



NAMBU

HYDRAULIC CYLINDERS

FOR DIE CASTING AND PLASTIC MOLD
NAMBU ROTARY JOINT



COMPANY BROCHURE

NAMBU CYLINDERS ARE SERVED EVERYWHERE IN THE WORLD



Motto

We serve to the society by technology.

The Guiding Precepts

We concentrate our energies for developing advanced technology as much as possible and manufacture the best quality products which will be highly evaluated all over the world.

Our products are always creative. And we will never imitate the competitors' products.

It's our profound gratitude to satisfy customers' requirements.

Thinking in mind to develop creative products to be praised in the world such as advancing “Eco products” and “Reuse of cylinders” for reducing environmental load, we have been trying to supply high quality products manufactured by applying the most adequate technology with aiming CS as a subject of highest priority. We should aim to become a “Problem Solution Type Enterprise” and more dependable to customers by offering useful information and technical advice.

Greeting

NAMBU COMPANY LTD. was established in 1955 as the first specialized manufacturer of the hydraulic cylinders in Japan. Since our founding, we have survived up to the present day through a number of changes to our own process. With our products of Hydraulic Cylinders for the Mold Industry and Rotary Joints for the Steel and Heavy Industries in the main, we've developed an array of products to satisfy the various needs of our customers. As a result we have been fortunate enough to receive high evaluations for our quality products.

I have taken the office of the Representative of NAMBU COMPANY LTD. as and from January, 2013. I returned to Head Office from the local subsidiary in Thailand in the spring of 2008. Thereafter, as the director responsible for the sales department, I have gained the experience to coming through the long dark tunnel of the worldwide economic crisis triggered by the Lehman shock. After having passed through the long and oppressive tunnel, we encountered a completely different set of sights/situations such as advancing local procurements in the overseas markets obviously influenced by the continued ultra-strong yen.

I remind myself that such hard experiences gave us the opportunity to view ourselves and to evaluate our justification for existence.

Facing this rapidly changing business environment, it might be considered most practical that feeling always suspicious about our established management policies, we ought to step forward with our proper sensibility, insight, judgment and timely action without denying inconsistent behaviors. Under the prevailing circumstances, it's becoming indispensable for us to gain reasonable shares in the overseas market for our continued survival. When it comes to risk taking, it used to be considered right to take minimal risks, however, it will be required to challenge boldly towards significant growth by taking moderate risks judged depending on the circumstances of each individual case.

As one of the important roles, our head office will be required to consolidate the NAMBU group companies under close communications with each other and overseas business quarters in order to bring synergy into effect from now on.

On the other hand as a manufacturer, we should grow out of such ways of thinking that "Manufacturing products = Machined products" and try to make full use of IT devices so as to improve products and service to be provided. We would aim to become a "Problem Solution Type Enterprise" and be more dependable to customers by offering useful information and technical advice.

It's quite certain that all the staff have the firm conviction to also keep providing serviceable "value" to the customers into the future.

Thank you for thoughtful attention!

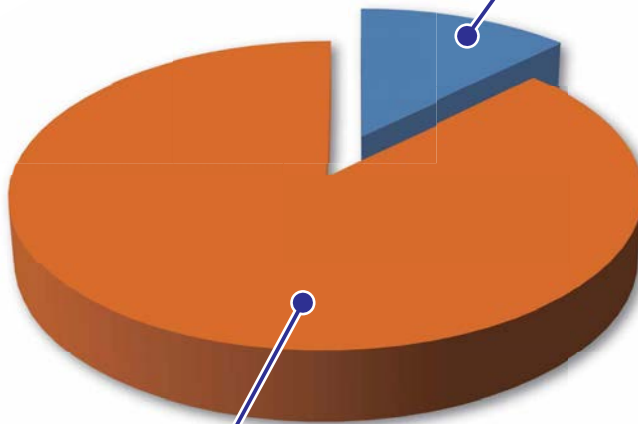
By *Takahide Nomura*, President,
NAMBU CO., LTD.



