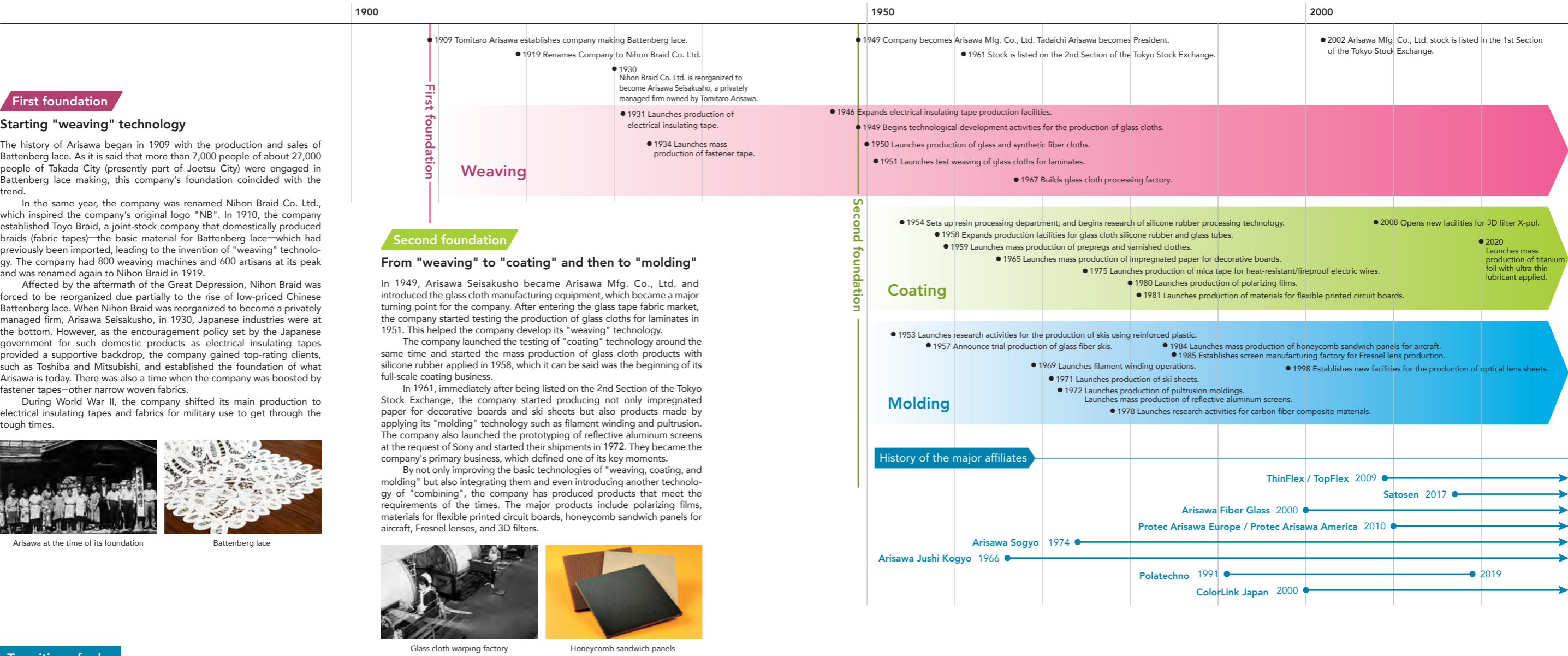


Value Creation

Management Capital to Support Value Creation

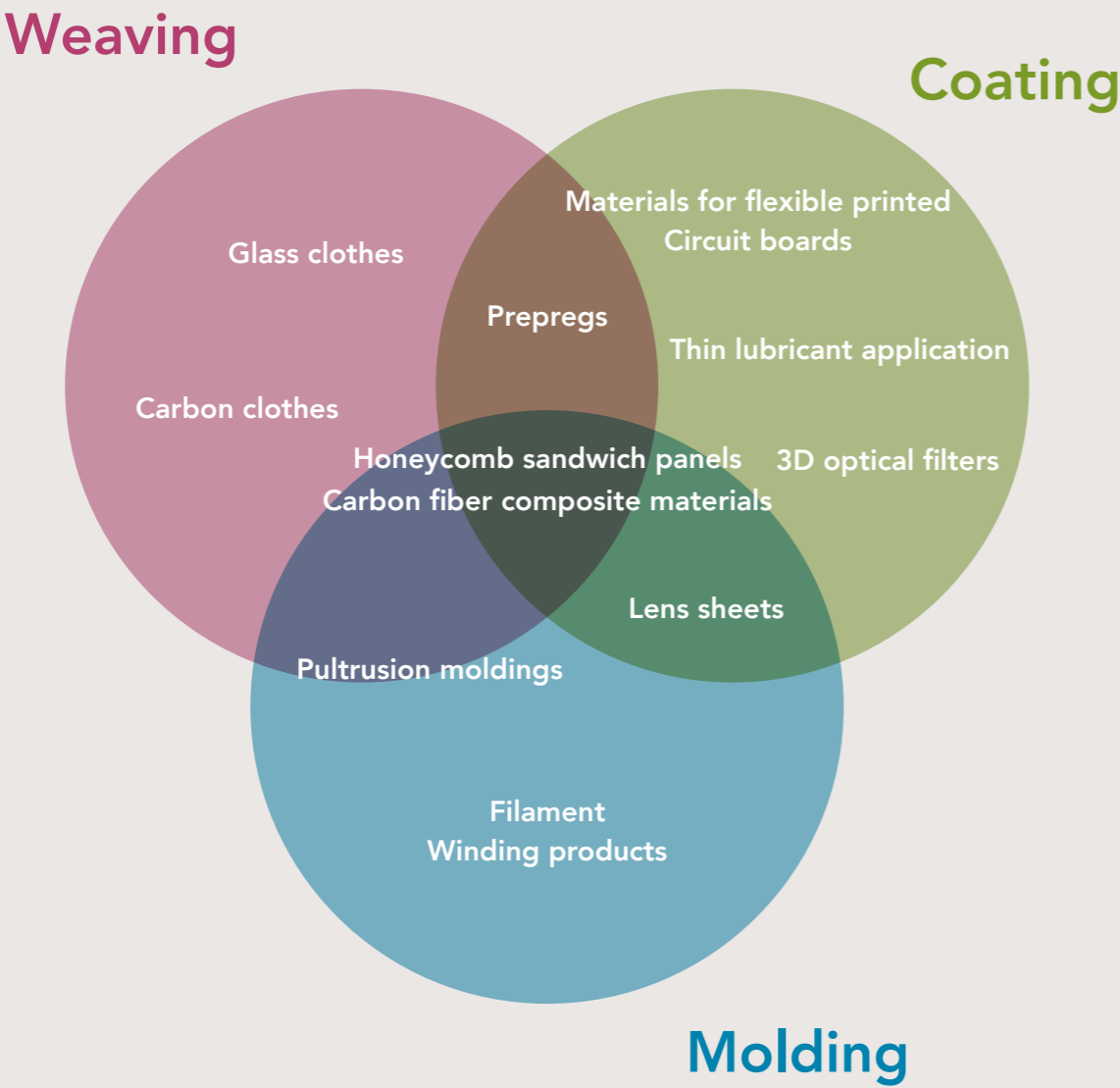
Arisawa has contributed to society for 115 years by developing its unique technologies of "weaving, coating, and molding".



Value Creation

History of Value Creation

Keeping developing technologies of "weaving", "coating", and "molding" and combining them gives rise to infinite possibilities.



For details on the products developed through the combination of key technologies, see page 27 (Businesses / Outline of Each Segment).

