PRODUCT SUSTAINABILITY

PRODUCT QUALITY AND SAFETY
RESEARCH AND DEVELOPMENT
SIT'S SUPPLY CHAIN

PRODUCT QUALITY AND SAFETY

In the entire history of the Group, quality has been the actual starting point rather than an objective to pursue.
The Group has two Quality departments: one for the Heating division and one for the Metering division. In addition to ensuring the normal control and prevention on processes and products, these departments continuously ensure that company processes are in line with the best standards in terms of quality, safety and environmental certifications – including controls on hazardous substances and the sourcing of materials from war zones.

SIT was among the first companies in Italy to achieve ISO 9001 Quality Certification, in 1988, and has, over the years, pursued steady growth aimed at adapting to and often anticipating the emerging needs of the market. In this regard, all of the Group's operating facilities are certified to ISO 9001 in its latest 2015 revision[9].
Monitoring by certification authorities has borne out the organization's ability to keep product quality consistent with the international standards of reference.

In order to maintain the certifications, the Group submits to annual notified body audits of its Management System and corporate and production processes. This activity is supplemented by an internal audit regularly conducted on all corporate processes and functions, and main suppliers. In addition, SIT regularly analyses all customer feedback.

All Group companies are fully supported and encouraged in maintaining the corporate Quality System, in order to ensure that they design, build, check and supply products with exactly the same degree of care, competence and dedication.
To achieve this goal, the Group promotes the continuous improvement of the Quality System and the development connected programs, in order to optimize the control, efficiency and precision of its processes.

The commitment to investing in quality is essential in order to compete in the global market, and even more so for a Group that designs, produces and sells components and products for which safety is a fundamental element.
Quality and safety constitute the earliest stages in a product's life cycle, involving the very latest methods to improve robustness and prevent errors that might otherwise lead to higher costs if not identified in time. The Group also provides for continuous and strict controls on the safety of its products.
On an annual basis, corporate quality goals are defined and then formalized in an Annual Quality Plan. The KPIs of such goals include the quality of the finished product as perceived by customers, the efficiency of internal processes, and the performance of suppliers. During the year, performances are continuously monitored against targets in order to verify project progress and identify new actions deemed necessary.

The most relevant product quality issues regard mechanical parts, metrology, electronic boards and software. Software quality, in particular, is managed by the Group through structured testing and validation methodologies aimed at preventing potential criticalities.

9) It should be noted that MeteRSit updated to ISO 9001:2015 in 2018.

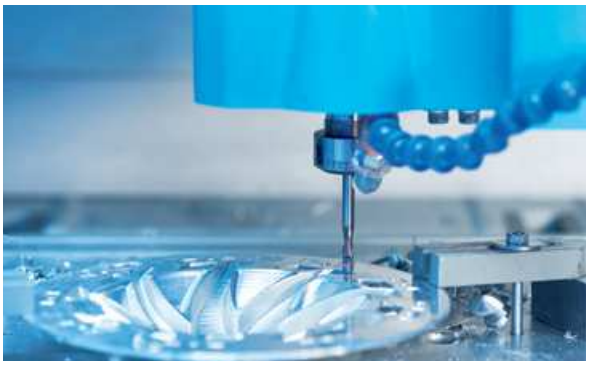
In addition to the aforementioned certifications, the Metering Division's Rovigo plant is certified to Annex IV of the "Atex Directive" as a guarantee of Production Quality Assurance regarding instruments and systems used in potentially explosive atmospheres. Furthermore, MeteRSit S.r.l.'s Rovigo and Brasov plants are certified to Module D of the Measuring Instruments Directive as a guarantee of Production Quality Assurance.

Regarding mechanisms for handling complaints and notifications, the Group has an "After Sales" department which acts as the receiving point for all customer complaints. A dedicated team analyzes every complaint received to verify any correlation with defects on returned products attributable to the company.

In order to help protect people and the environment from risks deriving from chemical substances, SIT has implemented a standard for some years now that requires suppliers to limit, declare or refrain from using restricted substances. The process of collecting documentation continued in 2019, which serves to ensure that components supplied to SIT comply with the relevant legislation.

