

Adapt or Die?

With rising labour costs and increased competition, manufacturers need to continue to find new ways of achieving manufacturing efficiency in China if they are to survive.

By Katrina Hamlin

RISING COSTS AND increased competition from other manufacturing destinations are eroding the competitiveness of low-cost manufacturing in China. The recent economic downturn also forced companies to scrutinise their cost base and look more closely at where cost savings could be made: manufacturing operations in China were no exception. With a host of product quality scares in recent years making headlines, the demand for better quality products – without increasing costs – is now also required of China’s manufacturing industry. The industry is feeling the pressure.

Poor Maintenance

China’s manufacturing industry has developed very rapidly. As a result, factories have been set up and equipped and then run into the ground, with little attention paid to the renewal of equipment and facilities. Once they have been run into the ground and are beyond the point of no return, they are

replaced. “Historically, companies in China have been in investment mode,” says Bruno Lhopiteau, General Manager, Siveco China, a maintenance consultancy in China. “They have been constantly expanding their business with new plants, or the extension of existing plants. As a result, maintenance-related investments and specifically, the replacement of faulty equipment, have often been hidden within larger construction or expansion budgets.”

In many China factories these budgetary and accounting practices make it difficult to identify the impact of inadequate maintenance on the bottom line. A similar black hole occurs in identifying how much money is lost through high staff turn over. When employees move on, the organisation risks losing valuable data and experience that can impact adversely on costs through more imprecise quality and process checks and less effective maintenance. This also impacts on the ability to analyse the operation’s success and to identify a means for future

improvement. Identifying and putting in place processes that monitor and provide the feedback to support maintenance strategies and minimise impact of staff turnover so that costs can be brought down is not easy. As a result, they tend to be neglected.

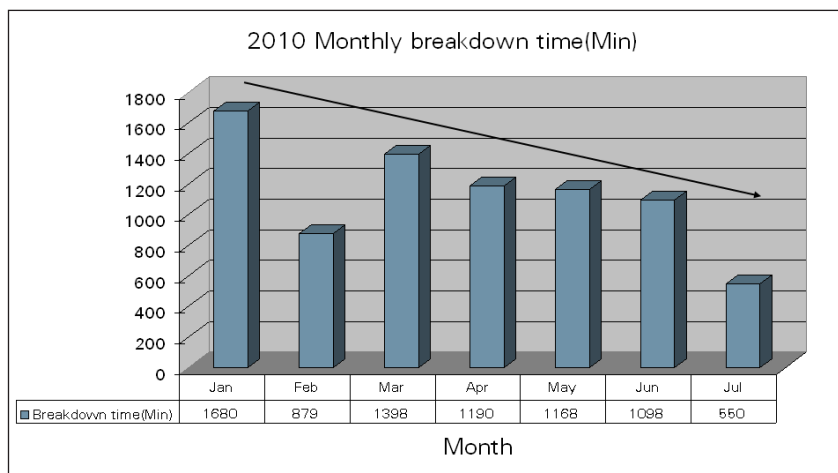
Paying to Learn

There are also the hidden costs of manufacturing in China that only become apparent through practical experience and these are often overlooked when companies first set up. “Businesses tend to come to China because they see the big picture – lower costs,” says Olivier Levy, managing director of Dragon Sourcing. “They don’t always see the western China-specific details that will add to that cost when they consider sourcing from remote Chinese provinces.” A lack of raw materials is a good example. Even if businesses budget for this, there are additional expenses and complexities such as the need to co-ordinate elongated supply chains and industry services in areas where logistics are not fully developed. “For example, manufacturers of automobile parts might find the right conditions to make their product, but it can be hard to find other high quality necessities, like specific packaging for the parts’ transportation, or bar coding,” says Levy.

Which Approach Works Best?

Most manufacturing operations will agree on the benefits of improved and systematic maintenance management, but choosing the best approach for their specific operations may not be that straightforward.

One option is computerizing systems to make records more precise and consistent, and to generate useful data for past and present equipments’ condition, lifespan



Source: Brose Wuhan Automotive Systems Co.

