

Essay

Report on Residence in Wuxi, China

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1. Introduction

Wuxi KYB Top Absorber Co., Ltd (hereinafter referred to as “KWT”), one of the KYB Group’s production bases in China, is located in Wuxi, Jiangsu Province, China, and mainly manufactures suspensions for motorcycles. I was stationed at KWT for three years and eight months from April 2016 as a technical manager. In this essay, I would like to describe about my efforts to achieve both product development and sales promotion there.

This was the first time for me to be stationed abroad since I was engaged in the development of suspensions for motorcycles, and it has been a very valuable and unparalleled experience for me as an engineer. I hope this essay can provide useful information to young engineers who will open the door to the world.

2. Wuxi Information

Wuxi City is located approx. 130 km northwest of Shanghai, and it takes about 1.5 to 2 hours by car from Shanghai Hongqiao Airport by expressway. The most convenient way to get to Wuxi from Shanghai by train is to take the high-speed train from Shanghai Railway Station or Shanghai Hongqiao Station, which takes about 50 minutes. An express bus service is available to Wuxi from the long-distance bus terminal near the station. I never felt inconvenience in traveling between these cities. When you take a flight from an airport in Japan in the morning, you can arrive at KWT in the afternoon on the same day. The location of KWT is excellent for expatriates.

Wuxi City has an area of 4,788 km² and is the "city of water," with abundant lakes and canals. The Grand Canal, which was initially constructed during the Sui dynasty, runs through the city even today and ships sail gracefully in the canal.

The total population of the city has exceeded six million, which can be compared in scale to a Japanese prefecture with a government ordinance-designated city. Wuxi is also famous for its industry. Many Japan-based companies have built manufacturing plants mainly in the Development Zone with a lot of Japanese expatriates, although I have heard that there has been a trend toward lower number of such expatriates.

The downtown is lined with high-rise buildings and condominiums, forming an urban landscape. People walking in the city were so energetic at that time, making me strongly feel the economic growth of China.

In addition to Standard Chinese or Mandarin, the local people speak Wuxi dialect when they talk with each other. Wuxi dialect may sound quite aggressive to Japanese people. In my early days working as an expatriate in Wuxi, I was astonished by how they were talking every time I heard them, and I thought they were quarreling. Sooner or later I no longer cared about how they talked, saying, "Oh, it has just started again." That might be the time I got used to life in Wuxi.

Another famous topic concerning Wuxi is that it is the home town of "Wu," one of the famous ancient Three Kingdoms in China described in the Romance of the Three Kingdoms. Wuxi had flourished as a tin-producing area in the ages of "Yin" and "Zhou" before Christ. Ancient people aggressively dug out tin for bronze ware until it ran dry. That's why the city was called Wuxi (literally meaning "no tin" in Chinese). The city's famous souvenirs include earthy dolls called "Wuxi clay dolls." Local farmers used to knead mud to create dolls and dry them in a fireplace or sun-cure them before painting. They exchanged the dolls for food to survive. This type of doll can be found everywhere in China, but the Wuxi clay



Photo 1 Wuxi clay dolls

dolls have a history of over 400 years. It is now customary to give Wuxi clay dolls as a souvenir to expatriates who are returning to Japan.

3. Life in Wuxi

A typical Wuxi food I remember is Wuxi spare ribs. These stewed sweet pork ribs, similar to Japanese braised pork belly (kakuni pork), and was my favourite. Another famous Wuxi dish is silver fish (very similar to Japanese icefish) from Taihu Lake. Which is generally sweetly seasoned and therefore suitable for Japanese people who do not like spicy Chinese food.

In China, eating crayfish with a glass of beer with a group of friends in the heat of summer is a regular event. At first, I was hesitant to eat crayfish, but once I took a bite, I could not stop. We would quickly devour a heap of crayfish. The experienced local people can delicately pick meat from the head and claws, but this may be a little bit difficult for the Japanese to master.

In the cold winter months, hot pot is a must. They pour a special soup in a big pot and throw a variety of ingredients into the pot. After simmering for a couple of minutes, they eat it with a dipping sauce and their favorite topping. The

soup includes a good amount of spices and tastes very hot. I frequently had a bad stomachache next day, but I found the hot pot really delicious when I familiarized myself with the taste. I've heard that the number of hot pot restaurants is increasing in Japan these days. I'd like to go there if I have the chance.

