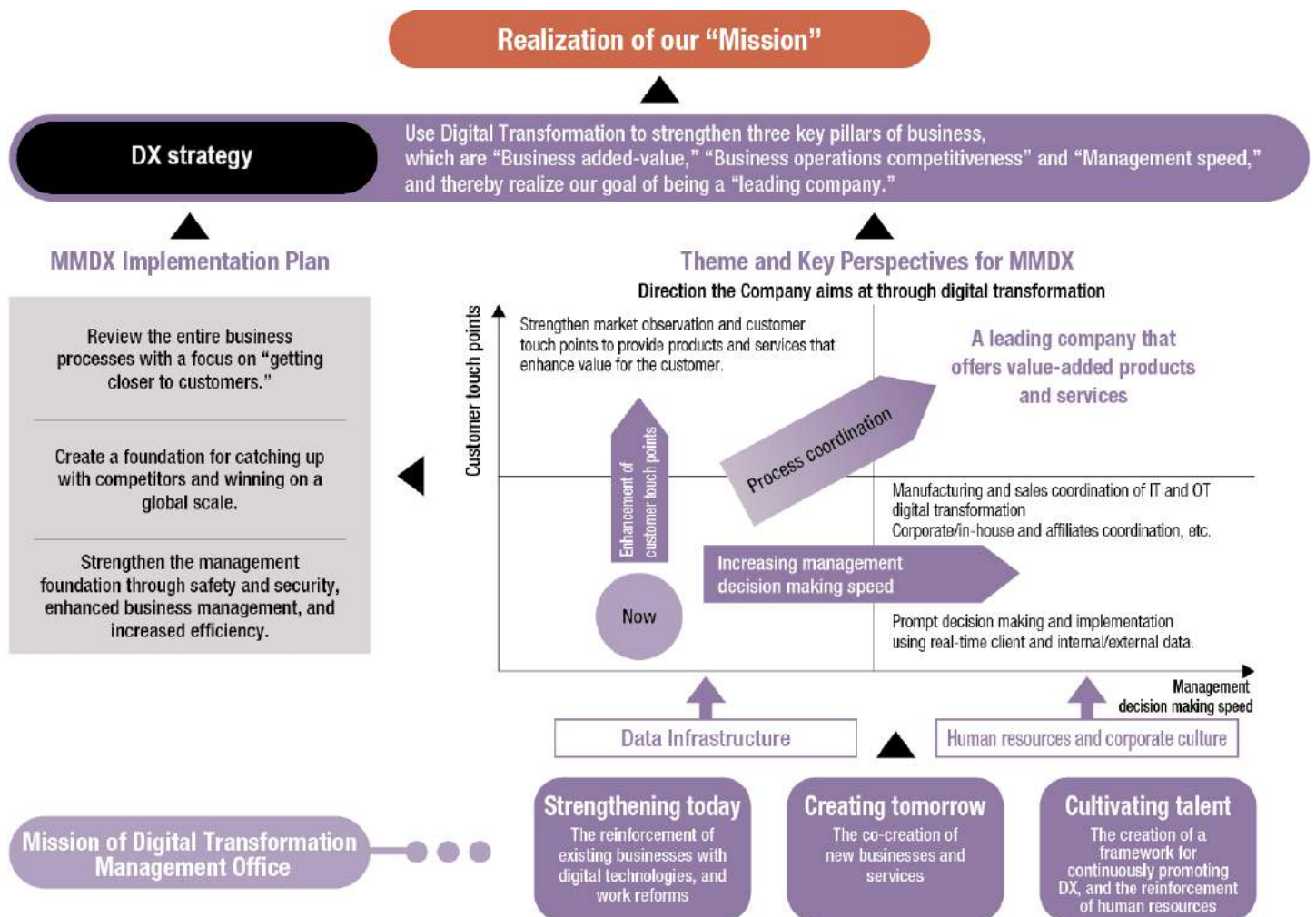


DX Strategy

We strongly promote digitalization strategies that use data and digital technologies, driving implementation along the three pillars of business added-value, business operation competitiveness and management speed as we aim to become a leading company in the DX sphere.

