Machine	C220(X)	1 TSUGAMI
Centerless Grinder	MD-450-RT OC-20BR-200	1 MICRON 1 OHMIYA

Centerless Grinder(In-Feed Type)	MEC-450	1 MICRON
Semi Auto Buffing Machine	BUFA-01	1 KYOWA KOGYO
Manual Buffing Machine	TFO-FK(MOTOR)	3 KYOWA KOGYO
Auto Washing Machine	WAA-01	1 KYOWA KOGYO
Hydrocarbon Washing Machine	FVH2-3040CV MVH1-3040	1 CLEANVY 2 CLEANVY
Wire Cut Machine	SP43	1 MAKINO

[Measuring Machines]		
Image Dimension Measuring System	IM Series	2 KEYENCE
Surface and Contour	Surfcom 1910SD3 Series	2 ACCRETECH
Measuring Instrument	Surfcom 5000SD-T	1 ACCRETECH
Roundness and Cylindrical	Rondcom 43C-S	1 ACCRETECH
Profile Measuring Instrument	Rondcom 44SD3	1 ACCRETECH
3D Coordinate Measuring Machine	XYZAX mju NEX-C4	1 TOKYO SEIMITSU
Digital Measuring Microscope	SVP-2010, iMS-2010	3 ARCS
Residual Measuring Machine	DY300, GR-200, UP2	1 YAMATO SCIENTIFIC&D Company Limited
Automatic Measuring Machine	F-1 Tools, TGK	2

Main Customers

JATCO (THAILAND) CO.,LTD.
HITACHI METALS (THAILAND) LTD.
BOSCH DIESEL LTD. (CZ)
NABTESCO AUTOMOTIVE PRODUCTS (THAILAND) CO.,LTD.
NIDEC TOSOK (VIETNAM) CO., LTD.
CKD THAI CORPORATION LTD.
FORTUNE CROSS (THAILAND) CO.,LTD.
LINEX PRECISION (THAILAND) CO.,LTD.
NATIONAL TOOL CO., LTD.
KYOWA KOGYO CO., LTD.



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NATIONAL TOOL
PRECISION · SPEED · CONFIDENCE

Company Information

Name	National Tool Co., Ltd.
Address	11400-238 Tamagawa, Chino-shi, Nagano (TEL)0266-70-1400 (FAX)0266-70-1403

Establishment	October 1987
Capital	40,500,000 Yen
Representative	Managing Director : Mr. Masaaki Morozumi
Employee	100 Persons
Main Business	Special tools and automotive parts

Main Banks	Nagano Bank Hachijuni Bank Japan Finance Corporation Nagano-Ken Shinkumi Bank Shoko Chukin Bank Suwa Shinkin Bank
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Web Site	www.n-tool.co.jp info@n-tool.co.jp
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NATIONAL TOOL
PRECISION · SPEED · CONFIDENCE

Company Profile

**National Tool creates a future
with special tools
and precision machining.**

Surrounded by beautiful nature with Yatsugatake Mountains at close range, National Tool produces and sells special tools and precision parts. In the field of special tools, we have received tremendous trust from many users as we have been responding to users' needs, such as precision, quality, lead time and price, that are increasing strictly through times, by constantly promoting technological advancement and bringing in advanced equipment. In the field of precision machining, we utilize the know-how cultivated through production of special tools to create our own machining process. We also spiral up to the path of further development with two major wheels by feeding back the technologies cultivated through mass production of precision parts as well.

Since established in 1987, National Tool has been producing and selling products with a motto "High precision, fast delivery" as a manufacturer of special cutting tools and precision parts. As a result, we became a proud company which is second to none in these fields. However, when considering further development as a company, it is essential to develop diversified businesses, such as entering into new businesses and developing a business overseas, which is why National Tool is currently promoting to expand business in various industries, mainly in the field of automotive parts.

As we are in the era with the rough wave of changes and users' needs are extremely diverse, by anticipating in these changes flexibly and quickly, we aim to create company's new value by making a proposal from the point of view of our customers. Towards a new era, each of our engineer believes in their possibilities and continues to make further efforts to ensure that customers are satisfied and be able to say that "National Tool has high-precision + fast-delivery" that meet customers' expectations.

Message from the President

Challenging in machining of difficult-to-cut material by keeping absolute quality.

Precision machining is currently a big pillar of our company that made the best use of the know-how cultivated through the creation of special tools. National tool is focusing on aluminum which is indispensable for current parts that are moving towards weight reduction. By developing excellent machining techniques, we built the latest production lines to supply aluminum parts to major automobile manufacturers.

