

[Company Profile]

Location	148 Numa Hikami-cho, Tamba City Hyogo Prefecture 669-3634, Japan
Phone	+81-795-82-7111
URL	http://www.meisyo.co.jp/
E-mail	develop@meisyo.co.jp
No. of employees	53
Capital	30 million yen
Established	May 1952 (began operations in September 1940)
Representatives	Chairman & CEO: Kozo Akada President & COO: Toshiki Okamoto

[Business Overview]

We at Meisyo Kiko Co., Ltd. offer a fully-integrated production system that supports our customers from product design/development and manufacture to machine and system control. Our broad range of precision machines and equipment include nanotechnology equipment, research and development (R&D) machines, ultra-high vacuum (UHV) products, equipment for synchrotron radiation, laser, and neutron research studies, semiconductor and LCD panel manufacturing machines, and defense-related products.

[Technology]

Our fully-integrated production approach that spans design and manufacture to machine and system control allows us to respond flexibly to the various needs of our customers. We are one of the leading manufacturers and suppliers of nanoimprint equipment in Japan.

Nanoimprint lithography manufacturing equipment



Our business domain broadly consists of four separate segments of products: equipment used for neutron, synchrotron radiation, and laser research studies; UHV products; nanotechnology equipment; and automated manufacturing machines such as those designed for energy conservation purposes. For the manufacture of each of these products we take a fully-integrated approach, in which we handle every step in the production process ourselves—from design through machine and system control. Although many companies provide only custom-made nanoimprint equipment, we also offer ready-made, standard types of such equipment, which are listed as the main items in our product catalogue; we have long been one of the largest sellers of nanoimprint equipment in Japan.

At our company, we take two approaches in developing and manufacturing equipment, based on the early conceptual ideas we obtain mainly from research organizations and private labs. One approach is turning the needs of our customers into products. The other approach is introducing our original products to the mass market after collaborating with universities and research institutions for the purpose of product development from early research stages. The development of our original nanoimprint equipment, the main reason why we have been selected as a Hyogo “Only-One” Company, is a typical example of the latter approach. In 2002, we began our collaboration with Dr. Shinji Matsui at Himeji Institute of Technology (present-day University of Hyogo) to jointly develop our own standard nanoimprint equipment, and in 2004, we managed to introduce them to the mass market. Since then, based on our standard models, we have also been able to produce a wide variety of custom-made versions by flexibly meeting the various needs of users.

[History of development]

Back then, in 2002, only nanoimprint equipment made by overseas companies were sold in Japan. Thus, with the aim of making these machines popular in our country, we started to develop them jointly with Dr. Shinji Matsui at Himeji Institute of Technology (now University of Hyogo). In June 2002, together with Dr. Matsui, we applied for inclusion in the “Promoting Technology Transfer and Innovation” run by the Japan Science and Technology Agency, and luckily our research proposal was accepted by this program. We took advantage of this aid, put in a lot of intensive work to create a high-quality nanoimprint equipment that users could purchase at a low price, and in the end succeeded in developing such equipment. Following the end of this joint project, in February 2004, we then began selling new types of equipment —thermal nanoimprint equipment for 2- inch wafers.

[Originality]

Since the introduction of our “NM-0401” nanoimprint equipment in 2004, which were the first in Japan to make possible the collective transfer of 2-inch wafers, we have continued to strategically develop nanoimprint products. Since we can utilize a fully-integrated production system that enables us to handle products from design and manufacture to machine and system control, we have been able to respond to many different needs of users. By doing so, we have been able to further expand our nanoimprint equipment lineup with the addition of equipment

that can process chips and wafers ranging from 4-inch to 12-inch diameter and roller-type nanoimprint machines. Today, we provide to the market customized nanoimprint products with various functions and systems (including high-precision step and repeat function, UV system, laser heating technique, fully automated function, and alignment system in vacuum chamber) which respond to different needs of users in terms of specifications and purpose, and the properties and shape of the product to be transferred.

[Future development]

Living in a world of ever-advancing technology, we do not expect that we can survive only with our nanoimprint lineup. Making use of the know-how we have accumulated to date, we have been working hard to develop new equipment that apply the techniques used in our nanoimprint products. We are not going into details about it, but since gasoline engines are about to be replaced by electric motors as the main driving source of the automobile today, we believe that the transformation and reorganization of industries will continue to advance throughout the world. Against this backdrop, we plan to develop products that will possibly be in need in new and emerging industries.

[Corporate History]

- 1940 KOUDENSYA began to manufacture ship radio equipment and electron tube parts at Fukiai-ku, Kobe City
- 1952 The company was officially established
- 1960 Received the “Good Factory” Award from the Director-General of the Small and Medium Enterprise Agency
- 1997 Opened the Kobe Development Center at Kita-ku, Kobe City
- 1998 Participated in the construction of equipment in New-SUBARU Synchrotron Radiation Facility at LASTI, Himeji Institute of Technology
- 1999 Participated in the design and manufacture of the accelerator system at the Hyogo Ion Beam Medical Center
- 2003 Obtained ISO9001:2000 certification
- 2004 Participated in the construction of the amplifier for light source development at the Institute of Laser Engineering, Osaka University
- 2006 Obtained ISO14001:2004 certification
- 2008 Participated in the construction of J-PARC at Japan Atomic Energy Agency
- 2009 Participated in the construction of SACLA at RIKEN (the Institute of Physics and Chemical Research)
- 2017 Certified as a Hyogo “Only-One” Company