The famous liquor in Wuxi is baijiu. Baijiu is an original Chinese white liquor mainly made from grains such as corn, potato, or rice. This strong liquor, having about 50% alcohol, has a unique flavor that goes well with heavy Chinese food and I really liked it, although it might not be good to pair with Japanese food. If you have glasses of baijiu one after another while getting carried away with dancing songs for drinking, you may black out, ending in a difficult situation. It might be better for you to be cautious about baijiu when you try it for the first time.

Talking about food is endless, so I would like to move on to housing. My house was located in a suburban district a little bit away from the Wuxi downtown. Many Japanese lived in and around the district. I enjoyed a good environment: it was safe to live in and a supermarket nearby sold food imported from Japan. There is a restaurant mall called "guang chang" (literally meaning "town square" in Chinese) just a 20-minute walk from my house. I could drop by there after work to have dinner and a drink, and I think it was a blessed environment for a foreign resident businessmen. For your information, the restaurant mall has a "deep" atmosphere where the Japanese might get the feeling of the Showa era, and is very popular to Japanese expatriates in KWT. The mall is very large in scale and might be the area where the highest number of Japanese restaurants are densely packed in China. The mall was also a peaceful place for me because I felt as if I was in Japan and relaxed when I came into the area at times when work wasn't going well. I would like to thank all those who took care of me in the area.

Speaking about transportation in the city, I usually used taxis or local buses at that time. Local buses can take you almost everywhere you want to go if you are familiar with



Photo 2 Crayfish dish



Photo 3 Chinese Hot Pot



Photo 4 Restaurant mall

them, but they may be better used by experienced people because of the complexity of the route map and bus numbering. I recommend those who visit the city for the first time to use a taxi. With a base charge of 10 yuan (equivalent to about 150 Japanese yen) fare at that time, a taxi will take you anywhere you want simply by using body language to show tell the driver where you want to go. Recently smartphone-based taxi booking apps have started to be popularly used there. You may need to have a good command of using such apps.

Electronic banking systems using social network systems (SNSs) had already become popular. Even street vendors post QR codes on their front, and a mobile phone is all that is needed for everyday life. That way of life was so convenient to me as well, but I quickly returned to the way of life carrying a wallet and a coin case since I came back to Japan.

In springtime, Wuxi City is adorned with marvelous cherry blossoms. The locals say that it is one of the three most famous cherry blossom viewing spots in the world, but strangely no one can tell you where the other two were. What is different from the Japanese-style viewing of the cherry blossoms is the wonderful nighttime cherry blossoms lit up with illumination. It was a very Chinese presentation. Japanese may have the impression it is somewhat over the top, but it was really fantastic and remarkable to actually see the lit-up cherry blossoms at night. Please visit and give it a try if you have an opportunity.

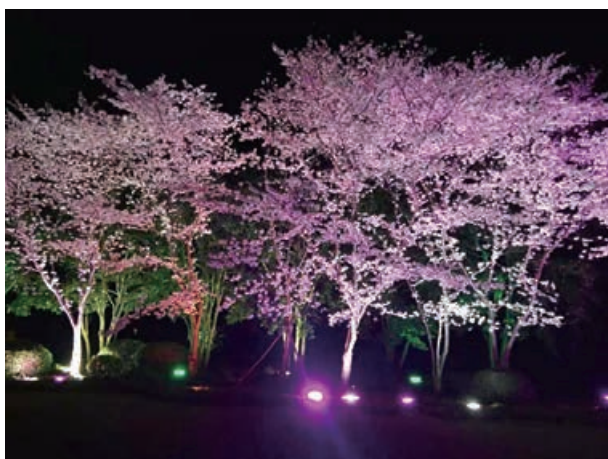


Photo 5 Night cherry blossoms in Wuxi

4. Motorcycles in China

When hearing the word China, the first to come to mind for Japanese people may typically be the numerous bicycles flooding streets in Beijing. This is not the case nowadays. In the coastal regions of China, motorcycle riding is prohibited in order to comply with environmental control regulations. Electric scooters have instead become popular as a means of transport for citizens, flooding the roads. A variety of electric scooters from various

manufacturers are available, ranging from those of a maximum speed of around 40 km/h to high-performance vehicles with a maximum speed of not less than 80 km/h. Reasonable models are sold in supermarkets at about 2,000 yuan (about 30 thousand Japanese yen) just like home appliances. In my early days of working as an expatriate in Wuxi, I felt my blood freeze so often electric scooters approaching from behind without making a sound. Partly due to instructions from the government, traffic laws for wearing helmets have been improved and the awareness of users has risen.