The right maintenance system can achieve significant improvements: Brose’s breakdown rates after setting up their system showed significant benefits.

and productivity. Brose Wuhan Automotive Systems Co. is an example; after consulting with Siveco, it used software tools to support its maintenance process as a key part of its IT systems and as a result it identified a range of areas where it could reduce costs, such as lessening its power consumption and improving its monthly breakdown times.

Another option is to introduce systems that embed the principles of maintenance firmly in the operating methodology of the company so that the practice does not become dependent on specific individuals tasked with the operation. This means that when staff leave the company, maintenance programmes are not compromised. Training can be used

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to establish the key concepts for newcomers, while careful management and a user-friendly system keep the principles in play.

Volvo institutionalises its maintenance system through strategic training. "When we started our Shanghai factory, we brought in supervisors and managers from our Korean factory to provide the training," says Benoît Rimaz, President of Volvo Construction Equipment China. "By 2007, we had successfully replaced the Koreans with Chinese managers. Maintenance management systems were thus replicated throughout different sites, ensuring reliability and thorough understanding of methods used across the organisation."

Lean and Mean

Adopting a Lean manufacturing philosophy or just 'Lean' as it has become known, is another increasingly popular approach to help drive down costs. In this, manufacturers

consider the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination. "Lean manufacturing has become more and more important for China's manufacturers," says Martin Uhlemann, CEO of International Management & Innovation Consultancy "In China, there is a growing belief among manufacturers that only Lean manufacturing can bring new life to their companies."

A key advantage is that Lean techniques and knowledge are now well established, understood and available in China. Services such as those provided by 1MFG.com, a multi-media platform targeting only manufacturing professionals in China, and events such as 1MFG.com's Lean Champion Summit, provide opportunities to learn more, and manufacturing staff are increasingly familiar with the system before training starts.

But Lean is no magic bullet, cautions Siveco's Lhopiteau. "'Lean' has become one of those magic buzz words imbued with amazing powers and is now a hugely popular topic in China, but it has its limits."

Companies should not be looking to Lean teachings for a quick-fix answer. Long term, institutionalised changes remain the best way forward. The principles and practices advocated by Lean also may need to be adapted to the specifics of each operation's needs. "We use Lean, but we adapt its concepts to our Volvo production system," says Rimaz.

Whatever system is chosen by a manufacturing operation, key to success is that it is user-friendly, whether or not it is computerized. It also needs to support maintenance management strategies which are structured and precise but also flexible. "Our system is both user-friendly and practical," says Marc Bourgeois, General Manager of Brose. "It can easily adapt itself to more or new technologies and processes as our company expands. It is also compatible with other systems run in our company, such as SAP."

One of the major ways in which improving the efficiency of manufacturing sites saves money is by reducing the need to build new sites, and in recent months established manufacturers have slowed or stopped the opening of new factories. "There has been no expansion of Volvo's footprint since the financial crisis," says Rimaz. "We would prefer to make the most of the sites we

CO-PUBLISHED FEATURE

Quality Control

Sébastien Breteau, CEO of AsiaInspection talks to SBR.



SBR: What are the greatest challenges for international manufacturers in China as they work to manage quality control?

SB: Finding a reputable, reliable partner you can trust; who will

consistently deliver, and who doesn't have any tricks up their sleeve that will impact your bottom line. It is key for importers to ensure that prerequisite quality standards are met and are verifiable at all stages of the preparation, manufacturing and delivery processes.

SBR: What are the latest innovations in quality control, and how useful will they be for manufacturers in China looking to improve manufacturing efficiency?

SB: These days, manufacturers need a quality service partner that is web-centric; enabling them to manage all aspects of scheduling and review of their inspections, audits and testing, at a competitive price and in a timely manner. For example, AsiaInspection customers can schedule an inspection online and have an inspector onsite anywhere in Asia within 48 hours; with a report delivered the same day for USD288.

SBR: What significant developments in quality control do you expect to see in the near future in China?

SB: The quality services industry is growing explosively and it will continue to evolve in ways that better meet customer demand. As the world continues to grow flatter, web-centric quality control service providers will continue to make it easier for international manufacturing clients to manage their core quality needs; easily, efficiently, and at a competitive price, while improving their reactivity and production.



