

## Foreword

### “Enhancement of Technical Capability”

Y. Satou

Executive Officer  
Mooka Plant Manager  
Production Division



“Manufacturing Spilits (MONODUKURI)” “job site power (GENBARYOKU)” and other similar words often appear in magazines and newspapers. These words sound differently to and are understood differently by those who read them. Many books also take up these words as their themes. Focusing on “technical capability,” one foresees a variety of problems and possibilities.

As is often discussed, construction machinery is a technology of “fitting.” This technology is clearly different from high technology in which innovative technology sometimes determines continuation or discontinuation of enterprises. In other words, construction machinery technology is a technology that is composed of “stacking” and “experience.” “History of technology” and “handing down of technology” are the keys. This applies to all technological fields including manufacturing engineering and service technology, to say nothing of development departments. Generally speaking, companies with high technological power are synonymous with companies producing products that use such so-called advanced technology.

The DANTOTSU (unique and unrivaled) products of Komatsu that have achieved outstanding technological results in fuel consumption and noise reduction can be included in this category. The products that achieve fuel consumption and low noise and their perfection as a system are the results of stacking of many basic and application technologies.

This can be understood more easily when it is likened to creating a high mountain. A large base is required when creating a high mountain. The weak coupling of rocks and earth that compose such a mountain will ultimately lead the mountain to collapse. A mountain of high technology is indeed built by stacking, but this mountain is not static. This mountain of technological power is not a mere technology itself. Needless to say, it is a technological power in competition with competitors and this technological power is meaningless unless cost and speed are involved. A mountain of technological power needs to be built amidst dynamic changes such as changes in the environment and market.

On the other hand, “standardization” and “database” are often talked about when we discuss stacking and the handing down of key technologies, and there exist problems that must be challenged courageously. Hither and thither we experience a repetition of past failures, methods that are based on basics are not followed and databases have become dormant and left unused due to inadequate maintenance, so that the mountain of technological power becomes hollow and is on the verge of collapse. In the technology itself, our technology field is indeed a “challenge to dispersions” as the core in achieving enhancement in performance, durability and reliability, so the story is not that simple when we talk about “standardization.” “Standardization” is a necessary condition, but not a sufficient condition. When we get down to it, the argument will probably lead to “company culture.”

In other words, it is a foregone conclusion that “high technological power” means the overall power of a company including human resources, organization and company culture.

It goes without saying that the driving force to enhance a technological power is having the spirit to gallantly challenge high goals. The ideal condition that we should pursue will indeed be a “mountain of DANTOTSU technology” that continues ceaseless small innovations and reliable handing down that stands tall when recognized, a mountain that is robust, but is flexible and burns with magma inside.