Weaving "Weaving" technology, which is the starting point of our innovation

Arisawa makes unique clothes from glass fiber, aramid fiber, and carbon fiber by using various weaving methods, such as plain weaving, twill weaving, and satin weaving. One of our strengths is weaving clothes that meet the needs of clients. We offer an integrated service from thread selection to weaving design and manufacturing. We have also developed processing technologies on our own that make the most of woven clothes and tapes. There are various types of processing available to

produce high-performance clothes: "opening processing", which makes clothes thinner by spreading threads evenly, and "surface processing", which enhances adhesiveness to other materials. These high-performance clothes are applied in a wide range of areas, such as printed circuit board materials for electronic devices and automobiles, electrical insulating materials for motors and heavy electrical machines, materials for aircraft, and sports and leisure materials.

Coating "Coating" technology to produce new functions through unique resin development

Applications of coating technology allow us to produce products with functions, such as electric insulation and fire resistance, while maximizing the characteristics of materials. We specialize in "thin film coating", which coats any material thinly and evenly, and in-house development of "high-functional resins", which are optimized according to the purpose of use. We have produced thousands of products by mixing hundreds of resin recipes. Among these, our coating products, which are composed of glass clothes or films and made through the combination of

various resins, are highly acclaimed in various industries. Materials for flexible printed circuit boards are used to increase the performance of electronic devices, prepregs made of carbon clothes are used to make aircraft lighter and stronger, and electrical insulating materials are used not only for motors and generators but also to help develop nuclear fusion power plant technology. We also manufacture 3D display optical filters using fine alignment technology.

Molding "Molding" technology to maximize the performance of FRPs

Molding by mixing fibers with resins allows us to produce molding materials appropriate for the purpose of use. Various technologies are used according to the purpose of use to mold products and maximize their performance as requested by clients: press molding, which molds a prepreg into a plate, FW (filament winding) molding, which molds into a pipe through the impregnation of resin into a glass fiber or carbon fiber, and pultrusion molding, which molds by continuous pultrusion. Utilizing its

characteristics, such as lightweight, easiness to handle, superior corrosion and weather resistance, and higher mechanical strength, the FRP (fiber reinforced plastic) is used for materials for aircraft interiors, pressure vessels for water treatment, materials for civil engineering constructions, and electrical insulating materials. We also manufacture optical lenses and projector screens using minute molding technology.

Value Creation

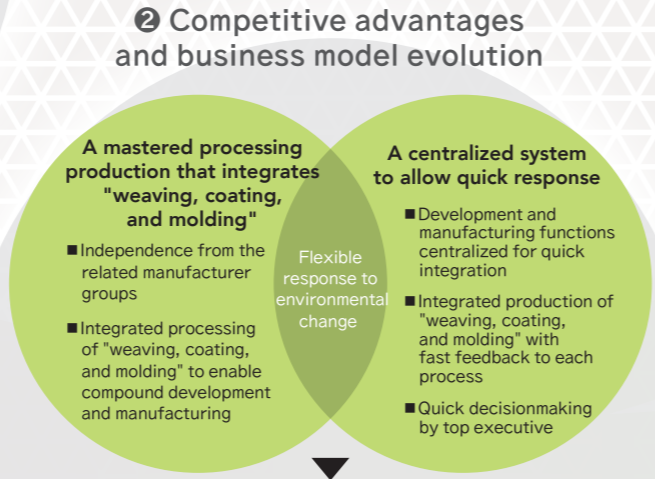
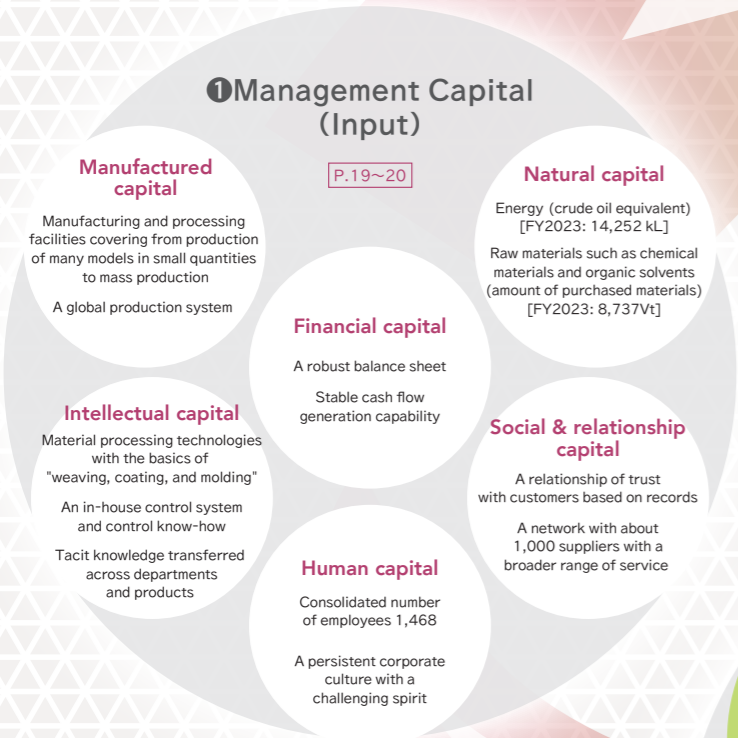
Value Creation Process