Main products

Line-up of global niche top products

Breakdown of sales
by industrial fields



Rotary joints / rotary cylinders



Primarily to be used for the heavy
and steel industries
(About 70% share in Asia and USA)

Hydraulic cylinders for
die-casting molds



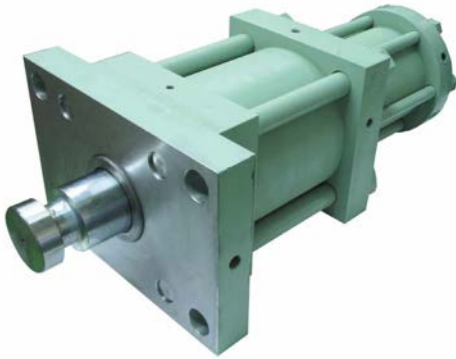
Primarily to be used for the automobile
industry
(70% to 80% share in Japan)



Our products are mainly categorized to “Hydraulic Cylinders” used for manufacturing molds for die-casting products such as engine blocks for automobiles etc. and “Rotary Joints/Cylinders” used for winding steel sheets in the final processing of hot/cold rolling lines. And up to the present day, we’ve satisfied customers’ needs in the manner of small quantity/variety of production system in accordance with specific orders from each customer. Based on long experience and accumulated technology, we’ve obtained a lot of patents in and out. Our products have been well evaluated with high quality and reliability and used by leading automobile manufacturers and steel makers throughout the world with high market shares. Therefore, those have been crucial to the automobile and steel industries as existing like one of powerful supporters from space under the floor.

Hydraulic core puller cylinders for molds

QS cylinders



In processing by die-casting, strong power is required for releasing mold first time in pulling out core. After releasing, strong power is no more necessary. QS cylinder is in double-deck in structure for large diameter and small diameter. At releasing mold, the core will be pulled out by large cylinder and thereafter, small cylinder will be used automatically. This cylinder will much contribute to shorten cycle time.

In case diameter of cylinder is $\phi 200$ with the stroke 200mm, it's possible to save energy by 52% at going forward and 65% at going backward compared with standard cylinders.

Rotary core puller



In the die-casting field, draft is always necessary for cores. On the contrary, since TS model rotates rods for pulling out before release, it has made possible to get core draft to zero degree.

[Distinctive features]

- It's possible to minimize draft of core pins. ("zero" in our record)
- Processed tab of formed products will get much fewer. Accordingly, the secondary processing time will be reduced remarkably.
- Outbreak of porosity on processed surface will decrease to great extent.
- It's effective to make core pins keep longer use.

Rotary joint and rotary cylinder



Based on the accumulated technology fostered over the years, we are confident about achievements for ultra-long life products and related know-how.

In the steel industry, they hate urgent standstill of machines brought by sudden accidents likewise aircraft and railway industries. We are very proud that our products have been used by all of the blast furnace makers in Japan. It's a proof of high reliability on our products. In the overseas countries, lots of our products have been practically used by leading steel makers as well. In this connection, we have been contributing to the development of the steel industry to a certain extent.

Apart from the steel industry, our products have been also used for tunnel boring machine, exhausters on expressways, high power pressing, steel pipe manufacturing equipment for oil drilling rig, roll crown, hydraulic arbors and etc.

We can comply with order made design by applying particular know-how such as plural port circuits, water cooling structure and automatic lubricant circuits. We are much confident of selecting most suitable seals for rotating sections.

Global Network

Our hydraulic cylinders are used all over the world. In order to satisfy customers abroad by providing cordial sale & technical services, we've been trying to strengthen global network as much as possible.