The Group is pursuing a DX strategy as a way to lay the foundations to prevail on the global stage. Toward achieving Our Commitment from 2030 to 2050, the DX Promotion Department is playing a central role in driving transformation with three missions, **Strengthening today**: using digital technology to reinforce existing business, **Creating tomorrow**: co-creation of new business and services, and **Cultivating talent**: reinforcing human resources and systems to effect reform continuously. To materialize the three pillars of DX promotion, namely business added-value, business operation competitiveness and management speed, we have selected priority themes to be addressed based on the key DX perspectives of enhancement of customer touch points, process coordination and increasing management decision making speed, as well as the system and data infrastructure improvements and human resource and culture improvements that underpin them. Our business divisions and IT/digital departments are implementing these activities on a joint basis. By carrying out these activities on a speedy basis, the Group will aim to achieve real-time management that is responsive to societal change, environmental change and our own transformation. Since fiscal 2021 we named these DX initiatives of the Mitsubishi Materials Group "MMDX", and from fiscal 2023, two years after the start of MMDX, we shifted into a new phase as "MMDX2.0."



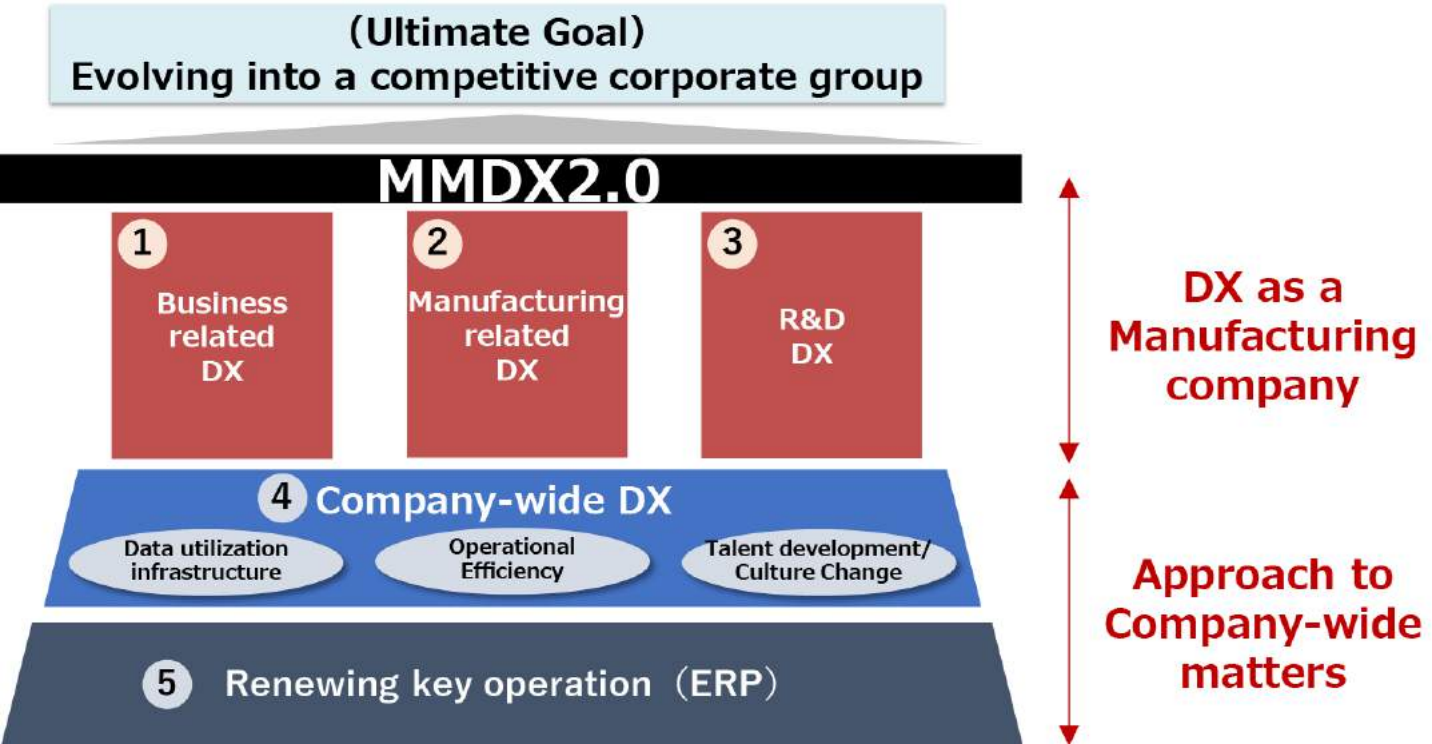
Shifting to a New Phase: MMDX2.0

While MMDX activities to date have started to yield results in connection with several themes including the enhancement of customer touch points, issues have also emerged, such as the setting of limited themes in the area of manufacturing, efforts being in parallel with those being promoted by other organizations such as smart factory activities, inadequate implementation capabilities at the execution stage, and understanding of MMDX among employees in the field lacking penetration. Given these challenges, from fiscal 2023 we have been addressing the following three points on a priority basis as MMDX2.0.

The first is strengthening the manufacturing area. To ensure that field-level activities are efficient and effective, we incorporated efforts such as the smart factory activities pursued by the Monozukuri and R&D Strategy Division to date as DX themes, integrating both the themes and the structures underlying them. In addition, under MMDX2.0 we have reorganized DX efforts into five areas: Business related DX and Manufacturing related DX, R&D DX as a manufacturing business, as well as Company-wide DX, Renewing key operation as DX initiatives that span the Group.

The second is strengthening the execution system. We have developed a promotion structure that unifies business and DX divisions by transferring specialists from the DX Promotion Department to the business divisions and other areas responsible for executing the DX themes. In addition, to roll out DX themes across the Group and internalize a structure for the development, maintenance and operation of systems, we split IT functions from Material Business Support, the affiliate company entrusted with the Group's indirect operations, and established Mitsubishi Materials IT Solutions (MMIS) as a system function company inheriting some employees from the DX Promotion Department at head office.