Arisawa started its business with the making of one braid about 100 years ago. We at Arisawa have supported various kinds of product-making by developing products using glass fiber and other new materials and innovating technologies in response to the needs of the times. With responsibility and pride as a company involved in the initial stage of product-making, we will move forward more smoothly and actively to change product-making around the world for the better in the next 100 years.

Our group's current major product segments include electronic materials, industrial structural materials, electrical insulating materials, and display materials. Through value-creation activities to support these segments, we offer products and services that help people have richer lives. We are committed to creating social and economic values by tackling the four issues "contribution to a decarbonized society", "development of diversified human resources and improvement in job satisfaction", "promotion of circular economy", and "enhancement of governance" through activities to be a strong company that can achieve sustainable growth.

**External environments (social issues)**

- Climate change -Resource depletion -Ecosystem collapse
- Tightening of regulations -Diversification of values and lifestyles
- Aging society -Divisions of the supply chain
- Exposure of human rights issues -Mobility of workplaces
- Progress of innovation -Exposure of geopolitics and cyber risks



Existing businesses utilizing competitive advantages + Innovative new businesses based on the CIC spirit

Evolution of the mid-term model

- Evolution into a proposal-based business through active discovery of needs
- Evolution into an industry front-runner leading toward a decarbonized society
- Evolution into "weaving, coating, and molding" + "combining"
- Evolution into a global manufacturer from Joetsu to the world

C I C

"Create, Innovate, and Challenge"  
Better today than yesterday better tomorrow than today



Value Creation

Management Capital to Support Value Creation

With the capital built up through repeated growth as our foundation, we will further increase our competitive advantages. While evolving the value creation process through business strategy management and active initiatives on ESG issues, we raise our corporate value.

Financial capital

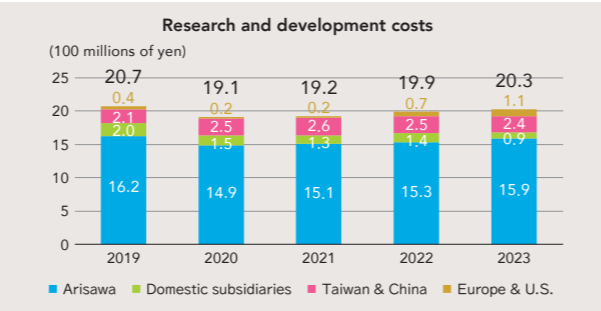
We have not only working capital but also financial capital that allows stable and flexible operation to implement capital investment, M&A, and DX investment for growth as necessary. Major financial resources are flexibly gained from cash flow from operating activities and borrowings from financial institutions. We set an ROIC goal of 6 % in our mid-term management

plan, aiming for profitability enhancement and capital efficiency improvement. Specifically, we first maintain a healthy cash flow through business and secure financial soundness, and then actively allocate the capital to new business investment and research and development investment for further growth. We will return the resulting surplus appropriately to our stakeholders.