SIT also pays the utmost attention to the protection of data managed through its products. As such, in November 2018, MeteRSit SRL received the UNI CEI EN ISO/IEC 27001 certification (an essential prerequisite for selling products to European markets) and has passed its subsequent annual audits up to 2020 without any recorded non-compliances.

ISO 27001 is an international standard that defines the requirements for information security management systems, thereby guaranteeing the confidentiality, integrity and availability of data. The procedures, new IT infrastructures and regulations put in place by MeteRSIT aim to protect the expertise and information processed by the company at all levels and across all departments. Furthermore, IT resources and network infrastructures underwent technological upgrades to meet the certification's requirements. The upgrades have improved the reliability of the Company's production processes, which are heavily reliant on IT systems.



RESEARCH AND DEVELOPMENT

SIT develops and manufactures high-tech systems and components as well as smart meters connected to communication networks. Investing in Research and Development is therefore essential in defending the Group's competitive advantage with regard to other players in a market that continually requires more innovative and highly performing products capable of helping to reach higher energy classes. From a manufacturing perspective, SIT is also constantly engaged in research into using smaller quantities of materials, in order to make production cycles more efficient and to reduce environmental impacts. On the other hand, SIT is committed to developing solutions and products capable of meeting new energy requirements, and the use of non-fossil fuels such as hydrogen and biomethane in particular. In addition, and with regard to its Metering Division in particular, greater emphasis has been placed on projects with a secure connection to smart utility networks such as NB-IoT (Narrowband Internet of Things) in recent years. Researching new technological solutions and developing new and better performing products is therefore the best way to continue leading the market and strengthening a brand image globally recognized as a synonym for quality and innovation.

In 2020, the Group invested approximately 3.5% of its revenue, amounting to Euro 11.2 million, into research and development.

At the end of 2020, SIT possessed[10] 74 patents, while a further 5 patents are pending in 2020.

Heating Division

With regard to the Heating Division, SIT has chosen to adopt a matrix management organizational structure in which specialized professionals define development processes and scout new technologies in the fields of electronics, mechanics, testing methods and technical documentation development. In particular, the Heating Division employs four platform managers for the management of all project and product development phases, from conceptualization to production.
Furthermore, demands for an increasingly reduced time-to-market requires the adoption of the latest methods and tools in order to design products faster while guaranteeing the highest standards of reliability and quality.

In 2020, the new product development procedure developed in 2019 with an external consultancy firm, was rolled out to both the marketing and R&D departments.

The first step in the process was to align the marketing department's Product Development Plan with the New Product Development Process adopted by the Research & Development department. The latter consists of the following macro-phases:

- Concept. During this phase, one or more technical solutions that meet the product requirements are defined and their technical/technological feasibility is assessed while guaranteeing compliance with regulatory and legislative aspects;
- Design. During this phase, all requirements are frozen, technical solutions are trialed using prototypes and product and (preliminary) process documentation is drawn up;
- Execution. During this phase, equipment and materials for production trials and series production are acquired/ constructed. Product and process validations are completed.

The new procedure is included in the quality manual and must be followed for all platform projects and derivatives.

10) All patent families for which the first filing was granted are considered.

A key factor is the use of the Stage/Gate methodology, which divides R&D processes into a predefined series of stages that alternate with checkpoints (gates). The procedure specifies the objectives, primary activities and real or intangible object (deliverable) produced as a result of each stage.

Each Gate asks for information that must be provided in order for the process to move on to the next stage. Furthermore, the procedure outlines the decisions to be taken, the organizational roles involved in making decisions, and all the actions to be taken as a result of said decision on the basis of a specific responsibility assignment matrix (or RACI table).

Checkpoints (or gates) allow progress to be monitored, significant improvements to be made, and the deliverables for each stage of the project to be redefined where necessary.

Operating in an international technological context, the Group can take numerous opportunities to establish collaborations with research institutions and customers. Indeed, for many years SIT has collaborated with leading Italian universities, such as the Polytechnic University of Milan, the University of Padua and the University of Ferrara, and with leading global players in co-design and development activities. In 2020, the Heating Division pursued a project with the technology incubator E-Novia on intelligent combustion control using acoustic sensors.

These opportunities have allowed SIT to keep pace with global technological developments, developing and exploiting new competences and products both with and for its own customers.