The third point is activation of bottom-up activities. In addition to existing DX themes that have been set according to a top-down approach, we have been working to make MMDX a groupwide endeavor that involves those working in the field by establishing various schemes including the creation of themes originating in the field, a system to take on challenges that allows for failure, and the provision of learning programs and accompanying support for employees.



TOPICS

Selected as a "Noteworthy DX Companies 2023" in "DX Stocks 2023"

In May 2023, the Company has been selected as a "Noteworthy Digital Transformation (DX) Companies 2023" in a program run by the Ministry of Economy, Trade and Industry (METI), the Tokyo Stock Exchange (TSE), and the Information-technology Promotion Agency, Japan (IPA).

The selection as one of the "Noteworthy DX Companies 2023" is in recognition of MMC's DX achievements, human resource development, and efforts to foster a corporate culture. We are currently operating a business that collects E-Scrap (discarded circuit boards, etc.) from all over the world and recycles them into valuable metals. And in December 2021, we launched a new platform called "MEX" (Mitsubishi Materials E-Scrap EXchange) that enables the transaction to be conducted online, realizing a business model that will attract more business partners through DX.

Furthermore, regarding the development of DX human resources, we are working on "common digital literacy education" to raise the level of all employees and "advanced digital education" to secure human resources who will drive business growth. We will continue to pursue management reforms through "MMDX 2.0" and implement a variety of initiatives to realize our vision and evolve into a competitive corporate group.



DX注目企業2023
Digital Transformation

- ▶ Mitsubishi Materials selected as a "Noteworthy DX Companies 2023" in "DX Stocks 2023"

Reforming Business Processes and Operations Enhancement Through ERP Introduction

Reforming Business Processes and Strengthening Operations Through ERP Introduction

Mitsubishi Materials is working on ERP introduction to renew and standardize business processes, including domestic and overseas Group companies.

With the renewal and standardization of accounting processes, which will be pursued as a first step, we aim to fundamentally rethink accounting-related operations, speed up the monitoring of business results and improve the accuracy of results forecasts. Our target is to start operation of the system from fiscal 2025 at the head office, with a group rollout to follow. With the renewal and standardization of sales and logistics processes, we are exploring the introduction of ERP that can achieve operations that are fully integrated globally and across sites, and which can adapt to the targets of each in-house company, such as strengthening cost control by product.