Sales & manufacturing bases

JAPAN

1 Head office



3-14-18 Haginaka, Ota-ku, Tokyo 144-0047, Japan
TEL : +81-3-3742-7377
FAX : +81-3-3745-1021
e-mail : eigyo@nambu-cyl.co.jp

2 Hamamatsu factory



Hamamatsu Factory
3922 Shinpara, Hamakita-ku, Hamamatsu-shi, Shizuoka 434-0003, Japan
TEL : +81-53-584-2751
FAX : +81-53-584-2752

THAILAND

3 Thailand factory



NAMBU CYL (THAILAND) CO., LTD.
700/739 Moo 1, Amata Nakorn Industrial Estate, T.Panthong, A.Panthong, Chonburi 20160 Thailand
TEL : +66-38-447037~39
FAX : +66-38-447040
e-mail : sales@nambu-cyl.co.th

Overseas sales agents & contacts

CHINA & TAIWAN

Please contact to NAMBU CYL (CHANGZHOU) CO., LTD. of our local subsidiary in China shown as ④.

THAILAND

Please contact to NAMBU CYL (THAILAND) CO., LTD. of our local subsidiary in Thailand shown as ③.

⑥ EUROPE

YAMAZEN GMBH
Hedelfinger Strasse 61, 70327
Stuttgart, Germany
TEL : +49-711-90115-0
FAX : +49-711-90115-100

⑦ KOREA

UBE MACHINERY CORP. SEOUL BRANCH
2nd Floor, Koami Bldg., 13-31, Yoido-Dong,
Yongdeungpo-Ku, Seoul, Korea
TEL : +82-2-784-0486
FAX : +82-2-784-0489

⑧ INDIA

YAMAZEN MACHINERY & TOOLS INDIA PVT. LTD.
Flat 8A, 8th Floor, Hansalaya, 15,
Barakhamba Road, New Delhi-1, India
TEL : +91-11-23706046~7
FAX : +91-11-23706059

⑨ MALAYSIA

HANANO (MALAYSIA) SDN. BHD.
Lot 9, Jalan P2/18, Seksyen 2,
Bandar Teknologi Kajang, 43500
Semenyih, Selangor Darul Ehsan,
Malaysia
TEL : +60-3-8723-2882
FAX : +60-3-8723-2992

⑩ INDONESIA

PT. MORESCO INDONESIA
Wisma Nusantara Buiding 6th Fl.
Jl.M.H. Thamrin No.59, Jakarta,
Indonesia
TEL : +62-812-831-52403
FAX : +62-21-390-6459

CHINA

④ China factory



NAMBU CYL. (CHANGZHOU) CO., LTD.
Plant No.5, Zhisi Hi-Tech Industrial Park,
No.18, Feng Ming Road, WIZ, Wujin,
Changzhou, Jiangsu 213166, China
TEL : +86-519-8981-6060
FAX : +86-519-8981-6077
e-mail : sales@nambu-cyl.cn

U.S.A.

⑤ five star Technical Collaboration Agreement



five star hydraulics, inc.
1210 N. Crisman Rd.
Portage, Indiana 46368 U.S.A.
TEL : +1-219-762-1619
FAX : +1-219-762-3938

Head Office & Factory

We have Designing & Development Departments where the staffs make full use of 2D, 3D CAD and FEM for analysis.



Though NAMBU is a SME company, we have capable Designing & Development Departments with abundant line-ups. Many experts of mechanical designing and electronic control take care daily works.

We retain more than 10 patents in Japan and USA.



Workshop in the friendly atmosphere with active communications among different generations from younger workers to experienced members. We have a variety of machines such as from all-purpose ones to new & powerful machine tools and always make most suitable processing.

Lively workshop where woman skilled workers take active parts.



High level processing by skilled workers



All-purpose lathes

New & powerful machine tools are installed



Horizontal type machining center

Hamamatsu factory



Lively workshop where young workers take active parts. They mainly manufacture standardized articles. Setting up the business base in 2009, they try to correspond to the customers promptly and to provide better services.

Thailand factory (NAMBU CYL (Thailand) CO.,LTD.)



In order to comply with the growing demand for two-wheeled and four-wheeled vehicles in the South East Asian markets, we made inroads into the Amata Nakorn Industrial Estate in Thailand in 2002. Later, they moved to OTA TECHNO PARK in 2006. Besides, they moved again to the expanded own factory in 2012.

In the initial stage, they used to manufacture various parts for the Head Office, but now they've become a very important production quarter to cover the markets not only in Thailand but rapidly growing ASEAN/India as well.

