

GLOBAL SMT & PACKAGING

The Global Assembly Journal for SMT & Advanced Packaging Professionals



PRESHOW GUIDE

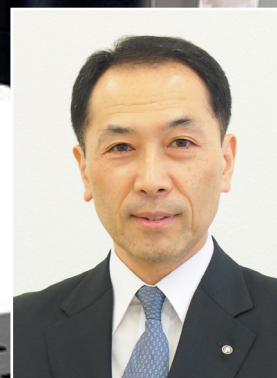
**Progressive
Cavity Pump
Systems**

**Machine
Optimization
Explained**

**Visiting ICSR
Canada 2017
and NEPCON
Thailand 2017**

**Motion Sensors
Partners with Juki**

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Electronic PCB**



**INTERVIEW INSIDE
Tetsuro Nishimura
- President, Nihon
Superior**



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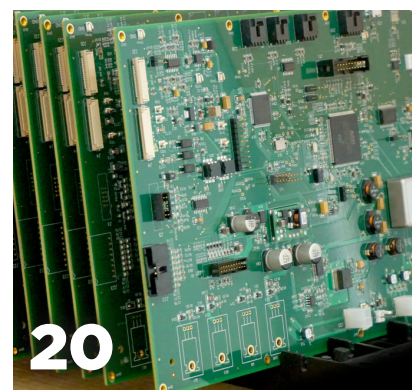
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Nihon Superior Interview with President Tetsuro Nishimura

Nihon Superior Co. Ltd. was founded in 1966 when it began marketing unique flux products imported from the United States. The company made its mark on society by gathering the most advanced soldering and brazing technologies and products from around the world, and supplying them to companies in the metal-joining industry. A turning point for the company came when it started developing its own soldering materials and with the success of its unique SN100C lead-free solder alloy, Nihon Superior has become a major player in the global market. To support the growing demand

for its products, Nihon Superior has established manufacturing and sales centers in Japan, China and other Asian countries as well as the United States, and formed business partnerships with companies in other markets. Our editor recently spoke with Tetsuro Nishimura, President, to gauge the company's thoughts on current and future issues.

First, congratulations Mr. Nishimura - we understand that Nihon Superior recently celebrated an anniversary.

Yes, the company celebrated its 50th anniversary last year. My father, Toshiro Nishimura started Nihon Superior to

import brazing materials for the Japanese market. As the company grew we expanded into soldering materials which is our main focus today. Now, my son, Takatoshi, has joined the company which makes me very proud.

How is the current market in Japan? Where do you see it in five years from now?

Currently, the market for our products is good and has been recovering slowly but steadily since the recession. However, production in Japan is not what it used to be as many of the companies have moved production to

■ LEFT TO RIGHT Takatoshi Nishimura, Toshiro Nishimura and Tetsuro Nishimura.



China and Southeast Asia much like those in the US. It is important to have strategic alliances with the headquarters within Japan for new products and qualifications. Our facilities in China and Malaysia then supply the products which is good for Nihon Superior as a whole. I believe this trend will continue as companies consistently search for low cost.

How important is a global customer base to Nihon Superior? What advantages does this bring customers?

They are absolutely important for us. Globally there are different ways of thinking and different rules, but those new ideas and agendas are great for developing new products. To get new information from our customers and to deliver the latest information to our customers, we now have ten subsidiaries with the latest being a new sales company in Malaysia, Nihon Superior Asia SDN. BHD. (NSA). NSA covers sales from the Philippines to India, including Singapore, Malaysia, and Indonesia. Also, we seek NSA to be the hub base for all sales and technical supports throughout Southeast Asian countries with the connection with our subsidiary in Thailand and office in Vietnam.

What new markets will the company focus on entering? Why these?

We are trying to develop the semiconductor and vehicle markets. We are well known in consumer product markets, especially the home appliance market, and have been expanding the results to other markets little by little. We have developed Alconano nano-silver paste as a lead-free option for the semiconductor market as the customers are looking for new technologies. Cases are coming up constantly and we are always trying to find the best answer for the customer. The results have been good and we have recently expanded our production facility for Alconano. We are also looking into developments to address high reliability requests. I'm very proud of our R&D capability which we have assembled not only in Japan but also our facility in Malaysia.

We are also interested in supporting innovation which we hope turns into new markets. There is an area in

We are trying to develop the semiconductor and vehicle markets. We are well known in consumer product markets, especially the home appliance market, and have been expanding the results to other markets little by little.



■ Tetsuro Nishimura

Tokyo, Akihabara, which is known as the world leader for the development of electrical products and electronics. It is much like Ginza being known for fashion. A facility in Akihabara, "DMM. make" provides entrepreneurs tools to develop and promote their new ideas and products. I'm pleased to say Nihon Superior has partnered with DMM. make to supply soldering products for these new developments.

In order to enter these new markets, will you expand your network of global licensees? How do you decide which companies to bestow with this honor?

We currently have great partners with our network of licensees. Any expansion will be very carefully considered in a positive way, whether it will expand the new market.

Speaking of new products, are you experiencing success with SN100CV products? What prompted the company to create and introduce this platform?

Our customers were asking for cost savings with thermal cycling performance that matches or exceeds that of SAC305. Our solution is SN100CV, a silver-free with Bi solid solution strengthened alloy. SN100CV gains its strength from solute atoms in the tin matrix of the joint while silver containing alloys derive their strength from a dispersion of fine particles of eutectic Ag₃Sn. The advantage that the strengthening mechanism in SN100CV has over that in SAC solders is that while the strengthening effect of the Ag₃Sn deteriorates as the particles coarsen when the joint is subjected to elevated temperature and strain, the effect of solid solution strengthening remains stable over time even when exposed to elevated temperature service.

We are also taking a different approach to promoting our products through Manga which I believe is a solder industry first. This type of cartoon story is very popular in Japan and it appears the rest of the world enjoys it also. The first Manga is explaining our new product SN100CV and its characteristics. We are always looking for new initiatives.

By the end of 2017, what goals do you hope to accomplish for the company?

We would like to strengthen the linkage with our R&D center in Japan and Malaysia to respond to expectations by our customers. Our aim, to expand SN100C and other NS products worldwide, has never changed and will remain unchanged. We are always watching carefully for customer's requests and are thinking hard for what solutions we can give.

Any additional comments?

I would like to congratulate Dr. Iver Anderson of Iowa State University for his induction into the U.S. Patent Hall of Fame in recognition of the development of the SAC alloy. I also want to thank him for the honor of selecting Nihon Superior's SN96CI products based upon his patent for permanent display in the U.S. Patent Museum.

- TREVOR GALBRAITH