Omron (Shanghai) Co., Ltd.

JP1 displays its power in the night shift of production management system. Its “auto execution” and “problem response” functions significantly reduce the labor intensity.

Omron (Shanghai) Co., Ltd. bears the role of strengthening the competitiveness of Omron in Chinese and global market. By production expansion transferred from Japan and the employment of inventory management system, plus the using of Hitachi JP1/AJS2, tasks at night can be sufficiently and automatically performed. For the plant with hiking information, they have become indispensable tools to support stable operation.

In charge of the whole production procedure, OMS employs the latest technology.

As the base to strengthen the competitiveness of Omron in both Chinese and global market, Omron (Shanghai) Co. Ltd. (OMS) was founded on Jul. 2005 in Pudong New District, Shanghai. As a branch of Industrial Automation Business Company (IAB), it is engaging in the business of versatile basic control facilities, such as sensors, controllers, temperature controllers, etc.

OMS is not only in production, but the whole process of the manufacturing. From the process of design and development, production, delivery to customers in China and all over the world, to after-sales services, OMS takes care of all. Since the products OMS make always face price competitions, OMS has been pursuing scale economy in order to get prices advantages and being more competitive than rivals.

Therefore, the Company employs the latest production technologies and facilities of Omron, with the level able to match that of Omron plants in Japan, which is advanced even among Japanese manufacturers.

OMS uses JP1/AJS2 in the night shift of production management system to realize the automatic job management and increase the productivity.

When OMS was founded, the former three individual plants of sensors, controllers and temperature controllers were a consolidated one, which had a business line of thousands of products. Besides, to accommodate the varying demand of the world, the productivity is changing by the day. The various lines of products require not only a production commensurate with the demand, but also of low cost – which has become a mission of the Company.

Taking the opportunity of transferring production expansion from Japan and introducing the inventory management system, OMS imported Hitachi JP1/AJS2. JP1 is a comprehensive and systematic operation management tool developed by Software Business Department of Hitachi Manufacturing of Hitachi Group. JP1 has taken the largest market share for consecutive 9 years in the domestic operation software market of Japan.

In the past, for night tasks of the production management system, OMS had been using Windows task manager. However, “With the transfer of production expansion from Japan and the introduction of the inventory management system, the I/F with Japan has kept growing. As for the starting time of Windows task manager, if we consider the extra processing time caused by data alteration, it might lead to inability to perform night processing.” (Watanabe)

There are more than 40 interfaces between the systems, such as the receiving of order information and sending inventory data and delivery dates between oversea systems, as well the sending inventory supplement information to production management system, sending information to owners or receiving component orders and practical purchase amounts from the production management, etc. Mr. Watanabe tested the Windows task manager on trial data, and the results were that, the processing was not finished until 10 a.m. the next day.

Here, Mr. Watanabe introduced JP1/AJS2 for testing, and JP1 was trialed in several Omron plants in Japan. The results turned out to be positive. “Should there be anything we worried about during operation, we can immediately consult the Japanese services. It was really amazing. During the trial period, we confirmed that the automatic execution function of JP1/AJS2 contributed to the stability of system, so we decided to introduce the software formally.” Mr. Watanabe told the whole story.

When using Windows task manager for night tasks, if the data amount increases, it would be necessary to monitor the processing time and calculate the extra time and thereby change the starting time. The whole process cost a considerable length of time, however, after introducing JP1/AJS2, jobs can be automatically executed and the operation sequence can also be restructure rationally.

The “problem response” eliminates the loss and confirmation work become easy and handy.

Together with the function of executing jobs automatically, “problem response” also plays an important role. It can automatically redo the job or skip the procedure and automatically turn to next item when some problem occurs. “In the past, if something is wrong during the night, although some procedure could be stopped, the next step might still be running. Wasting operation time was a great loss. After introducing JP1/AJS2, there has been no wasting of this kind.” (Watanabe)

Besides, although by using Windows task manager could process parallel jobs, it was hard to run a single one. JP1/AJS2 makes this possible.

Moreover, “It is good to see and supervise the operation results when at work. Anyone, even people do not familiar with the system, understands the operation methods can easily operate.”

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With increasing loads of the system, the expectation on JP1 also rises.

In the future, people will become more aware of the existence of OMS. Both the production transferred from Japan and the productivity is keeping on increasing. Under this situation, OMS has been expanding their team. Now there are more than 2000 staffs in the Company.

Thereby, the loads of the plant system are also increasing. Mr. Watanabe has already started to restructure the system.

There are also more expectations on JP1/AJS2, such as monitoring according to the setting by Oracle, and the “notifier” of sending messages to mobile phones when problems occur at night, etc. Their applications in new areas are being studied now.

JP1/PFM can monitor the system according to the requirement set by Oracle. If anything occurs within the range of monitoring, they would be notified automatically through emails. Besides, JP1/AJS2 introduced by OMS has a “notifier” that can send messages to mobile phones automatically when problems occur during the automatic processing at night. “Especially the ‘notifier’ is our immediate want. In China, sometimes the network may suddenly cut off, and power cuts due to road construction are frequent without any prior notice. Because of this, we would like the ‘notifier’ to be available as soon as possible and build a problem-solving system for the night,” said Mr. Watanabe.

“First, we shall realize our goals of production increase of this year. The current goal is to stably use the plant’s system. Then, the future goal is to build a system able to perform consolidated management on oversea plants and realize stable operation of the system. To achieve these two goals, we will make full use of JP1”, Mr. Watanabe animatedly depicted his plan.