Intellectual capital

Since our foundation, we have improved our core technologies of "weaving, coating, molding", and "combining"\* through trial and error to fulfill customers' needs. We have many experienced engineers who have been involved in development to highly integrate these technologies and optimize the functions. Our unique technologies made through research and development with new innovations based on the experiences passed down from senior employees to junior employees are positioned as important assets that contribute to the growth of customers' businesses. By understanding the characteristics of products required by customers and the in-house manufacturing process and incorporating our core technologies cultivated over the years, we proceed with obtaining an optimized design. To continue thriving in business and achieve sustainable growth, we have set a target for new products to account for 50 % or more of the total sales (with the counting period being 3 years after the launch). We also set up a program called the "new product development award", which is one of the incentives for

employees who contribute to the development of new products, and in FY2018, we introduced a "15 % culture", where employees engaged in development can spend 15 percent of their working hours studying what they like. Several products developed through this "15 % culture" program have actually led to sales improvements. We will continue to improve the environment so that more new products and businesses are born.

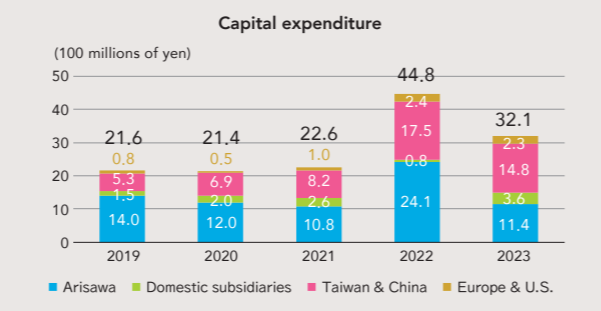


\*"Combining" refers to a technology that continuously laminates multiple thin materials together, such as a two-layer, double-sided CCL (one of the materials for flexible printed circuit boards), or precisely laminates a 3D filter to an LCD panel. Technologies derived from this "combining" help us develop various kinds of products.

Manufactured capital

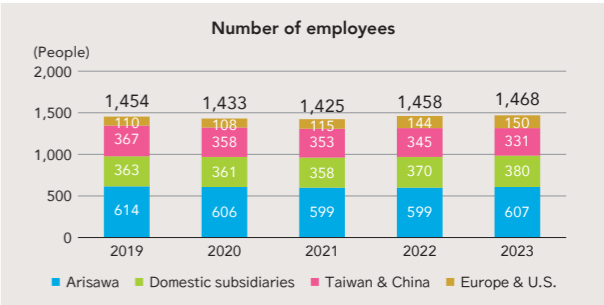
We use facilities that can produce many models in small quantities to better cater to various customers' needs. Having facilities that can handle medium to mass production with our sights set on the expansion of the scale of customers' businesses and an integrated production system, from pre- and post-processes to inspection, we deliver advanced quality control and stable supply. In addition, in-house development of a control system for production facilities achieves production efficiency improvement and cost reduction. We discuss quality at a daily meeting called "Hiruichi" ("ichi" means a "market" where people gather) held at 1 p.m. to prevent problems and issues from being carried over to the following day. The managers and supervisors of the Manufacturing Department, the Quality Assurance Department, and the Manufacturing Engineering Department gather to share daily issues and data and work together to find solutions through discussions on defect

causes and yield rates. This communication helps support field skills.



Human capital

Our executives and employees are traditionally serious, sincere, honest, patient, and hungry for challenges, which we can say has supported more than 100 years of our history. By integrating knowledge and technologies cultivated since our foundation step by step through trial and error, we have offered highly reliable products to customers. We have multi-skilled operators who can handle various products, trained operators with adapting capabilities, and development specialists, and many of them have been long employed. Turning tacit knowledge into explicit knowledge helps us build a stronger human network.