An automobile is a block of high-tech born from cutting-edge technology and high safety is also required. For this reason, all of our products are inspected by highly skilled inspectors. We have absolute confidence in quality and we have been supporting comfortable and safe car society behind the scenes. We also make an effort to produce products from difficult-to-cut materials in various fields by making full use of our know-how.

National Tool will keep exploring its own machining line starting from process design utilizing its own special tools.

Machine List of Machining Section

CNC Auto Lathe	BS-18	29	TSUGAMI	Special Machine for Secondary Operation		1	ORIGINAL
	BS-20	15	TSUGAMI	Precision Centerless Grinder	OC-18BR-200	1	OMIYA MACHINERY
	BS-26	3	TSUGAMI	Infeed Grinding Machine	MD-450	2	MICRON
	BS-32	3	TSUGAMI	Hydrocarbon Vacuum Washing and Drying Machine	TWH3-3040VA2PCV	1	CLEANVY
	MB-38	1	TSUGAMI	Roundness and Cylindrical Profile Measuring Instrument	RA-2100S A	1	MITUTOYO
	MU-38	1	TSUGAMI	Surface Roughness Measuring Instrument	SV3100	1	MITUTOYO
	MB-50	1	TSUGAMI	Contour Measuring Instrument	CV-31000 S4	2	MITUTOYO
	BO 20F	1	TSUGAMI	Microscope	MF-A1730	4	MITUTOYO
	BO 205	7	TSUGAMI	3D Measuring Machine	XM-1500	1	KEYENCE
	SS 207	15	TSUGAMI	Wide-Area 3D Measurement System	VR-5000	1	KEYENCE
	BW209	14	TSUGAMI	Image Measuring Machine	IM-6120	1	KEYENCE
	B0326	2	TSUGAMI		IM-7000	1	KEYENCE
	L-16	3	CITIZEN		IM-8020	1	KEYENCE
	SR20R	2	STAR PRECISION				
	SC20	1	STAR PRECISION				
	SR20J	1	STAR PRECISION				
	SR10J	6	STAR PRECISION				

Main Customers

HIKARI SEIKO CO., LTD. / KYOWA KOGYO CO., LTD. / MIZUNO METAL WORKS CO.,LTD. / NISHINO KIKAI KOGYO CO., LTD.
NIPPON APT CO., LTD. / NIDEC TOSOK CORPORATION / HARIKI SEIKO CO., LTD. / NIPPO VALVE CO., LTD.

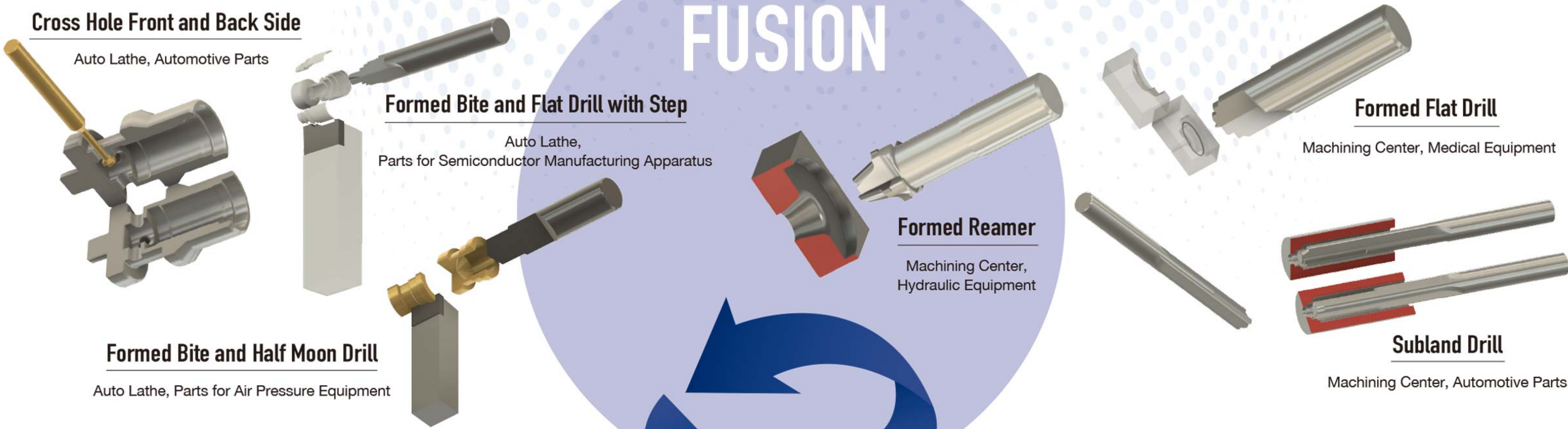
Technology fusion: mass production technology of precision parts and custom-made production technology of special tools.