Strengthening Operations

Copper & Copper Alloy Business: Developing More Sophisticated Development and Production Data Utilization

As a means of strengthening operations in the Copper & Copper Alloy business, we are working to improve yield rates and production capacity at copper product production sites, and to utilize development and production data at plants with the aim of streamlining operations.

To date, we have developed a data infrastructure used for collecting and accumulating data from various equipment at our plants and using it for trend analysis, and implemented a proof of concept (PoC) related to trend analysis of defects to optimize manufacturing conditions.

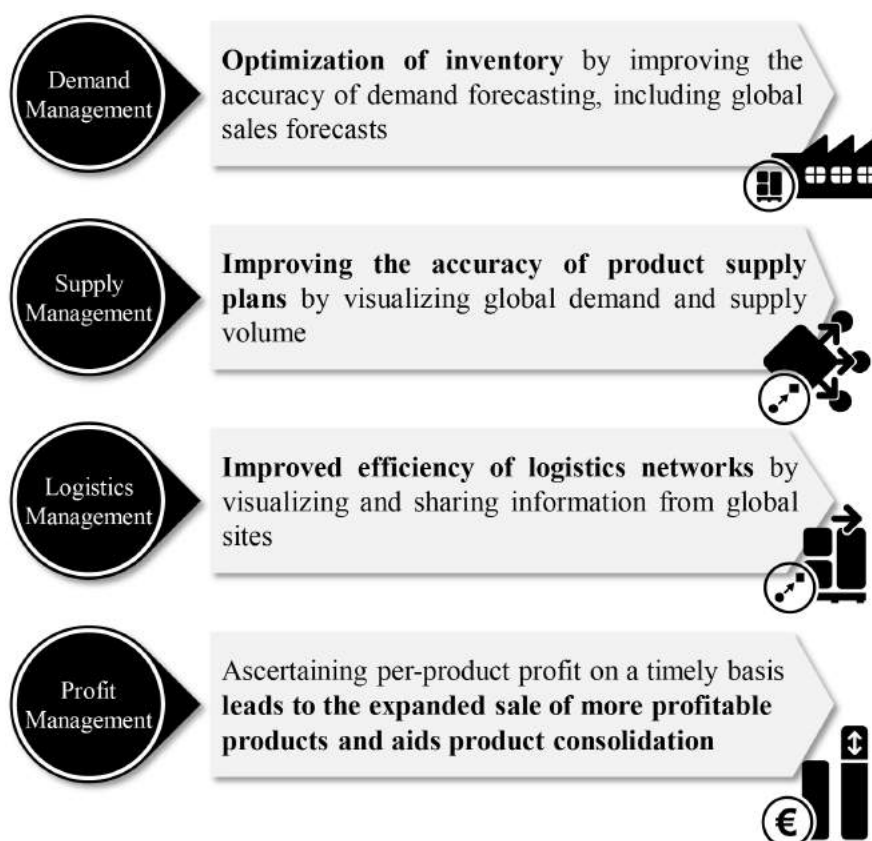
Looking ahead, to swiftly and efficiently drive improvement activities that utilize plant data in light of the results gained from the PoC, we will work on enhanced field data collection and accumulation for advanced analysis, and the cultivation of experts in data infrastructure utilization at each plant.

Metalworking Solutions Business: Developing More Sophisticated Supply-Demand Management for Cemented Carbide Tools

As a means of strengthening operations in the Metalworking Solutions business, we are working to build a global demand-supply management system for cemented carbide tools.

We have long faced operational challenges in responding quickly and appropriately to demand from end customers and distributors, and in developing optimal sales and production plans that reflect the supply-demand balance.

To address these challenges, we will work to develop more sophisticated demand, supply and logistics management systems utilizing DX. As of fiscal 2023, we have already introduced demand management tools and begun efforts to improve demand forecasting accuracy, and in fiscal 2024 we will develop supply management tools and systems, rolling them out to global sites.