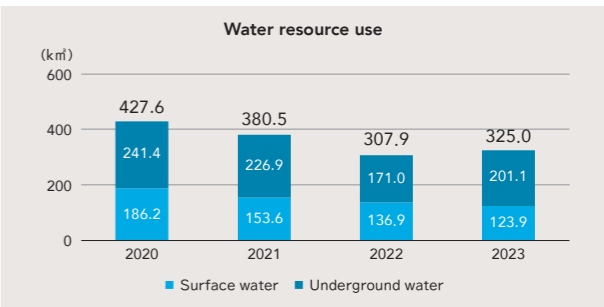
Social capital

Based on the relationship of trust with suppliers, we grasp the circumstances of each industry and take such measures as advanced acquisition of materials that have procurement risks. We have also diversified suppliers to establish a stable supply chain. Promoting CSR procurement with respect for human rights, labor rights, and the environment while ensuring material quality and stable supply allows high-quality and stable product-making. With the importance placed on continuous partnerships with suppliers based on trust, we conduct procurement for mutual sustainable growth.

At the time of our entry into the FRP field, when we only had weaving technology, we sincerely focused on prototype-making to materialize requests while being given technical advice by heavy electric manufacturers. These experiences helped us build a strong relationship of trust with clients. A person from a trading company once told me, "Mr. Arisawa, your company is a department store of prototypes". We would like to cherish the relationship with clients who contact us first in the consideration or prototyping phase, which is a great asset to us.

Natural capital

As climate change countermeasures, we introduce renewable energy and improve energy use efficiency to reduce CO<sub>2</sub> emissions. We are also working on reducing water resource use and waste disposal as measures for resource circulation and global environmental conservation. Regarding reductions in water resource use, we have enhanced water intake management by installing a flowmeter and have introduced aboveground piping to prevent leaking.



Value Creation

Sources of Value Creation (Business Model)

We aim to create a sustainable society and ensure its growth by creating a business model with originality while tackling social issues and then providing various values to our stakeholders.

Initiatives toward business model evolution

Improvement in sustainable corporate value

To efficiently operate business portfolio management for further improvement in corporate value, we focus on capital cost-conscious management with ROIC set as an indicator. As it is important that our management direction is properly understood and empathized by our stakeholders, we also provide opportunities for active dialogue.

Enhancement of competitiveness for value creation

We enhance our competitiveness by creating new value through the active promotion of carbon neutrality and development activities targeting new growing markets.

Quality improvement

Utilizing know-how cultivated through APS (our production management system), we will improve our services and quality including ones in new fields.

Patent strategy that has moved from being defensive to being aggressive

To maintain and improve technological innovation and competitiveness, we place importance on owning effective patent rights and know-how. While preventing important technologies from leaking, we acquire the date of notarization for some know-how and secure the right of prior use. Our previous intellectual property strategy focused on preventing other companies from infringing our patents and heightening barriers to entry into our businesses.

Taking the opportunity of introducing ai-coater\* last year, we started promoting open innovation proactively and accelerating efforts to launch joint development projects and new OEM projects. This allows us to enhance the cooperative relations with our clients (partners) and explore new market opportunities. It also clarifies new technical issues through joint development and accelerates the acquisitions of patents and know-how in the solution-finding process. By properly managing the use of patents and know-how while making joint applications, we continuously improve our technologies and further strengthen our competitiveness.

We also provide internal professional education periodically to help employees deepen their understanding of intellectual properties and increase competitive advantages across the enterprise. Going forward, we will develop our patents and know-how as powerful assets and utilize them to explore new markets and expand our businesses.

Direction of business model evolution

We expand the areas of proposal-based business through the active discovery of needs by leveraging the experiences in the existing business fields with competitive advantages. We develop needs with our innovative proposals and high-quality product-making based on the CIC spirit to create new businesses.



