

# Sustainable Injection Moulding

Sustainability at Sumitomo (SHI) Demag



## Committing to a sustainable future

Climate Change, environmental pollution, limited resources. Our society faces a variety of evolving issues. We have long-passed the point where the single guiding parameter is growth. It takes courage and care to make sustainable decisions and implement ethical measures. At Sumitomo (SHI) Demag, we believe sustainability is a responsibility, and we're committed to leading the way toward a circular economy.

As an established company in the plastics industry, we leverage our strengths to drive positive change across the sector. Our fully electric injection molding machines set new standards in energy efficiency and emissions reduction, promoting a more sustainable production landscape for our customers. Since joining the Sumitomo Group in 2008 and becoming part of our parent company, Sumitomo Heavy Industries (SHI), we have evolved into a global player, combining the best of German and Japanese engineering expertise. In addition to our headquarters in Schwaig, Bavaria, we operate further production sites in Wiehe (Thuringia) and Ningbo (China). We are also represented by sales subsidiaries in Brazil, the Czech Republic, Spain and Portugal, Poland, Hungary, the United Kingdom and Ireland, Italy, and France,

Aligned with the SHI Group's mission, **"Enhance society and those within it with compassion through our ownership and vision"**, we take responsibility for advancing both industry and society. Thus, we focus on delivering solutions that minimize environmental impact and promote the circular economy. Our holistic sustainability strategy is woven through every aspect of our work ensuring we move forward responsibly and collaboratively – in an economical, ecological, social and compliant matter.



„Sumitomo (SHI) Demag is a manufacturer of injection moulding machines that stand for innovation. The omnipresent trend towards saving energy is served by modern electric drive technology, as is our corporate culture, which promotes sustainability. In this way, we – together with our colleagues in Japan – contribute to the protection of our environment worldwide.“

Christian Maget | CEO  
Takaaki Kaneko | COO  
Anatol Sattel | CSO

# Sustainability strategy

Guided by the Sumitomo Business Philosophy and Sumitomo Heavy Industries (SHI) Group Principles, our strategy focuses on sustainable growth, environmental responsibility, and ethical business practices. Our mission is to create value for society while minimizing our environmental footprint and fostering a safe, vibrant workplace. Our sustainability approach centers on three guiding commitments:

- 1 | We shall provide products and services that contribute to economic and technological development and aim for our sustainable growth.
- 2 | We shall make every effort to minimize the environmental load in all of our business activities, including the entire product life cycle. In addition, we shall protect the safety, security and health of every person involved in any corporate activities and create a workplace where everyone of us can work vibrantly.
- 3 | We shall ensure thorough corporate ethics and improve management soundness and transparency.

## Driving sustainability requires collaboration

To effectively implement our sustainability strategy, we focus on our whole value chain:

### 1 – Our own operations

Within our operations, we follow certified management systems aligned with global standards (ISO 9001, ISO 14001, ISO 50001, ISO 45001, and VDA ISA). Platforms like EcoVadis help us benchmark and continuously improve our sustainability performance. We also collaborate with customers, industry experts, universities, and initiatives like the R-Cycle community to foster knowledge-sharing and drive positive change. Our sustainability involvements are listed here:



### 2 – Suppliers

We partner with suppliers who share our commitment to sustainability. We control our supply chain through our compulsory **Supplier Code of Conduct**, and regular robust assessment processes, including comprehensive supplier evaluations, periodic audits, ongoing performance monitoring, and the use of certain indices, such as the Global Rights Index or the Environmental Performance Index. Through these efforts, we aim to reduce environmental impact and promote social responsibility at every level within our supply chain.

### 3 – Customers

Our machinery is the biggest lever towards the sustainable production of plastic parts. For this reason, we closely collaborate with our customers to meet their sustainability goals by offering energy-efficient systems, advanced production machinery, and solutions that support the circular economy. Together, we create a value chain focused on sustainability and shared impact.

# Advanced technology for sustainable moulding

One of our most powerful levers for sustainability is the machinery we create, designed to minimize energy use and reduce production waste. We understand that the most sustainable production is one that operates smoothly and reliably, producing less waste, conserving raw materials, and maximizing energy efficiency. With each innovation, our aim is to empower our customers to achieve efficient and streamlined operations, leading the way to a sustainable future.



“The precision of the IntElect machines allows for the shortest startup phases and generates the most stable processes, which are essential for our demanding product portfolio. This significantly reduces the carbon footprint of our production.”

Martin Knobloch  
Project Manager bei ARaymond

## Energy efficient machinery

Sumitomo (SHI) Demag is the world leader in all-electric machinery. A major reason for this success are our in-house developed direct drives, purpose-built for injection molding. These direct drives significantly reduce energy use, stabilize production quality, ensure a consistently high output and in turn conserving raw material.