On the other hand, electric scooters, which have lower power, are actually close to useless in heavily contoured inland areas. People living in such an area still use engine type motorcycles. I rarely found large motorcycles: to illustrate how small they were, the largest model I found was 250 cc. However, the demand for large motorcycles has recently risen. Various motorcycle manufacturers, from leading manufacturers to emerging ones, exhibit their large motorcycles and accessories in domestic motor shows, grabbing the eyes of user visitors.

Emerging motorcycle manufacturers aimed at this market had sprung up in various parts of China, and a very active and attractive market was beginning to be formed. Since these domestic large motorcycles used suspensions imported from European suspension manufacturers at that time, the domestic motorcycle manufacturers really wanted suspensions for large motorcycles to be produced in China.

The stage for KWT to address the market had been almost set.



Photo 6 Chongqing Motor Show

5. Product Development in China

Among the motorcycle suspension components, KWT manufactures two components: the front fork (FF) to be mounted on the front wheels and the rear cushion unit (RCU) to be mounted on the rear wheels. Particularly, FF is a critical functional component that must have the required strength and rigidity as part of the bodywork: it

needs to absorb shock from the road surface for improved ride comfort, to grasp the front wheels securely so as to transmit the steering input to the front wheels, and to serve as a bumper to absorb impact during collision. Therefore, the development of FF needs to be promoted simultaneously with the development of bodywork. Thus, KWT promotes product development under mutual deep relationships with vehicle manufacturers.

In Japan, roles of vehicle manufacturers and suspension component manufacturers including KYB have been defined over many years of development, and the tasks to be carried out by both parties are clearly defined. Among such tasks, suspension tuning to ultimately achieve ride comfort and handling stability is difficult to decide only by Engineering. Rather, test riders from vehicle manufactures carry out sensory evaluation through actual riding and the results are converted into technical terms such as damping force and sliding property, which are then fed back to Engineering and Manufacturing again for optimization.

A major challenge for KWT Engineering, was how to proceed with the promotion of this series of development tasks with Chinese vehicle.

First of all, it was necessary to propose suspensions of appropriate size and materials in accordance with the bodywork strength requirements. It was relatively easy for us to translate these aspects into proper specifications based on the experience and standards of the both parties.

One problem that occasionally arose was the requirement for surface treatment. In the initial stage, we often failed to determine the proper requirements for color tones, weatherproofing, and corrosion resistance due to insufficient discussions or adjustments. However, once we had an accurate understanding of the customer's requirements, we were able to propose appropriate specifications based on the experience and know-how of the KYB Group without specific problems.

What we had difficulty with was how we should tune handling stability and ride comfort. Since motorcycles other than electric scooters were not permitted to be driven on the public roads in Wuxi to begin with, KWT Engineering staff, who had not driven a geared large motorcycle before, to translate what the test riders communicated about how they had felt regarding faulty conditions of the target motorcycle into technical terms. As a result, they had no idea which direction they should take the vehicle properties and had difficulty making a proper decision. The test riders were certainly able to determine which vehicle they preferred better when they drove two vehicles for relative evaluation. However, it seemed very hard for them to determine to what extent they should specify related properties in many cases since they did not often have an absolute evaluation standard.

That was where I, as an expatriate employee who had experienced that kind of thing in Japan, came in, but I

could not properly grasp what the test riders from customers exactly demanded during the initial stage. In spite of repetitive comments given, I had a hard time, as I was unable to propose improved specifications that could convince the riders. Language barriers certainly existed, but those were not the main reason. When looking back, we had failed to establish a common framework or procedure for what we should do under what kind of circumstances, which resulted in indiscriminately increasing test samples and man-hours. This is what I have realized now.

To overcome these problems, I held an internal workshop with Engineering staff on the correlation between the feeling of test riders during test runs and the suspension physics. I provided an opportunity for the staff to actually ride a motorcycle in a vacant space in the company site to feel, though in a quite simple way, the vehicle's behavior in response to the rider's control. These test rides were just at the entry-level, but common grounds for basic understanding were established in my opinion.

