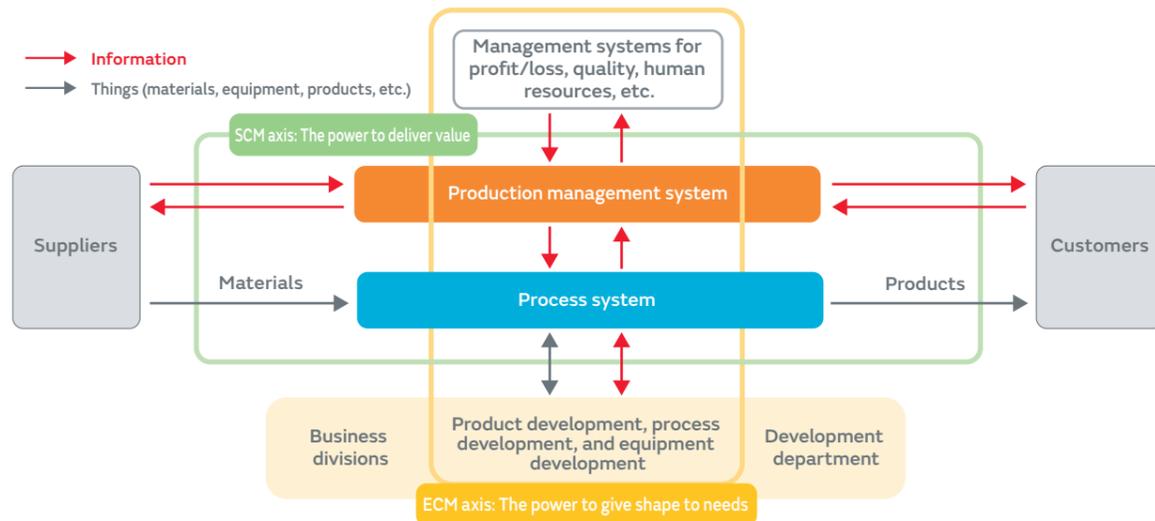


# Murata's monozukuri (manufacturing) which creates core competencies

## Murata's monozukuri (manufacturing) domains

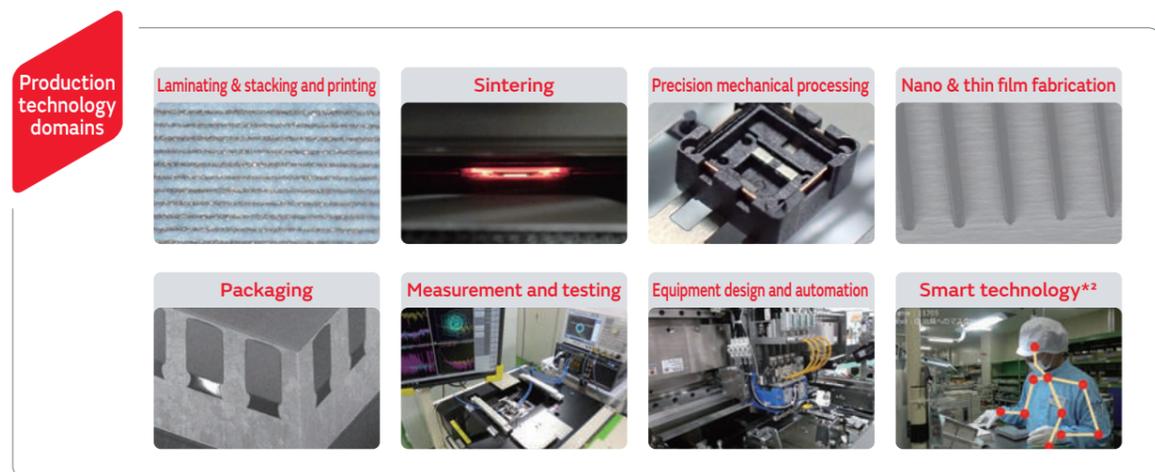
At Murata, we consider the SCM axis, which delivers value from suppliers to customers through our business, and the ECM axis, which conducts product development and the related development of processes and equipment, to be our monozukuri (manufacturing) domains in a broad sense. In manufacturing, we are strengthening each of these domains and demonstrating Murata's core competencies, "The power to give shape to needs" and "The power to deliver value," through advanced linkage of the SCM and ECM axes.