China factory (NAMBU CYL.(CHANGZHOU) CO., LTD)



In the latest world automobile industry, the market in China in particular, will be estimated to expand furthermore. It's evident that China has already become a leading country in the world in terms of the annual selling numbers of automobile by exceeding USA. Taking into account of China's remarkable developments in the recent years such as improvement of living conditions/environments backed up by growing middle income groups, their market will be considered very potential also in future.

We, NAMBU are established of a local subsidiary in China in order to manufacture and supply the hydraulic cylinders and peripheral instruments as well as we do in Japan and provide cordial service to the Japanese automobile manufacturers and also, related parts makers, mold makers who have already started operations there.

Summary



Showroom

Company Name NAMBU CO., LTD.
 Address 3-14-18 Haginaka, Ota-ku, Tokyo 144-0047, Japan
 TEL +81-3(3742)7377
 FAX +81-3(3745)1021
 e-mail eigyo@nambu-cyl.co.jp
 URL <http://www.nambu-cyl.co.jp>
 Foundation In August, 1941
 Establishment In December, 1965
 Capital (paid up) 58 million Japanese yen
 Outline of Business 1. Manufacturing and sale of hydraulic core puller cylinders for molds and related parts.
 2. Manufacturing and sale of rotary joints/cylinders for winding steel sheets and peripheral apparatus/parts.
 3. Cylinder related maintenance and overhaul
 Our Banks Mizuho Bank (Kamata Branch)
 Bank of Tokyo-Mitsubishi UFJ (Kamata Branch)
 Sumitomo Mitsui Banking Corporation (Kamata Nishi Branch)
 The Sawayaka Shinkin Bank (Haneda Branch)
 The Shoko Chukin Bank, Ltd. (Omori Branch)

Historical Records

- 1910 Founder Saburo Nomura was born on December 20 as the second son of the Iron Works in Yokohama. (He died at 84)
- 1928 He graduated in the mechanics from Kanagawa Prefectural Mechanical School and entered Mitsubishi Heavy Industries, and was put in charge of various departments concerning military tanks.
- 1934 He joined Rikuo Licensed Harley-Davidson Motorcycle Co., Ltd., and engaged in the designing MILITARY motorcycles with side cars.
- 1941 Nomura Precision Instrument Co., was established in Kawasaki and operated as a factory to supply military demand until the end of the war.
- 1955 He established a company and started business as the first high pressure hydraulic cylinder manufacture in Japan. Based on the experienced technology, he succeeded in the business to supply products to the regular customers such as Toshiba Machinery, IHI, Mitsubishi Heavy Industry and etc.
- 1963 A fire broke out in the own factory in December by which the factory was completely destroyed. Facing such unforeseen accident, he was forced to suspend and close business for some time.
- 1965 Based on the experienced technology and business relations with the first-rate corporations as well as its technical backbones, he became aware of the limitations of being a sub-contractor and started again as NAMBU IRON WORKS LTD. Around that time, inclined pins were used in manufacturing molds for die-casting/plastic products, but the demand arose for Core Puller Cylinders changed from inclined pins. Thus, the company directed to be specialized as a manufacturer of Hydraulic Core Puller Cylinders. Thereafter, meeting with various requirements from the customers, they developed plenty of new products and created NAMBU standard later on.
- 1982 The factory was built at the present place in March.
- 1984 The second factory was built in May.
- 1986 The headquarter buildings and MC factory were built in April.
- 1990 The company name was changed to the present NAMBU CO., LTD. from NAMBU IRON WORKS LTD. The capital was increased to 58million J-yen.
- 2000 Built up organization of 6 factories system from the first to the sixth.
- 2002 NAMBU CYL (THAILAND) CO., LTD. was established in February.
- 2005 Experimental factory started operation in September.
- 2006 NAMBU CYL (THAILAND) CO., LTD. moved to OTA TECHNO PARK in June.
Their capital was increased to 92 million J-Yen.
- 2006 Hamamatsu factory was established in December in Hamamatsu City, Shizuoka Prefecture.
- 2007 Hamamatsu factory moved to Shinpara, Hamakita-ku, Hamamatsu City in August.
- 2009 NAMBU obtained ISO9001:2008 and ISO14001:2004 certifications in April.
- 2009 The business base was set up in Hamamatsu in June.
- 2010 NAMBU CYL (CHANGZHOU) CO., LTD. was established in June.
- 2012 NAMBU CYL (THAILAND) CO., LTD. moved to the expanded own factory in May.

