

Measures to Reinforce Platform for Delivering Value

Measures to Reinforce Platform for Delivering Value to Realize 2030 Vision

		Input (management resources)	Goals in 2030	Issues to be addressed (short, medium, and long term)
Platform for delivering value	 R&D	 Kawamura, Manager • R&D expenses: 0.75 billion yen • Development division engineers: 28 • Joint development with customers and external organizations • 4+ α core technologies (drying, mixing and kneading, material handling, and control) + measurement	• Full-scale installation of low-carbon and environmentally friendly products • Installation of automated products leveraging AI and IoT technologies • Lateral deployment of environment-related equipment	• Human resource development for transfer and expansion of core technologies • Short-term and medium- to long-term product development aimed at decarbonization • Building a development platform for environment-related equipment • Improvement of development speed for increasing the amount of social implementation
	 Sales and consultation	 Nakayama, General Manager • Establishment of a marketing division • Adaptation of the organization for globalization • Utilization of past and future data • Support of comprehensive operation of plants	• Offering of environmentally friendly products for low carbonization • Offering of products+operation through remote operation and automation • No.1 manufacturer in Asia	• Development of environmental products • Acquisition of plant operation knowhow • Acquisition of overseas partners (agents) • Expansion of the ASEAN market • Nurturing of human resources who will play the main role in developing fields
	 Planning and designing	 Uehara, Manager • Group of skilled engineers who respond to customer needs • Core technologies (mixing and kneading, heating, material handling, and control) • Accumulation of knowhow regarding plant design and technical bases • Cooperation structure with technical design partner companies	• Plant solution provider • Proposals that create values at both customers and society • Comprehensive support of remote operation, automation, saving manpower • Overseas expansion of global standard products	• Systematic human resource hiring, strengthening the knowledge of the workers through nurturing • Enhancement of core standard products that respond to customer needs • Improvement of customer satisfaction in quality, safety, and environment friendliness • Proposal of suitable products that reflect customer requests and meeting the delivery date • Improvement of design work efficiency and shift of resources to new expanding business fields
	 Procurement	 Umezawa, Manager • Introduction of a new core system • Construction of new materials warehouse • Human resources to build procurement base	• Operation structure focused on stable purchasing and cost reduction • Information sharing with suppliers and favorable relationship of trust with them • Acquisition of ample knowledge of products and industry trends and enhancement of communications with suppliers and within the company • Contribution to the mitigation of environmental burden	• Soaring prices and shortage of raw materials, etc. and sudden foreign exchange fluctuations • Closure or scaling back of suppliers as well as discontinued production or prolonged delivery • Aging of core system and increasing burden of daily operations
	 Manufacturing	 Yamada, Factory Manager • Introduction of 2 new rebar NC processing machines (BW) • In-house development and revamp of rebar supply system • Integrated technology and skills for integrated in-house products from primary processing of materials to canning welding, machine processing, final assembly, and trial run as well as production and shipment control	• Improving production efficiency by 10% and production capacity by 10% • Promotion of flexible delivery of a wide variety of products in short delivery time • Achievement in both quality improvement and reduction of manufacturing cost • Improving productivity of Thai subsidiary • Manufacturing collaboration within the Nikko Group and generation of synergies	• Normalization of excessive overtime • Promoting engineers to acquire multiple skills and building flexible backup system • Enhancement of high-mix low-volume production corresponding to destinations • Achievement in both quality improvement and reduction of manufacturing cost • Instruction of manufacturing technologies for Thai subsidiary
	 Construction work	 Noguchi, Section Manager • Operation engineers: 25 (up 5 engineers) including 9 field management engineers and 18 chief engineers • Contractors around the country • End-to-end structure from assembly to operation adjustment	• Operation engineers (plan): 60 (up 10 from existing level) • Reinforcement of field management engineers and chief engineers and take on all sorts of plant installation work • Digitization of work plan, safety documents, etc. to enable a structure where anyone can handle them • Increase in areas to eastern and western bases from the head office (From 2025 onwards)	• Actions for safe work and safety instruction • Identifying new contractors and collaboration with other departments • Easy-to-implement structure in the design and construction work stages • Reinforcement of personnel (operation engineers)
	 Maintenance	 Sone, Manager • Service staff: 120 employees • Transfer of front office operation, strengthening of organization • Development of workplace safety and machinery management system	• Plant management through asset management • Start of operation service • Global operation of customer support	• Switch from after-incident maintenance to preemptive maintenance • Acquisition of on-site human resources [(i) to a workforce of 150 area service employees], [(ii) reinforcement of contractors] • Remote management of plant operation and utilization of operation data for prevention and prediction