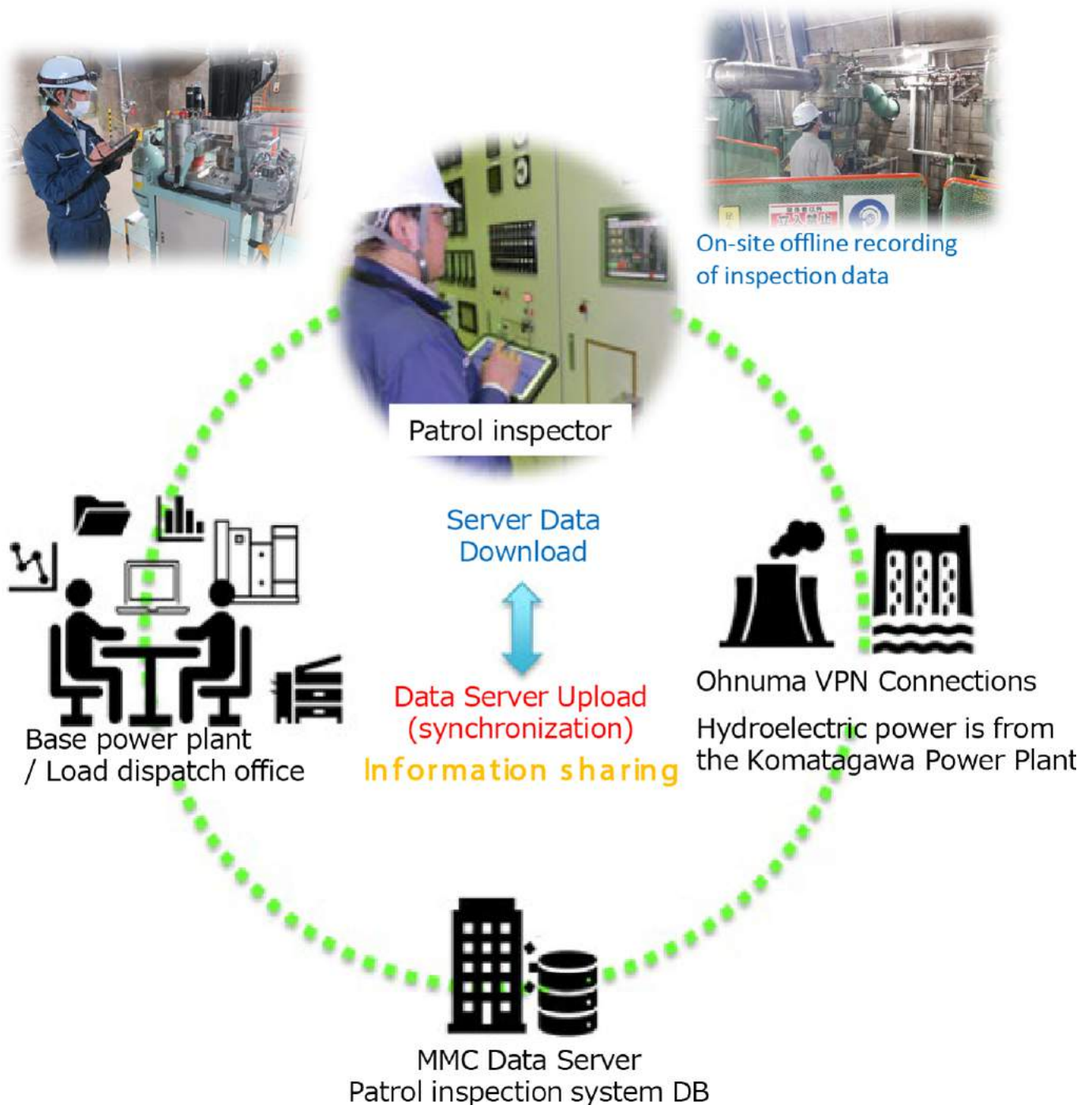


Renewable Energy Business: Developing More Sophisticated Power Plant Operation

To fulfill the social responsibility of ensuring the stable supply of clean power in the Renewable Energy business, improving the reliability of power plant operation is an important theme. To achieve this, the Renewable Energy business is working to develop more advanced operation utilizing digital technologies, and is pursuing the following three steps with the aim of achieving automated prediction and control, preventive maintenance and centralized remote control.