This approach is embodied in our IntElect machines using up to 80% less energy than hydraulic models and up to 20 % less than other all-electric options. For high-speed applications, our PAC-E machine sets a new industry benchmark, combining unmatched speed and energy efficiency, particularly suited to sustainable, high-speed injection molding in the packaging sector.

## Innovative technology

We are constantly evolving our machine control technology to meet the evolving demands of sustainable manufacturing. The latest control feature, activeMeltControl, automatically adapts to variations in material quality, ensuring high-quality outputs, even when using recycled materials. Through these advancements, we empower customers to reduce defects and waste, contributing to their sustainability objectives.

## Process-expertise for eco-friendly design

Our broad process expertise enables sustainable product design. In the packaging industry for example, where sustainable product design is key to less environmental pollution, our systems support the creation of thin-walled, mono-material containers – resource conserving, highly recyclable and built for circularity. In the automotive industry, our machines facilitate lightweight foaming technology, reducing resin use and part weight for eco-friendly automotive components, perfectly suited for the mobility of the future.

## Harnessing data for resource-efficiency

Big Data has transformative potential in plastics production. Our digital solution, myAssist, connects and analyzes data across our customers' machine fleets, optimizing processes and significantly enhancing product quality. This powerful tool has the capacity to dramatically reducing waste by increasing production quality and supporting smarter, resource-efficient production workflows.



Changing our portfolio to sustainable and efficient  
**all-electric machines**



Increased energy efficiency  
**up to 80 %**



Worldwide number of all-electric machines  
**over 80.000**

# Environment

As a machinery producer, we recognize our responsibility toward environmental impact. Alongside our commitment to minimizing the ecological footprint of our injection moulding machines, we are actively optimizing our own production facilities and working to make our supply chain as sustainable as possible. From development to delivery, we strive for the most eco-conscious manufacturing across our value chain.

## Use of natural resources

Responsible resource management is an ongoing process. We are committed to continually improving our understanding of the raw materials used in our products and their environmental and social impacts. By working closely with our suppliers, monitoring industry trends, and staying updated on best practices, we strive to enhance our sustainability performance and minimize the environmental footprint associated with our operations. A perfect example for responsible resource management is our focus on all-electric injection molding machines which greatly reduce the usage of auxiliary production materials such as hydraulic oil and cooling lubricants.

## Energy management

Reducing energy consumption and its associated environmental impacts is a key element of our corporate strategy. In 2024, our total energy consumption amounted to around 14 million kWh - a significant decrease compared to previous years. Conservatively calculated (despite the absence of data from China for 2019), this represents a reduction of more than 14% since 2019, and even over 22% for our sites in Germany alone. Our facilities in Schwaig (DE), Wiehe (DE), and Ningbo (CN) are currently transitioning step by step towards renewable energy sources. This includes the integration of photovoltaic systems as well as renewable heat from combined heat and power (CHP) units. With these measures, we are increasing our energy efficiency while simultaneously reducing our CO<sub>2</sub> footprint.



Energy savings from  
modernisation projects  
since 2020  
**1.730.000 kWh**



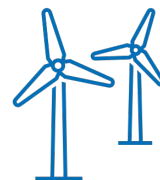
Energy savings  
since 2019  
**> 14 %**



Scope 1 & 2 CO<sub>2</sub>  
reduction since 2019  
**~ 48 %**



Scope 3 reduction per  
machine since 2019  
**~ 34 %**



Electric energy from  
renewable sources  
(incl. bought-in)  
**~ 50 %**

## Water and waste

Circularity shapes our water and waste systems. Through closed loop cooling water systems in our production machinery and through vacuum distillation units in our coating department, we reuse the water we use in our production from 95 up to 100 %. The same goes for our waste management, with over 90% of our waste diverted from landfills and repurposed.

## CO2 emissions

We are dedicated to reducing greenhouse gas emissions in line with the SHI Group targets, aiming for a 50 % reduction in Scope 1 and 2 emissions and a 30 % reduction in Scope 3 emissions by 2030. Our clear priority lies within Category 11 in Scope 3: "Use of Sold Products", since this aspect represents approximately 90% of our total emissions. Thus, we continuously focus on improving our all-electric injection molding machines and to focus on digital solutions which help to reduce emissions and offer sustainable processing for our customers.



Sumitomo (SHI) Demag Wiehe, 2024

# Society

As a global company, our impact extends beyond our team to the communities around us and everyone involved in our supply chain, from raw material suppliers to end users. We are deeply aware of our responsibility toward society and are committed to upholding human rights and fostering equality. To make a positive impact, we've implemented and continuously monitor rigorous standards to ensure fair practices and contribute to a just and inclusive environment.