National Tool was established as manufacturer of custom-made special tools. Afterwards, with a request from a customer to do trial cutting of our cutting tool to check precision, we installed a CNC machine and started delivering tools and machining parts as a set. During the golden days of CD-ROM which required a high precision shafts (lead screws) for picking up the data, these lead screws required very high precision and machining methods were limited as well. However, we managed to create a process that met customer requested precision by making specific special cutting tools with in-house trial cutting and tool tuning, and delivered a set of cutting tools with sample parts to ensure and satisfy our customers. Since then, precision parts grew dramatically, however, our customers started to shift their businesses to automotive industry.

With these circumstances, both special tools and precision machining have grown together as a set in National Tool, but due to the flow of work standardization in recent years, we have separated the production into two divisions.

However, we have consistently been operating based on "cutting/machining" since we started the operation, and we create the fusion of mass production technology of precision parts and custom-made production technology of special tools once again. This integration increases the density of mutual collaboration among engineers and aim to become a "customer's production technology and laboratory factory".

Based on this goal, we installed multi-axis machine including B axis in special tool division in 2016 and have been using it for trial cutting of tools made in the company and recreate customer's machining condition to explore and suggest optimum shapes and establish mass production process. In this changing era, National Tool strives to enter into new industries with the phrase "the fusion of cutting tool manufacturing technology and precision parts mass production technology" that cannot be found in other companies in the same industry.



Test Cut

Trial cut using tool ordered by customer.



Shape Determination by Tool and Machining Condition

Transition to mass production after the quality of workpiece is confirmed.

Skilled techniques and advanced equipment that produces various functions and shapes.

Due to the development of technology, a wide variety of products are made in every field, and the complexity and sophistication of its function and shape still remain to be found. Of course, similar technological innovations are required for machines and tools for making these products and parts.

Since its establishment, National Tool has been adopting technologies and equipment that are always one step ahead of the times in the field of special tools, innovating technology, and delivering tools to meet various needs.

While special tools required to have high precision, they are not mass produced. Each user, even each tool, has different function, shape and size, and its production method and process also differ.

We are proudly providing special tools with high degree of difficulty, as well as precision, by designing each tool from the know-how we have cultivated over the years and using high precision machining technology by skilled technicians.

Machine List of Tool Section

CNC Lathe	ATO-400A	1	TAKIZAWA
NC Milling Machine	B-3V	1	SHIZUOKA
Machining Center	VM4II	1	OKK
Fine Cut Carbide Cutting Machine	N-7	1	HEIWA
10K High Frequency Machine		1	TOROU
Dry Brasting Divice	D10-121	1	FUJISEIKI
CNC Tool Grinding Machine	CNS2	1	MAKINO
	CNV-60	2	MAKINO
	CNJ 2-30	1	MAKINO
Tool Grinding Machine	C-40	3	MAKINO
CNC Universal Cylinder Grinding Machine	S33	1	STUDER
CNC Cylinder Grinding Machine	GE3	1	TOYODA
	RD33	2	MITSUBISHI
	GPS-2050	2	SHIGIYA
Cylinder Grinding Machine	GU3060	1	SHIGIYA
	GU4A	1	TSUGAMI
Surface Grinding Machine	PSG-63DX	1	OKAMOTO
CNC Optical Copy Grinding Machine	GLS-5T	1	WASHINO
	GLS135AS	2	WASHINO
	GLS130AS	1	WASHINO
Universal Grinding Machine	DP-3	1	ITO
Tool Grinding Machine	GE-120S	1	IIDA
Universal Tool Grinding Machine	WS-11	3	EWAG
CNC Combined Machine	INTEGREX j-200	1	MAZAK

Main Customers

AISIN SEIKI CO., LTD.
KITZ CO., LTD.
KVK CORPORATION
CKD CORPORATION
SHIMAZU CORPORATION
JTEKT CORPORATION
DENSO CORPORATION
TOYOTA INDUSTRIES CORPORATION
NIPPO VALVE CO., LTD.
MITSUBISHI MOTORS CORPORATION