Promotion of human resource strategy

To keep offering products and services that exceed the expectations of customers and society, we deploy a human resource strategy that encourages, supports, and nudges motivated employees for their growth. We also promote a comprehensive organizational strategy so that employees can work lively under the new Arisawa brand.

New value creation and challenge for new fields through co-creation

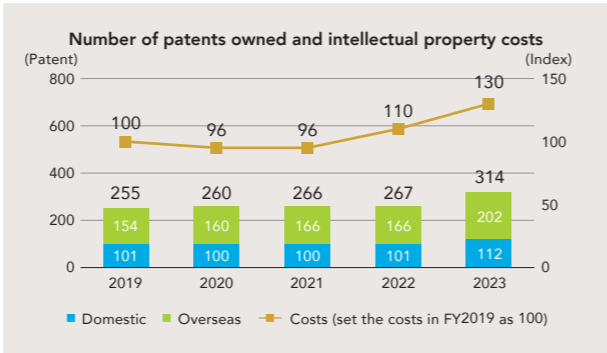
We will create new value through co-creation by finding more partners who can share the same empathy through open innovation. We will also expand our business into new fields to increase value proposition for further expansion of corporate value.

Promotion of coexistence and shared prosperity with the environment

Toward long-term coexistence and shared prosperity with society, we promote eco-friendly product and technology development to actively create new value.

Open innovation

- We increase our corporate value by integrating our and another company's ideas and expanding both sales channels.
- We use our unused ideas for social contribution.



\*ai-coater (arisawa innovation - coater) : A new small experimental coating machine launched in September 2023

New Initiatives for Value Creation

Arisawa Innovation Center

With eyes on the next 100 years, we aim to build a base for open innovation where unprecedented new value is created through the introduction of a design framework that stimulates more communication throughout the company and the integration and co-creation of technologies among Arisawa, other companies, and research institutes. It is called the Innovation Center, where people and ideas come and go.

The Innovation Center was initially scheduled to open in April 2025 but is now expected to be completed in July 2025 due to construction delays caused by difficulties in foundation work because the underground bedrock was harder than expected.

Almost all of our technologies were previously confidential. Manufacturing facilities were previously kept private because they are the core of our know-how. However, with the launch of the ai-coater in September 2023, we began joint development with both existing and new clients. Of course, we invite clients to the development site. Innovation that cannot be achieved by Arisawa alone could be feasible if we leverage each other's strengths with clients (partners).

We hope that this Innovation Center will be a place where participants can foster ideas and bring them to life through programs that make use of our abundant management resources, such as workshops, laboratory tours, and social gatherings. We expect the center to function as a platform that supports a series of processes from idea discovery to product launch and produces results. Assuming that the Innovation Center and ai-coater are hardware, workshops and laboratory tours would be software. This is the place to generate ideas freely, turn them into something new, and spread them to the world.

We envision the future where people say "Arisawa is interesting", "I want to work with Arisawa", and "I want to work at Arisawa".



Rebranding

On April 1, 2023, Arisawa renewed its logo and announced the brand message shown below. The company produces and develops "future pieces" to create its own value.

Before  
( ~2023.03 )

After  
( 2023.04 ~ )



株式会社 有沢製作所



ARISAWA

"NB" is the design logo of its former company Nihon Braid. The company stayed long with this logo for about 100 years.

The triangle is designed like "A" of Arisawa. Its three sides represent the company's core technologies of "weaving, coating, and molding", and its 3 colors represent "cherry blossoms", "sky and sea", and "mountains and fields" of Joetsu City.

We put our thoughts into the logo, hoping to produce something new and unique to Joetsu based on these three technologies.

TOPICS

The company name "Arisawa" became the sub-station name of Minami-Takada Station!

In April 2024, we acquired the naming rights for Minami-Takada Station (Myoko Haneuma Line), the nearest station to our Joetsu Head Office. "Arisawa Mfg. Mae" was added as a sub-station name to the name board of Minami-Takada Station as well as the signboards at the adjacent Takada and Joetsumyoko Stations.

