

# Chapter 11

## New Global Partnering Production Model for Expanding Overseas Manufacturing Strategies

### ABSTRACT

*To improve quality at leading manufacturers' overseas production bases from the perspective of global production, a New Global Partnering Production Model (NGP-PM) is created, and its effectiveness discussed for expanding overseas strategy. The aim is to increase global quality by generating a synergetic effect that organically connects and promotes continual evolution of the production plants in Japan and overseas, as well as greater cooperation among production operators. As an example of concrete deployment, the author has established a New Turkish Production System (NTPS) employing strategic NJM (New Japan Model) in the Republic of Turkey. Recently, moreover, the author has developed the NGP-PM for expanding overseas manufacturing strategy.*

### INTRODUCTION

In recent years, leading manufacturers in Japan have been deploying a new production strategy called “globally consistent levels of quality and simultaneous global launch” in order to get ahead in the world-wide quality competition, and high quality assurance in manufacturing - simultaneous achievement of QCD (Amasaka, 2006, 2017a; Yamaji and Amasaka, 2006, 2007a,b,; Yamaji et al., 2006; Amasaka and Sakai, 2010, 2011). This is the key to successful global production, and has become a prerequisite for its accomplishment employing New Japan Model (NJM) (Amasaka, Ed., 2007, 2012) (Refer to Chapter 5).

The greatest concern of corporate managers is the success of “overseas production strategy - local production” as well as “to bring overseas manufacturing to Japan standards”. Therefore, to increase the skills of production workers at local manufacturing sites (hereafter referred to as production operators),

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the key to successful global production is necessary to realize manufacturing suited to the actual situation at production sites of various overseas production bases.

Against this background, the author has established a New Global Partnering Production Model (NGP-PM) employing New Japan Production Management Model (NJ-PMM) for Toyota's expanding overseas manufacturing strategy (Amasaka, 2007a, 2015, 2016, 2017a, 2019, 2022; Ebioka et al., 2007). NGP-PM generates a synergetic effect that organically connects and promotes continual evolution of the production plants in Japan and overseas, as well as greater cooperation among production operators. As an example of concrete deployment, the author has established a New Turkish Production System (NTPS) employing strategic NJM in the Republic of Turkey. Recently, moreover, the author has developed the NGP-PM for expanding overseas manufacturing strategy (Sakalsiz, 2009; Yeap et al., 2010; Siang et al., 2010; Shan et al., 2011; Shan, 2012; Miyashita Amasaka, 2015, 2016, 2017, 2018, 2022).

## **PROBLEMS WITH SUCCESS IN GLOBAL PRODUCTION**

Recently leading companies aim to succeed in localizing production as a global production strategy; the key to this is success in global production. However, it has been observed that, despite the fact that overseas plants have the relevant production systems, facilities, and materials equivalent to those that have made Japan the world leader in manufacturing, the “building up of quality - assuring of process capability (Cp)” has not reached a sufficient level due to the lack of skills of the production operators at the manufacturing sites. Under such a circumstance, there are many studies abroad for globalization (Lagrosen, 2004; Ljungström, 2005) and TQM (Burke et al., 2005; Hoogervorst et al., 2005).

As a countermeasure to such a problem, and in order not to lag behind the “evolution of digital engineering – the transition to advanced production systems at production plants”, the Japanese manufacturers expect the production plants in Japan to serve as “mother plants”. They would welcome overseas production operators to these plants, and promote “a local production program - transplanting the know-how of Japanese manufacturing” (Sakai and Amasaka, 2006). However, it is by no means easy to transfer the “know-how of Japanese manufacturing” directly to overseas production bases as mentioned above.

In other words, there is always “an obstacle to overcome - a suitable production system for each production base”, due to the difference in ability (level of skill and education) or national characteristics between the local production site and Japan. Therefore, to cope with this situation, an environment in which the creation of labor values—ES (employee satisfaction), advanced skills, a sense of achievement, and self-development can be realized must be urgently considered (Amasaka et al., 2006; Yamaji et al., 2006, 2007).

To accomplish the above, the author surmises that it is necessary to develop a type of manufacturing which fits the local circumstances of various overseas production bases and to advance from “Japanese mother plants” to “global mother plants”.

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