Robotic Arm Raises Productivity for Food Manufacturer

Q.B. Food adopts robotic arms to double output per worker

The National Productivity and Continuing Education Council (NPCEC) Chairman, Deputy Prime Minister Tharman Shanmugaratnam, visited Q.B. Food Trading Pte Ltd (Q.B. Food) today, and witnessed how it has utilised robotic solutions to increase production volume by 60 per cent and doubled its output per worker.

Robotic arms to increase production and reduce reliance on manpower

2 Q.B. Food is a local food processing company specialising in the import, processing and distribution of frozen, chilled and dry products. It is one of the few food manufacturers that has utilised robotics, traditionally used in the Automotive and Engineering sectors, to optimise its production processes.

3 In May 2012, the company embarked on a project to install a cheese fabrication (cutting and packing) line, with support from SPRING Singapore's Capability Development Grant (CDG). This project involved the acquisition of several machines from Europe, such as the cheese-cutting machine, robotics pick-and-place system and packing machine, and putting them together into the cheese fabrication line.

Since the project completed in June 2014, Q.B. Food has successfully doubled its output per worker, increasing its production volume by 60 per cent from 40,000 portions of cheese to 64,000 portions a day. They also reduced their reliance on labour as only three workers are now required for the cheese cutting and packing process, compared to four previously. The line can produce up to 80,000 portions per day, which allows Q.B. Food to scale up to increase sales.

5 This automation project also reduces the need for human contact, thus minimising the risk of contamination as well as improving the safety and quality assurance of its products.

Food manufacturing industry has the potential to grow further

6 Speaking at the visit, DPM Tharman said, "The food manufacturing industry has good potential for further growth. Our food products have appeal, and are safe and trusted. Companies such as Q.B. Food are also adopting robotics in food production to improve their productivity."

7 Apart from further automating their workflow and adopting advanced processing technology in the near future, Q.B. Food also has plans to expand exports into new markets. The company currently exports to countries in the region, including Malaysia, Indonesia and Cambodia.

8 The visit is organised as part of the "Way to Go Singapore!" campaign, a national outreach effort under NPCEC to rally Singaporeans to embrace productivity. The visit seeks to facilitate sharing of knowledge and best practices amongst SMEs and across sectors.

NATIONAL PRODUCTIVITY AND CONTINUING EDUCATION COUNCIL (NPCEC) 24 SEPTEMBER 2014

ANNEX A – Fact sheet on Q.B. Food ANNEX B – Fact sheet on Food Manufacturing Industry



Mr Quah Wee Keong, Managing Director of Q.B. Food, showing DPM Tharman the cheese fabrication line

ANNEX A

FACTSHEET ON Q.B. FOOD TRADING PTE LTD (Q.B. FOOD)

About Q.B. Food

Founded in 1979, Q.B. Food Trading Pte Ltd (Q.B. Food) is a food processing company specialising in import, processing and distribution of frozen, chilled and dry products. Its key house brands are "Spring Cottage" (cheese) and "Boxer" (meat).

Q.B. Food provides various value-added services, such as slicing, cubing and the portioning of cheese and meat products. It carries many well-known brands from across the world (e.g. "Johnsonville" brand sausages from United States). Its customers include F&B outlets, supermarkets, airlines and casinos.

Cheese products currently contribute 30% to its revenue while the other 70% comes from meat products. As meat products cannot be easily exported from Singapore, growth potential in this area is limited. Hence, Q.B. Food focuses on its cheese products to expand overseas while building its local business through distributing to local F&B outlets.

To enhance operational efficiency, the company has been acquiring machines from Europe to automate its meat processing activities to reduce its reliance on manpower and to increase output. The company believes that improving productivity is an important catalyst for growth.

FACTSHEET ON THE FOOD MANUFACTURING INDUSTRY

Industry Overview

The Food Manufacturing (FM) industry comprises 858 establishments employing 27,700 workers (0.8% of Singapore's employment) and contributes S\$2.3 billion in value-added (0.8% of GDP). The industry's value-added (VA) per worker in 2012 was \$84,500, a 4.5% growth from 2011.

The FM industry is highly fragmented, made up of mostly home-grown businesses, producing a wide product range from beverages to sauces to confectionery and processed meat. 96% of the establishments are local SMEs. Out of the industry's S\$8.5 billion total output, about half of this has been exported, with China and Japan being the top export markets.

Importance of Food Manufacturing in Singapore

Stringent food hygiene and safety standards have resulted in the global popularity of Singapore-made food products. Coupled with the ability to create a diverse range of Asian products, Singapore food companies have a competitive edge internationally, as shown by a strong 10.2% Compound Annual Growth Rate (CAGR) in direct exports from 2007 to 2012.

By continuing to enhance local food manufacturers' competitiveness through exports, innovation and productivity improvements, there is good upside for further growth. There is also a need to anchor food manufacturers in Singapore, especially for products such as meat/poultry, fish, eggs, vegetables, rice for food security. Food manufacturers should look at producing higher value-added products such as functional food/nutritious food for sustainable growth.

(Source: EDB Census of Manufacturing, 2012)