## Human rights in our supply chain

We are dedicated to aligning our actions with internationally recognized frameworks, such as the Universal Declaration of Human Rights, to uphold human rights across all our operations and partnerships. Our Supplier Code of Conduct requires that all suppliers adhere to these principles, explicitly prohibiting forced labor, child labor, and discrimination. To ensure compliance, we continuously work to improve the transparency within our value chain and conduct thorough screenings of our suppliers, mandating that new partners complete social and human rights evaluations. Additionally, to prevent the use of conflict minerals, we adhere to responsible sourcing practices, ensuring that the minerals within our supply chain do not contribute to human rights abuses or armed conflicts in high-risk areas. By holding every supplier accountable to these high standards, we reinforce our commitment to fostering a fair, ethical, and sustainable global supply chain.

## Workers rights and equality

We foster a safe, inclusive, and equitable work environment for our team. We believe in providing equal opportunities in hiring, career development, and treatment, ensuring that all individuals are respected and valued, regardless of gender, age, ethnicity, nationality, religion, sexual orientation, or disability. Our commitment towards workers rights includes supporting freedom of association, collective bargaining, and maintaining open communication with employee representatives. We are committed to fair employment practices and have implemented a comprehensive whistleblower system that enables employees to raise concerns safely and without fear of retaliation. Additionally, in Germany, we operate under the "IG Metall" collective bargaining agreement. Furthermore, we empower our employees to develop essential skills for future success while ensuring they can balance their professional and personal lives. We offer continuous training, development opportunities, and personalized coaching, along with flexible working models, including mobile work arrangements and overtime compensation through our time-off system. Our zero-tolerance policy for discrimination and harassment, combined with active participation in anti-discrimination initiatives, reinforces a workplace where every employee feels valued, respected, and empowered to thrive. We are proud to create an environment that not only meets professional standards but also fosters a culture of respect and inclusivity.

## Community

We aim to create a positive impact in our communities through responsible business practices, environmental stewardship, and educational initiatives. Our sustainable practices prioritize minimizing environmental impact, reducing waste, and preserving natural resources, benefiting both the local community and future generations. Furthermore, we support education and innovation in our field of action. For instance, our partnership with Technische Hochschule Rosenheim on the "SelbstSGMKI" project aims to include students of the university to advance AI in process optimization. Through initiatives like these, we contribute to the local economy, foster knowledge-sharing, and support community development.

# Governance

At Sumitomo (SHI) Demag, we are firmly committed to conducting our business in strict compliance with all applicable laws, regulations, and directives. Compliance is overseen by our CEO and supported by a dedicated compliance officer who ensures our processes and guidelines meet regulatory standards and ethical expectations.

## Code of Ethics

Our **Code of Ethics** provides clear guidance on anti-corruption, fair competition, human rights, and confidentiality. Our whole team is required to familiarize themselves with these principles and integrate them into their daily work. We also run regular training programs to reinforce these values and raise awareness about the risks and consequences of non-compliance.

## Anti-corruption measures

Sumitomo (SHI) Demag has a strict zero-tolerance policy regarding any form of bribery or corruption, whether active or passive, including interactions with public officials. Through comprehensive anti-corruption programs, we ensure all employees understand these policies and the importance of maintaining ethical integrity.

## Whistleblower hotline

To maintain transparency and accountability, we offer an anonymous whistleblower hotline, managed by an external ombudsman. Employees can use this resource to confidentially report any misconduct or compliance breaches, helping us address issues proactively and protect the integrity of our organization.

## Regular audits and J-SOX compliance

We conduct regular audits across our operations, with our sales and production subsidiaries audited every two years and our headquarters in Germany audited annually, in accordance with J-SOX (Japanese Sarbanes-Oxley Act) standards. These audits are essential for ensuring consistent compliance with regulatory requirements and maintaining accurate financial reporting.

## Supplier Code of Conduct

Our **Supplier Code of Conduct** requires all suppliers to adhere to ethical practices, including refraining from sourcing conflict minerals. This code promotes transparency and responsible sourcing throughout our supply chain, aligning our partners with our compliance and ethical standards.



# Sustainability reporting

Thank you for your interest in our sustainability initiatives and for taking the time to read through this brochure.

We recognize that sustainability is a broad and multifaceted topic. This brochure offers yet a brief overview of our approach to addressing environmental, social, and governance (ESG) issues.

For a more in-depth look at our sustainability measures, please refer to our detailed sustainability report, which includes all relevant facts and figures:





[www.sumitomo-shi-demag.eu](http://www.sumitomo-shi-demag.eu)

All of the information in this prospectus has been provided by us and collated with the greatest care. However, we cannot guarantee its accuracy. Furthermore, we must highlight that individual representations and information with regard to the actual delivery status may vary. 12.2024