Commendation Records

- 1985 Received MITI Minister's commendation (statistics) in October.
- 1988 Commended by Tokyo Metropolitan Credit Association and Credit Council Union in March.
- 1989 Commended by the Business & Technology News Paper as the distinguished management (Research & Development) in January.
- 1989 Commended by the Governor of Tokyo (Excellent company of consultation) in March.
- 1991 Commended by the Director of the Small and Medium Enterprises Agency (Excellent company of consultation) in March.
- 1993 Appointed by the Small & Medium Enterprises Agency in April to a rationalized model factory among small & medium enterprises.
- 1996 Approved by Ota City to "Excellent" Factory and obtained special recommendation in February.
- 1996 Received Recommended Award in the 7th Ota City's New Products & Technology Contest in February.
- 1996 Received "Grand Prize of Full of Heart Factory".
- 1997 Received the Most Excellent Award in the 8th Ota City's New Products & Technology Contest in February.
- 1998 Received the Most Excellent Prize in the Idea Contest on the Hyper-wheelchairs sponsored by SIT Industry & Academic World Inter-change Association in December.
- 1999 Received the Excellent Award in the 10th Ota City's New Products & Technology Contest in February.
- 2000 Received Recommended Award in the 11th Ota City's New Products & Technology Contest in February.
- 2001 Received Recommended Award in the 12th Ota City's New Products & Technology Contest in February.
- 2005 Received Grand Prize of Recommended Award in the 2nd "Parts Manufacturing" Contest sponsored by Business & Technology News Paper in March.
- 2006 Selected as one of the high-spirited small & medium 300 companies engaged in product manufacturing in April sponsored by the Ministry of Economy, Trade and Industry, Kanto Regional Bureaus of Economy, Trade and Industry.
- 2011 Commended by the Chief of Labor Standard Supervision Office of Ota Ward in December.
- 2012 Received Business Innovation Award in October commended by the chairman of Association of Management Consultants in Japan.
- 2012 Commended by the Superintendent of the Kamata Tax Office as an excellent tax declaration corporation in November.

Our Regular Customers

(in random order)

Toyota Motor Corporation	Sanden Corporation	CHINA STEEL CORPORATION
Honda Motor Co., Ltd.	AISIN SEIKI CO., LTD.	MITSUI MINING & SMELTING CO., LTD.
Nissan Motor Co., Ltd.	HONDA FOUNDRY Co., Ltd.	Ube Industries, Ltd.
Isuzu Motors Limited	Mitsubishi-Hitachi Metals Machinery, Inc.	FANAC LTD.
SUZUKI MOTOR CORPORATION	Honda Engineering Co., Ltd.	DENSO CORPORATION
Daihatsu Motor Co., Ltd.	Japan Machinery Company	TATA STEEL Limited
Mazda Motor Corporation	Toyotsu Machinery Corporation	Arcelor Mittal
Yamaha Motor Co., Ltd.	JFE Steel Corporation	FOXCONN
YAMAHA MARINE CO., LTD.	RYOBI LIMITED	POSCO
SEKISUI MACHINERY CO., LTD.	Shanghai Baosteel Group Corporation	
NIPPON STEEL & SUMITOMO METAL CORPORATION	TOYOTA AUTO BODY CO.,LTD	