▶▶▶ already have.”

Location, Location

However there is still strong demand from newcomers looking for new sites, attracted by China’s growing potential as a domestic market and the economy’s durability during the recent financial crisis. But the strategic decisions on the best place to locate have got much more complex. SIP Consulting, a China-based consultancy that advises on these matters, urges businesses to pay close attention to the hard, measurable factors as well as the equally important soft ones, prior to making this decision. Hard factors include the price of land; the price of labour; the price of utilities; tax incentives and logistical support.

Different operations will find themselves better located in different areas. Although inland China’s lower costs and government incentive programmes may seem attractive they do not always fit with the manufacturer’s other needs. “The actual cost of delivering quality may be cheaper in well established coastal zones,” says Geoffrey Mills, director of SIP. Harder-to-quantify,

softer issues can also dissuade companies from looking inland for new property investment. “While many cost variables may say ‘Wulumuqi’ logistics may not”,

inland “differences”, he adds.

People Power

Staffing is a vital factor in deciding on location. “We have to look at every aspect of production and quality,” says Rimaz. “That includes the people.” Staff retention supports efficiency, and location affects this. Manufacturers should investigate what appropriate talent is available in a region, points out Mills. Better universities provide talent; but its graduates may be over qualified, or more ambitious. They may be quick to move on once they have been trained. An attractive standard of living will also be important. For expatriate employees, there are other factors, for instance the ability to access an international education and facilities.

These are important issues if factories are to be located away from the most developed areas. However, soft factors should not overly influence location decisions. According to Mills, many companies and professionals were tempted to remain in Hong Kong for far longer than was commercially sensible for just this reason. **SBR**

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Business Diary Upcoming business events in Shanghai

Monday 11 Oct – Sunday 17 Oct

11 **Financial Times Innovation in Education Forum**
JW Marriott Hotel Shanghai
 Organised by: Financial Times Conferences Tel: 852-2230-5851

13 **Asia Expo Shanghai**
 TBC
 Organised by: Isn Inc. American Education Expo
 Tel: 1-215-2463432

13 **Shanghai International Disaster Reduction & Security Exhibition**
 Shanghai Exhibition Centre
 Organised by: Shanghai International Advertising & Exhibition Company Limited
 Tel: 86-21-5179-7008

15-17 **China Auto Motor Power Exhibition**
 Shanghai Everbright Convention & Exhibition Centre
 Organised by: Shanghai Gehua Exhibition Service Tel: 86-21-5152-7671

Monday 18 Oct – Sunday 24 Oct

19-21 **IFTC/Interfood Shanghai**
 Shanghai International Exhibition Centre
 Organised by: Koelnmesse, Shanghai International Exhibition Co., Ltd., China National Food Industry Association
 Tel: 86-21-6390-6897

20 **Youth Marketing**
 95 Changde Lu
 Organised by: BritCham
 Tel: 86-21-6218-5022

20-22 **Asia Green Vehicles Summit 2010**
 Pudong Renaissance Hotel Shanghai
 Organised by: EVAAP, AVERE, China Association of Automobile Manufacturers
 Tel: 86-21-5821-5880

23 **The 8th Annual China Automotive Industry Forum**
 CEIBS Shanghai Campus
 Organised by: CEIBS
 Tel: 86-21-2890-5890

21-24 **Top Marques: Timepieces, Jewellery and Eyewear**
 Thu-Sun
 Shanghai Exhibition Centre
 Organised by: Borrison Asia Ltd., Shanghai Borrison Co., Ltd
 Tel: 86-21-5081-3018

Monday 25 Oct – Sunday 1 Nov

27 **Technology For Marketing & Advertising China**
 Wed
 Shanghai Pudong Expo
 Organised by: UBM Asia Ltd
 Tel: 86-21-6278-7423

28-29 **China IPO Summit**
 Thu-Fri
 Ramada Plaza Pudong
 Organised by: IGVision International Corp. Shanghai
 Tel: 86-21-5181-5373

Key: **RED: Chamber Event**
BLACK: Exhibition
BLUE: Conference/ Forum