	Measures (short, medium, and long term)	Progress, outlook	FY2023 evaluation
▶	• R&D expenses from FY 2022 to FY 2024: 2.5 billion yen (2.1 times) • Number of development personnel to be hired from FY 2022 to FY 2024: 12 • Nurturing based on active implementation of human resource rotation • Promotion of open innovation with customers and external organizations including universities • Update of product development roadmap and redistribution of resources	• From FY 2022 to FY 2024 (forecast): 6 new graduates, 5 mid-career hires (including 2 foreign engineers) • Continuation of human resource rotation • Joint R&D: 8 projects being implemented • Turning measurement technology to core technologies	• Start of AI-related device installation • Start of installation of hydrogen-fueled burners (prospected) ○
▶	• Trade shows for new products • Collaboration with customers (development, education) • Establishment of overseas planning division and support for acquisition of products and partners • Establishment of ASEAN Business Strategy Office at Nikko to pursue synergies with the Thai subsidiaries (NAT and GMT) • Enhancement of the hiring of new graduates • Arranging more environmentally friendly products by joining an industry association	• A trade show for new products in November 2022 • Collaboration with customers: To be implemented for mutual education • Conclusion of agent agreements with one company each in Thailand and Vietnam • Review of supply chain and capturing the recycling AP market • Launch of new AP for overseas market	• Start of introduction of heated recycling system to the Thai recycling market (Delivery of 6 units) • Thailand: Start of market test for new recycling system • 1 GM and 2 overseas (1 for sales and 1 for Customer Support Center) • Joined Japan Road Contractors Association (JRCA) as a support member ○
▶	• Number of engineers to be hired from FY 2022 to FY 2024: 35 • Promotion of standardization and development of products with high added values • Building of engineering structure that combines sales and maintenance service • Restructuring and development of global models and technological involvement in overseas production • Promotion of outsourcing and digitization of operations	• Active investment in resources, placing engineers at the eastern and western bases • Maintenance of ratio of standardization at 70% Further sales promotion and deployment accompanying the registration of the new block-type plant as an advanced energy efficient system • Building an organization in charge of design quality control and development of engineering method	• Launch of a division dedicated to overseas and new businesses, and building of technological structure to accommodate business expansion including overseas • Development and sales of a new control panel model that adapts to DX ○
▶	• Cost reduction through centralized and distributed purchasing and averting risks • Working with designing section and promote functional purchase • Reconsidering a sustainable supply chain • Shift to paperless and PDM using new system, etc.	• Cost reduction => Rate of achievement in FY 2022: approx. 70% Rate of achievement in FY 2023: approx. 82% • Reconsideration of supply chain => Being implemented • New system => Completed. Currently in the process of shifting to EDI, etc. for achieving paperless processes Shift to EDI FY 2022: approx. 50%; FY 2023: approx. 70%	○
▶	• Expansion of production space through construction of factory buildings • Replacement of aged equipment • Reconstruction of factory layout • Promoting engineers to acquire multiple skills • Utilization of foreign technical interns and advanced skills training	• Continuation of human resource rotation • Continuation of vitalization through appointment of young employees as group leaders • Currently building an environmentally friendly plant (scheduled for completion in fall 2024) • Currently implementing manufacturing cooperation and collaboration and exchange of manufacturing technologies with Ube Kohki and Matsuda Kiko	○
▶	• Digitization of work plans and safety documents (conversion to online, and online work) • Easy-to-construct unit structure (design and cooperation), increasing the percentage of parts built in-house • Promotion of structure designs that facilitates safe work • Proactive negotiations with contractors throughout Japan (discovery of new contractors)	• Improvement of product finish, development of a mechanism for ensuring safe construction work • Initiatives for reviewing construction work processes that ensures safe construction work • Two new contractors. Continued efforts for discovering more contractors • Increase in 5 operation engineers (6 planned in 2024)	○
▶	• Predictive maintenance based on next-generation diagnosis and promotion of shift to next-generation preventative and predictive maintenance • Hiring, reduction of emergency repair, and improvement of efficiency through division of labor • Starting actual operations at cooperating factories and refining the operations	• Concluded agreements with 9 AP users and 30 BP users. Expecting 20 contracts per year in the future • Plan to appoint employees who are in charge of area-based front office operations • Start of data monitor operation	△