## Production technologies that support the creation of new products

At Murata, we focus on concurrent engineering\*1. The production engineering department which is responsible for the development of processes and equipment, collaborates from an early stage of the development of new products to develop, design, and manufacture unique in-house facilities that are economical, safe, and of high quality. We are also working on challenging development themes by

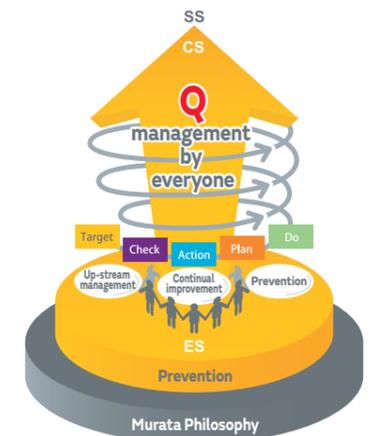
organizing core technologies that are at the root of Murata's monozukuri (manufacturing) and strategically focusing on elemental technologies that will serve as our competitiveness in the future. Looking another ten years ahead, we will develop innovative technologies that add two new perspectives: environment and site/people, thereby creating a continuous cycle of social value and economic value.



\*1 A method in the product development process in the manufacturing industry that is used to streamline development and shorten the development period by simultaneously carrying out multiple tasks  
 \*2 Technology that solves manufacturing issues such as improving productivity and quality of production lines by utilizing new technologies such as robots, IoT, and AI

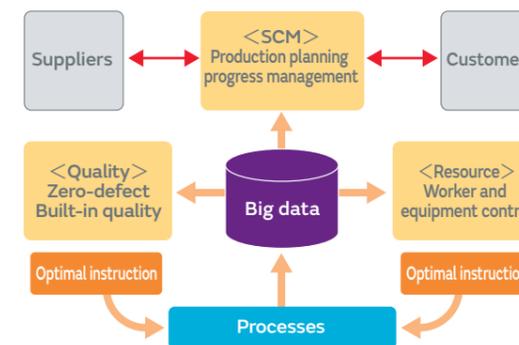
## Quality Management System (M-QMS) for realizing high quality

We have combined all of our manufacturing activities into a single M-QMS so that we can continue to ensure that Murata quality exceeds our customers' expectations. Murata has created integrated manufacturing systems from materials to finished products, and since the company's founding we have uncompromisingly pursued quality that will gain the trust of every customer by utilizing science-based management oversight, starting from the origins of our processes and throughout the operation. Using state-of-the-art failure analysis technology, reliability technology, quality technology, etc., we promote activities based on the five principles approach that includes three actuals. In addition to addressing the quality of products and services, Murata continuously improves all processes and systems relating to design, procurement, production, sales, human resources, goods, structures, and technologies, and strives to maintain optimal conditions in all facets of our operations. We encourage each employee to derive satisfaction and improve the quality of their work in order to solve our customers' issues and social issues.



## Management systems that meet customer requirements

Murata develops, maintains, and operates its own production management systems to meet customer requirements.



Our production management system has three main functions. The first is a supply chain management (SCM) function. This forms production plans based on the order information received from customers and connects these to delivery date responses and material orders to suppliers. The second is a function that performs actual production based on a production plan. We use that production information (big data) to monitor production conditions and issue improvement instructions with the aim of ensuring zero defects. The third is a function that monitors the operation status of resources such as workers and equipment. We use this to issue instructions such as increases/decreases and production orders. We will use these functions to meet the demands of our increasingly advanced and diversified customers.

## Human resources who support the monozukuri site

The foundation for excellent monozukuri is human resources. Murata places particular emphasis on developing improvement facilitators and maintenance engineer who are responsible for equipment maintenance. Our training for improvement facilitators focuses on having manufacturing supervisors and workers who are active at the frontline of the manufacturing site acquire improvement technologies that support our competitiveness in monozukuri. The number of our improvement facilitators continues to grow each year. As of March 31, 2022, the total number of improvement facilitators was approximately 1,750, making them the mainstay of on-site improvement.

In Murata's equipment-oriented processes, maintenance technicians are also important on-site personnel who support monozukuri. Maintenance

skills, which take time to master, are standardized as formal knowledge. This knowledge is passed on at "engineering training gym" that we have set up at our major production sites in Japan and overseas to develop and raise the level of these skills.



A maintenance dojo