Numerous research collaborations with universities are currently active on the development of innovative technologies aimed at significantly reducing energy consumption and pollution, while guaranteeing ever better temperature control comfort for users.

Within the Heating division, the research is focused on the development of electronic and mechanical solutions that are increasingly integrated, intelligent, able to communicate with the external environment through the most modern internet of things technology (IOT), easy to use and, at the same time capable of maximizing comfort performance while reducing energy consumption as much as possible.

During 2020, the main projects included:

- The development, commissioning and delivery to a leading customer of an innovative Combustion Management System (CMS) valve able to significantly increase modulation ratio performance, allowing for more precise adjustments and greater energy savings;
- The development of a new air+gas supply system architecture with electrical modulation for condensing boilers aimed at increasing performance while minimizing the use of space and materials;
- A flexible platform available as a generic version, a dedicated version with CAN interface, or a version that integrates the CMS combustion control board and algorithm;
- A new fan platform for compact, low-cost condensing boilers.
- A new low-power fan and pellet stove platform and sealed combustion chambers suitable for use in class-A dwellings;
- A new highly efficient, low-noise ceiling fan platform;
- Expansion of the range of adapters and bends for hoods and exhaust kits used to connect the various boiler models.

SIT was chosen by BOSCH Termotechnik as its technological partner to develop a hydrogen boiler safety and control valve as part of the UK government Hy4Heat program. The Hy4Heat program is part of the United Kingdom's national "heating decarbonization" plan, which evaluates the use of hydrogen appliances as a means of reducing CO2 emissions through the use of decarbonized gas.

Hydrogen, compared to natural gas, faces significant technological challenges as it is a lighter gas, has a considerably higher flame speed, a greater flammability range and burns at a higher temperature. It therefore requires specially designed and tested appliances and components. To overcome these challenges, SIT has developed a new product called Sigma - generation H, which has been approved for use with hydrogen, both in terms of materials and functions, by the KIWA Notified Body. The technological partnership with Bosch involves the production of valves, which can be used with hydrogen for installation in boilers. Prototypes were developed in 2020 and will be tested in the field in 2021, once approved by Hy4Heat.

Smart Metering Division

Applying the same product development process described in the paragraph dedicated to the Heating Division, the Metering Division's R&D department has defined medium- and long-term objectives for products and technologies.

Products

The main results achieved in 2020 with regard to product development were:

- The development and certification of the U6 ZigBee product for the UK market; the development and certification of the Walk-By household product for the Indian market (a 100-piece pre-series has been developed to start field testing);
- The development and customer approval of the NB-IoT household meter.

MID Welmec D certifications were also obtained for some metrological household meter releases (MBus and GPRS).

This will allow new releases to be downloaded in the field to fix bugs, without having to remove meters from the field. U6 and U40 meters designed to operate on 100% hydrogen (H2) were developed as part of the Hy4Heat project with BEIS (the Department for Business, Energy & Industrial Strategy in the UK). These products are particularly important due to the increasing availability of hydrogen gas in the near future, allowing CO2 emissions to be reduced. In 2020, work began on MID certification, although no laboratories are yet ready for hydrogen verification and certification.

Technology

The SGM61 "thermo-mass" measuring sensor has been certified and deemed appropriate for use (reliability tests are in progress). The sensor optimizes battery consumption, improves gas performance and is a pre-requisite to the SGM63 sensor.

The process of integrating the SGM63 measuring sensor into household meters has begun. SIT intends to achieve certification by the first half of 2021.

Acquisition of the Portuguese water meter company Janz was finalized at the end of 2020. In addition, the feasibility of a water meter platform with ultrasonic measurement technology was successfully analyzed in partnership with a specialized company. Joint development is expected to begin in early 2021 and to be completed by 2022.

Circular Economy

The EU's circular economy directives contain several challenging objectives in the field of eco-design, understood, in the case of SIT, as an ability to render products, such as boilers, more energy-efficient during the design stages. The directives also encourage consideration of other product characteristics that could have an impact on the environment, such as composition, durability, dismantling, ease of repair, and recyclability.

SIT intends to go above and beyond the challenge of rendering its products energy efficient, and in 2020, the Group made steps towards transitioning to a circular economy.