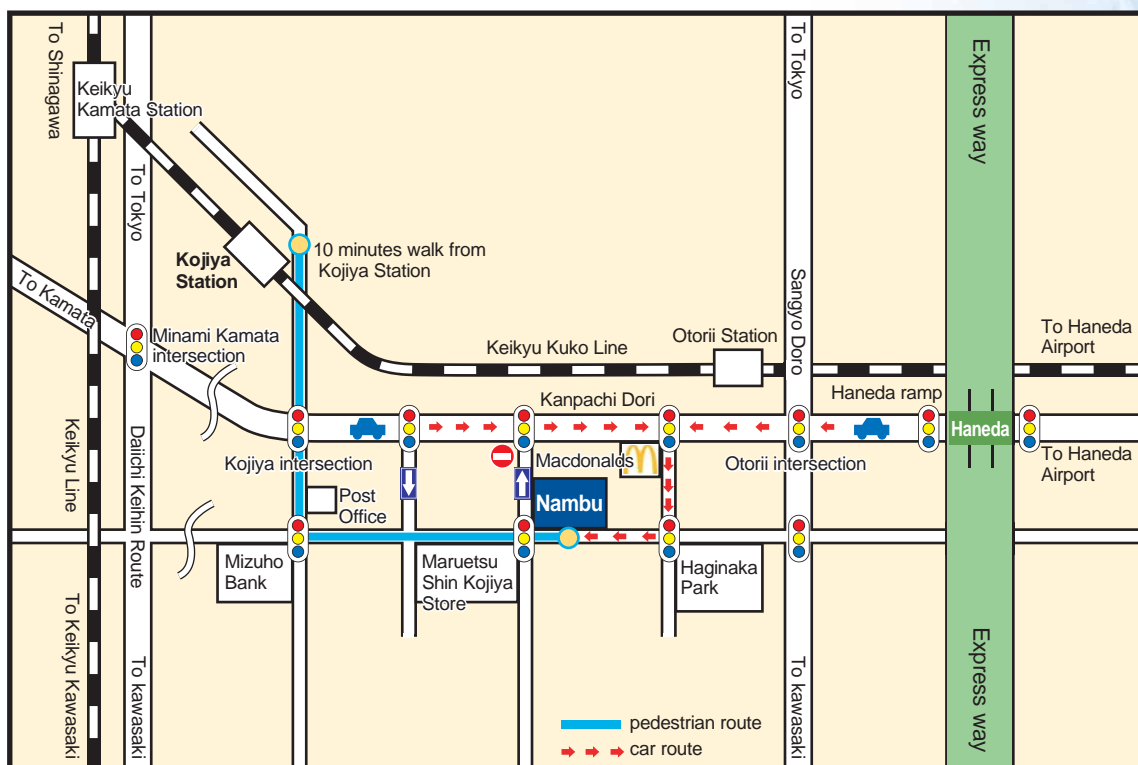
ISO Certification

In order to make our quality of products clear and strong, and at the same time, to get customers' reliability and satisfaction, our Head Office obtained ISO Certification on April 6, 2009 and Hamamatsu Factory did the same on April 7, 2012. Moreover, viewing that consideration of environment and reduction of load for environment must be indispensable to sustain business, we also obtained Certification for Management System in thought as the critical management assignment.



ISO 9001:2008 Certified Head Plant and
ISO 14001:2004 Hamamatsu Factory

Access map to Nambu



In case you visit us by railways

Please get off at Kojiya station of Keikyu's Airport Line and walk for about 10min.

Please note that Keikyu's "Airport Special Express" and "Special Express" don't stop at Kojiya.

In case you visit us by car

Please come along the Haneda Line of the Metropolitan Expressway and get off at Haneda Ramp towards Loop 8 (Kanpachi-dori) bound for Kamata. We welcome you to come over along the above guide map

In case you visit us by truck

In view of the peripheral road conditions, there are some traffic regulations for large-size vehicles. So, please take care with following notes in mind:

- Smaller than 3ton trucks: no problem for access regardless of roads
- As for flat body trucks bigger than 3tons but smaller than 4tons: accessible routes to our company are limited as shown in the guide map.
(4ton trucks with wide, long, swing bodies are not allowed to enter.)
- Trucks larger than 5tons are not allowed to go through by law.