These grounds should have been documented to develop a systematic procedure. However, customers would not wait for us. So we unavoidably started improving empirical values in actual orders from customers. We all discussed the direction of improvement every time an incident occurred and added the results to the proposed specifications.

Partly due to these efforts, we reached a mature level of tuning where we could tune the related properties to some extent according to comments from customer's test riders. Still, this was insufficient. We ultimately failed to attain perfect customer satisfaction. Customers also seemed to be hardly able to determine how far they should specify properties as actual vehicle evaluation proceeded, and were once again at a loss regarding what to do. Accordingly, I consulted a senior employee to receive advice on what we should do in order to progress to the next stage. After wondering, I finally decided to take on a challenge. That was to invite test riders from Japan and ask them to ride vehicles together with Chinese customers so as to derive challenges and resolve problems. Thus, we decided to carry out so-called "a joint test" in China.

6. Joint Test in China

The idea was great. But it cannot be realized without obtaining the understanding and cooperation of all those concerned, of course.

First, I prepared proposals to clarify the necessity of a joint test and the effects expected to be brought about by the test (higher evaluation level, its appeal, and receiving new orders). With the proposals, I passionately persuaded management with enthusiasm and finally obtained the approval of top management.

Then, I requested KYB Motorcycle Suspension (KMS) in Japan to send test riders to China. I sincerely appreciate

that the KMS staff expressed a willingness to accept the proposal in spite of their busy work schedules.

Second, we made a presentation to customers. This was where KWT Sales Department was to make the most of its strengths. The staff members rushed to customers in unison to explain their proposals and then successfully obtained their approval. I really appreciate that the customers positively accepted the proposals.

Once the stage was set, we got down to work for specific preparations. A detailed two-week plan was drawn up to ensure the safe and efficient implementation of the joint test, which would cover a total distance of 2,000 km, visiting customer sites in the coastal East China and the inland Chongqing region. Over 20 staff members were involved in this program. To establish a common conceptual image of purpose and results, they discussed details many times to finalize the program.

Two test riders were invited from KMS in Japan. Safety first was the top priority to begin with. In order to ensure the safety of the riders in the event of a fall, the same safety equipment as in Japan was used, and the itinerary was adjusted to allow for adequate rest.

For safety purposes, an auto race circuit was rented for exclusive use to test vehicles in each region, ensuring an environment for closed testing.

As a preparation to sample disassembly or specification changes on site, we rented a full-size trailer equipped with a damping force testing machine from KYB Group in Zhenjiang Region, China. The joint test team was supposed to travel along with the trailer over the entire itinerary.

After having made all possible preparations, the actual joint test finally arrived and turned out to be a great success. Both customers' and KMS's test riders drove identical vehicles and directly communicated with each other, which disclosed difficulties or events that had not been understood well and allowed us to verify the measures against them and the resulting effects, although I cannot unfortunately give detailed information here because the test runs were confidential. I feel that the communications between the two parties, which were the most important thing for tuning, have been greatly improved. The joint test was also well received by the customers. I believe that the customers actually felt the KYB Group's precision.

After the test runs, we discussed a variety of topics with engineering staff from both parties, leading to higher motivation in KWT engineering staff. I remember the gleam in their eyes vividly even now after coming back to Japan.



Photo 7 Trailer for tuning



Photo 8 Test run

7. In Closing

Fortunately, the current domestic sales of KWT in China are brisk. I heard that KWT was selected as one of the China's top ten motorcycle component manufacturers. I hope that this activity has contributed to the selection. As an engineer, my work has really paid off.

Photo 9 shows how the KWT and KMS colleagues from each country were praising each other in an after-party of the whole joint test itinerary. This photo is a source of my bravery. I'm proud that I was a member of such a marvelous event.

Finally, I would like to appreciate anew the customers who extended cooperation to this program, all those who gave me an opportunity to study abroad, my boss who allowed me to take on this challenge, and the local staff who pulled together with me. Thank you very much, everyone!



Photo 9 Colleagues from each country praising each other

Author



KITAMURA Yasuhiro

Joined the company in 1996.
Manager, Operations Planning Dept.,
Motorcycle Headquarters,
Automotive Components Operations.
Taken present post after being
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