SIT intends to adopt a Carbon Footprint Systematic Approach to assess its impact on the environment in terms of carbon dioxide (CO2) emissions resulting from the manufacture of three product categories: valves, electronic circuit boards, and fans.

The project foresees a cradle-to-gate approach and as such, the use and end-of-life phases are not included for the time being.

The ultimate goal of the project is to have the Group's CFP Systematic Approach verified by an independent accredited third party, allowing products to be registered with the Carbon Footprint Italy program operator.

The CFP Systematic Approach is based on a model – created especially for SIT – that involves the creation of a company database containing information on products and production processes and their GHG emissions. This information is subsequently linked to specific characterization factors for each individual entry, which are related to each other.

The CFP Systematic Approach will allow SIT to respond quickly to customer requests concerning the carbon footprint of its products and will provide the Research & Development department with a tool to quantify the CO2 emissions of the Group's various design decisions.

SIT'S SUPPLY CHAIN

Each SIT Group division has a Central Procurement Department for the procurement of raw materials, components, semi-finished products and services for all of the divisions' companies.

The two division departments share the goal of procuring components, materials and services at the right price, in agreed times, at a high level of quality and in compliance with criteria of ethics and sustainability.

In the pursuit of this goal, the Group strives to consolidate partnerships with its suppliers aimed at protecting supply quality and promoting safety, innovation and technological development. Such strategic partnerships are beneficial for both parties in terms of competitive advantages, proactive cooperation in resolving problems and the development of know-how and innovative solutions for market needs.

Direct materials suppliers are, in terms of expenditure, those with the greatest impact.

PERCENTAGE OF SUPPLIERS BY SUPPLY TYPE[11]	2019	2020
Electromechanical components, plastic and rubber components	24%	27%
Electronics	19%	17%
Metals and Raw Materials	27%	27%
Production services for factories and subcontractors	30%	30%

Suppliers are selected according to various criteria guaranteeing the highest standards of quality, costs and execution times.

In addition, in order to guarantee compliance with ethical standards in its supply chain, SIT has defined a Code of Conduct for Third-Party suppliers and Intermediaries, which expresses the basic principles third parties, individuals and entities must comply with in supplying goods or services, or brokering goods transactions between the seller and SIT S.p.A. or any of the SIT Group's subsidiaries. The Code is distributed to suppliers during the stipulation of the supply contract, and must be returned signed for acknowledgment. This Policy is available on the Group website in the "Corporate Governance" section.[12]

The Code's principles define the Group's commitment to operating in compliance with applicable legislation and with respect for human rights, child labor prevention, employee health and safety, environmental protection and sustainability, conflict mineral use prohibitions, conflict of interest and corruption prevention, fair competition, anti-trust, information confidentiality, and property rights.

The Group has defined a Conflict Minerals Policy in order to avoid indirect tolerance of human right violations in certain countries, thus undertaking to use and acquire only materials not containing minerals from conflict zones, such as the Democratic Republic of Congo and other countries categorized as "Covered Countries". In particular, the Group requires its suppliers to complete a Conflict Mineral Reporting Template (CMRT) indicating the origin of the materials in their supply chain.

11) The table shows only direct materials suppliers and their share of the total number of Group suppliers.

12) http://www.sitgroup.it/codici-condotta-policies/

Furthermore, in addition to other actions implemented to protect human health and the environment, the Group has defined the standard SIT 4900000. This standard summarizes supply materials requirements, including those deriving from the REACH regulation and RoHS directive, which Group suppliers are required to comply with.

In line with SIT's objective of being a versatile and innovative player in the global market, suppliers are required to:

- React quickly and effectively to market changes
- Maximize reliability, functionality and punctuality
- Reduce delays throughout the supply chain
- Render product and process supply conditions more efficient in terms of cost and quality

As SIT products are extremely specific safety products, component suppliers are subjected to rigorous approval processes and must guarantee reliable supply standards. The Group pursues a policy aimed at guaranteeing supply continuity through the identification of multiple sources, contractual coverage, and back-up and supply interruption risk mitigation plans.

To respond appropriately to the needs of an increasingly volatile market, the Heating Division's entire supply chain has been brought under a single management team, affecting the Sales, Material Planning, Customer Care, After Market and Procurement departments in particular.

