

Foreword

The Centennial Anniversary

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Komatsu will celebrate its centennial anniversary in May 2021. Komatsu Ltd. was established on May 13, 1921 when Komatsu Iron Works, which manufactured machines for in-house use, was separated from Takeuchi Mining Co., which operated a copper mine in Komatsu City, Ishikawa Prefecture. Starting with the development of the T25 agricultural tractor to meet the requirements of the government (which also served the purpose of developing Manchuria at that time) and through the full-scale development and production of bulldozers for land reconstruction after the war, it has steadily developed diverse models and components and expanded overseas to become the world's second-largest comprehensive manufacturer of construction and mining machinery. In Japan, only around 1% of all companies have reached their centennial, and there are not many such companies overseas either. Through the prewar and postwar periods, our predecessors ingeniously improved both quality and reliability with an understanding of customers' worksites, overcoming numerous economic and social difficulties and tough competition. Our continuous efforts to improve our machines and technology, introduce new machines, and enhance services have supported Komatsu's growth.

Today, the platform business utilizing digital technologies such as GAFAM is growing. Komatsu has enabled the visualization of work by using digital twins and the IoT, and is now working on digital transformation (DX) using SMARTCONSTRUCTION and iMC machine as key technologies for boosting efficiency, reducing manpower and improving safety at customer worksites. This is only possible by using construction machines that can accurately complete the construction work on site, providing meticulous field service in case of trouble, and making continued improvements. Machines that function very accurately as the norm, as well as support in the field, are essential.

Komatsu, with its Dantotsu (unrivaled) hardware, service and solutions, provides solutions for customers' needs and enables futuristic worksites that are smart, clean, safe, and productive. To improve the quality and reliability of our Dantotsu base machines which operate powerfully, accurately and efficiently for a long time as the norm, we are constantly improving our core design technologies. We have a duty to accumulate such experience, build the organization to boldly challenge new technologies, and pass them on to the next generation.

Komatsu's mining and construction machines are equipped with diesel engines, which started to be produced for Daimler-Benz trucks around 1922 to 1923. Thus, diesel engines will reach their centennial anniversary almost at the same time as Komatsu. Komatsu's production machines have moved forward with the progress of diesel engines for a century. However, at this major milestone, global climate change is a serious issue requiring the reduction of CO₂ emissions worldwide. This is a critical turning-point. Combustion engines must change. Similarly, mining and construction machinery also requires fundamental changes to its base, structure and technology. We need to enhance our existing technologies and take advantage of our strengths to manufacture major components in-house to establish an innovative machine body system which is more closely integrated, with improved durability, efficiency, and less environmental impact.

While considering the need for a decarbonized society both in Japan and overseas, Komatsu will develop new products and solutions for customers tailored to local characteristics, business conditions and scale of the mining, earth-moving and quarry industries around the world. Mining and construction machinery is used all over the world, supporting essential industries which underpin national economies and social infrastructure. As a manufacturer, we must continue to provide optimum products, services and solutions for each customer, with complete dedication to quality, reliability, and cost of hardware, while improving efficiency for the entire construction process and thus the environment.

In 2021, 3,696 companies will celebrate their centennial anniversaries in Japan. Only two companies will celebrate their bicentennial. This is a sharp decrease. Komatsu will ride through the major transformation with its technologies, and, with the pride of a product developer, will embark on the next 100 years.