1. Digitalization of Operating Information
2. Analysis and Prediction Using Data
3. Achieving Remote Operation Under Optimum Operating Conditions

In geothermal and hydroelectric power generation, the security and maintenance patrol and inspection work at five power plants was digitalized, moving from printed forms to database recording using tablet devices. We are also working to speed up information sharing and simplify trend and anomaly analysis, and in the future, we will focus efforts on operational prediction and automation based on the visualization and simulation of operating information through the accumulation of operating data.



Acquisition of New Added-value

Acquiring New Added Value

Smelting and Resource Recycling Business: The MEX E-Scrap Business Platform

We operate a resource recycling business that collects E-Scrap (mainly raw materials for recycling such as discarded circuit boards) from all over the world and recycle them into valuable metals. To create new added value in this business, we developed MEX, an E-Scrap business platform enabling transactions with recyclers, trading companies and other suppliers to be carried out with speed and ease. The service was launched in December 2021. MEX improves the transparency of information related to E-Scrap transactions and makes transactions more convenient, leading to greater supplier satisfaction and enhancing our attractiveness as an E-Scrap destination.

Since the service launched, MEX has added or developed the following features in an effort to provide better service.

- E-Scrap transaction inquiry, consultation and procedural functions
- Function to exchange confirmation and notification items during E-Scrap inspection
- Digitization of receipts (shifting from hand-delivered or posted correspondence to electronic format)
- Smartphone support for various functions

In the future, we will develop MEX into an industry-wide platform, with the aim of contributing to improved E-Scrap recycling rates around the world.

MEX : Mitsubishi Materials E-Scrap EXchange

By achieving visualization of the E-Scrap business and ensuring safe and secure transactions, we aim to drive the growth and expansion of the E-Scrap business overall.

Recyclers and Trading Companies



MEX connects customers with Mitsubishi Materials, making them close partners



Mitsubishi Materials



Copper & Copper Alloy Business / Electronic Materials & Components Business: Developing More Sophisticated Customer Contact Points

As an initiative to create new added value in the Copper & Copper Alloy business and Electronic Materials & Components business, we are working to develop more sophisticated customer contact points with the aim of improving customer satisfaction.

To date, we have visualized sales activities through the introduction of SFA tools and BI tools, and the analysis and utilization of customer and business negotiation data has led to effective action, such as faster decision making, effective sales and marketing activities aimed at customers, and improved accuracy and speed in responding with delivery deadlines. Going forward, we plan to develop a portal site for customers to provide faster responses on delivery deadlines and make it more convenient to place orders.

Metalworking Solutions Business: Developing More In-depth Metalworking Solutions

To create new added value in the Metalworking Solutions business, we are working to enhance cutting solutions with the use of digital technologies.

We will provide digital services to address the issues that customers face throughout the metalworking process from tool selection to tool management, including the quick selection of the best tools, cost reductions through the optimization of tool costs, the swift design and prototyping of highly productive processing methods, improved metalworking precision and shortened processing times, and the efficient use of tools and minimization of tool inventory through regrinding and recycling. First, in fiscal 2025 we plan to launch a tool selection service that will show optimum tool information and assembly status.

	Tool selection	Tool purchase	Preparations for mass production (trial production)	Mass production	Tool management
Customer challenge	<ul style="list-style-type: none">Quick selection of the best tool	<ul style="list-style-type: none">Cost reduction through tool cost optimization	<ul style="list-style-type: none">Rapid design and trial production of highly productive processing methods	<ul style="list-style-type: none">Improvement of machining accuracyReduction of machining time	<ul style="list-style-type: none">Efficient use of tools through regrinding and recyclingMinimum tool inventory
Value provided by MMC	Digital service menu				
	Automatic tool selection	Automatic process design (Process digital planning)	Prototype production, Outsourcing	Proposal of mass production quality and economic efficiency	Automatic optimization of machine tool control