Working as a united team will help improve customer service levels, with a focus on analyzing and managing market dynamics and fluctuations, and on managing the supplier base, while paying increasing attention to risk coverage and sustainability.

The following table indicates expenditure in the Group's production facilities on local suppliers. Local suppliers are used most in Italy and the Netherlands, accounting for an average of 43% of expenditure. However, Romania and Mexico have low percentages of local suppliers. In particular, Romania mainly procures materials from Italy, while Mexico procures from North America and the Far East. Given the specificity of its products, SIT applies a procurement strategy that favors the quality of procured materials over the geographical proximity of the supplier to production sites. It should also be noted that a high percentage of procurement for the Heating Division's final products is intercompany, as sizeable volumes of components are manufactured directly by SIT Group companies.

PORTION OF SPENDING ON LOCAL SUPPLIERS[13]	2019	2020
Italy	38%	43%
Romania	2%	6%
Netherlands	39%	43%
Mexico	2%	2%
China	19%	23%

13) The percentage is calculated from expenditure on direct and inter-company suppliers, considering local suppliers to be located in the same geographical region. Countries with significant operations are those where the Group has production facilities.

The pandemic has impacted the Group's supply chain as follows: raw material and component shortages, shipping delays and extended delivery times, difficulties aligning production capacity with fluctuating demand, and planning issues resulting from volatile customer demand.

The initial slowdown was followed by a surge in demand, resulting in a significant imbalance in supply and demand, which has not yet been resolved.

The pandemic also resulted in a marked increase in the prices of components needed for Group production processes (electronics, metals, plastics, rubber) and widespread shortages in all product categories.

Finally, there were considerable challenges in the transport sector, mainly due to international travel restrictions.

When faced with the uncertainties caused by COVID-19, being able to count on secure data processing procedures, access to corporate and financial information, and the application of a lean approach to corporate activities across the board (including logistics and financial disclosures) allows Italian companies competing in foreign markets to stand out from the crowd.

This is certainly the case for SIT, which recently obtained "Full" AEO authorization as an Authorized Economic Operator. Authorization from the Customs Agency proves that SIT is equipped with reliable, secure business processes that meet international trade standards.

The benefits of being an AEO Authorized Economic Operator are as follows:

- a status of reliability with unlimited and EU-wide validity;
- a reduction in international shipping times thanks to SIT's AA rating, which reduces customs checks by up to 90%, with priority given to AEO authorized operators;
- the improved efficiency of administrative customs activities related to the management of logistical flows;
- the improved management of risks associated with international shipments.

To date, the European Union has finalized and implemented mutual recognition agreements for AEO programs with Norway, Switzerland, Japan, Andorra, the United States and China.

We believe that being an authorized economic operator will allow us to guarantee our stakeholders a secure data processing channel and the efficient flow of goods, thereby facilitating import and export activities. In our opinion, the decision to implement regulated in-house processes that demand high levels of security, verification and reliability demonstrates SIT's professionalism and commitment to working with all parties in an ethical and professional manner, thereby protecting the entire supply chain.

Sustainability objectives

The "Responsible Supply Chain Management" sustainability objectives are set out below. These commitments have been updated depending on their achievement during 2020. Some commitments had to be extended due to COVID-19. Finally, objectives achieved in previous years are not listed. Please refer to the 2019 Non-Financial Statement for more information.

AREA: PRODUCT SUSTAINABILITY

TOPIC: RESPONSIBLE SUPPLY CHAIN MANAGEMENT

OBJECTIVE	PROJECT PROGRESS
Completion of suppliers' undersigning of the Supplier Code of Ethics (at least direct suppliers). **DEADLINE**: By 2021 - Deadline extended due to COVID-19	74% of direct suppliers signed the Code of Ethics in 2020, covering 96% of purchases from said suppliers. The former percentage is expected to increase significantly as the project will also cover all new Group suppliers.

OBJECTIVE	PROJECT PROGRESS
In order to offer customers products that meet the most stringent safety standards at an international level, SIT undertakes to regularly update a restricted substances list, going beyond mandatory RoHS and REACH regulations by integrating additional requirements deriving from specific market needs. **DEADLINE**: In 2019 - 2020	Developed and implemented a system to monitor the number and percentage of suppliers who have declared their compliance with the RoHS and REACH regulations. Mapping was completed in 2020.