we support your innovation


saes
getters

THE SAES GETTERS GROUP IS THE WORLD LEADER IN A VARIETY OF SCIENTIFIC AND INDUSTRIAL APPLICATIONS WHERE STRINGENT VACUUM CONDITIONS OR ULTRA-HIGH PURITY GASES ARE REQUIRED.

BRINGING A WEALTH OF EXPERIENCE IN SPECIAL METALLURGY AND MATERIAL SCIENCE TO THE NEEDS OF THE ADVANCED MATERIAL INDUSTRY IS OUR NEW CHALLENGE FOR THE 21ST CENTURY.

Purity by Tradition, Innovation by Nature

Pioneering the development of the getter technology, the SAES® Getters Group is the world leader in a variety of scientific and industrial applications where stringent vacuum conditions or ultra-high purity gases are required.

For nearly sixty years, our getter solutions have been fostering and supporting technological innovation in the information display and lamp industries, in ultra-high vacuum systems, in a wide range of electronic device-based applications, and in the vacuum thermal insulation. The Group also delivers solutions for ultra-high purity gas handling to the semiconductor, fiber optics and other hi-tech markets.

Bringing a wealth of experience in special metallurgy and material science to the needs of the advanced material industry is our new challenge for the 21st century.

We broaden our vision and keep on supporting your innovation. By nature.

By leveraging the core competencies in special metallurgy, material science and thermal processes, the SAES Getters Group broadens its corporate vision and expands its business in the advanced material niche markets, with the introduction of:

- advanced optical crystals for the optoelectronic device and solid-state laser markets
- shape memory alloys for components primarily used in the automotive, transportation and domotics industries
- metalorganic materials for chemical vapor deposition
- getters for MEMS/MOEMS and microelectronic hermetically packaged devices

An outstanding Research & Development structure, based at the Group's headquarters near Milan, Italy, is committed to technological excellence and keeps the Group at the forefront in innovation.

A total production capacity distributed at 8 manufacturing plants spanning across 3 continents, a worldwide-based sales & service network, nearly 1,000 employees allow the Group to combine multicultural resources, skills and expertise to form a truly global enterprise, capable to best support customers around the world, 24 hours a day.

SAES Getters has been listed on the Italian Stock Exchange Market, Star Segment, since 1986.

1947

SAES, Società Apparecchi Elettrici e Scientifici based in Milan (Italy), becomes operative through investments by families della Porta and Canale.

1951

Development of the first stable barium-aluminum alloy.

Our Vision

SAES Getters Group's vision is to be the leading global supplier of advanced materials to niche markets characterized by high growth potential in the high-tech business segments.

By leveraging our:

- sixty-year corporate culture of Research & Development and manufacturing excellence
- worldwide leadership in the traditional getter-based application fields
- commitment to product and process quality
- sound financial position and business integrity

the SAES Getters Group is uniquely positioned to offer competitive advantages to the advanced material markets, as well as to support customers' innovation and productivity enhancement through the provision of technological value.

1950-59

The invention of a technique for producing stable getter alloys and the introduction of the ring getter launch SAES Getters into the global market of thermoionic tubes.

1958

New headquarters and a first mass-production plant are opened in Milan.

Our Strategy

SAES Getters Group's business strategy builds on the following foundations:

- expanding our business portfolio and market leadership, through the development of new products within core competence areas
- pursuing the Group's growth through selected acquisitions and strategic business partnerships
- fostering long-term business relationships with the ultimate goal to generate value for our customers, while enhancing the Group's technological expertise and market competitiveness
- focusing on customer global support and satisfaction, maximizing quality and production efficiency through vertical integration, improved operational performance and attentive investment strategy
- committing to long-term success and stability, while practicing an ethic of responsibility and transparency towards stakeholders

1958

Development of U-shaped ring getters to be used in black & white television sets.

1966

Launch of Total Yield Flash Getters, extending color TV tube lifetime from 300 to 10,000 hours.

SAES Getters S.p.A.
Group Headquarters

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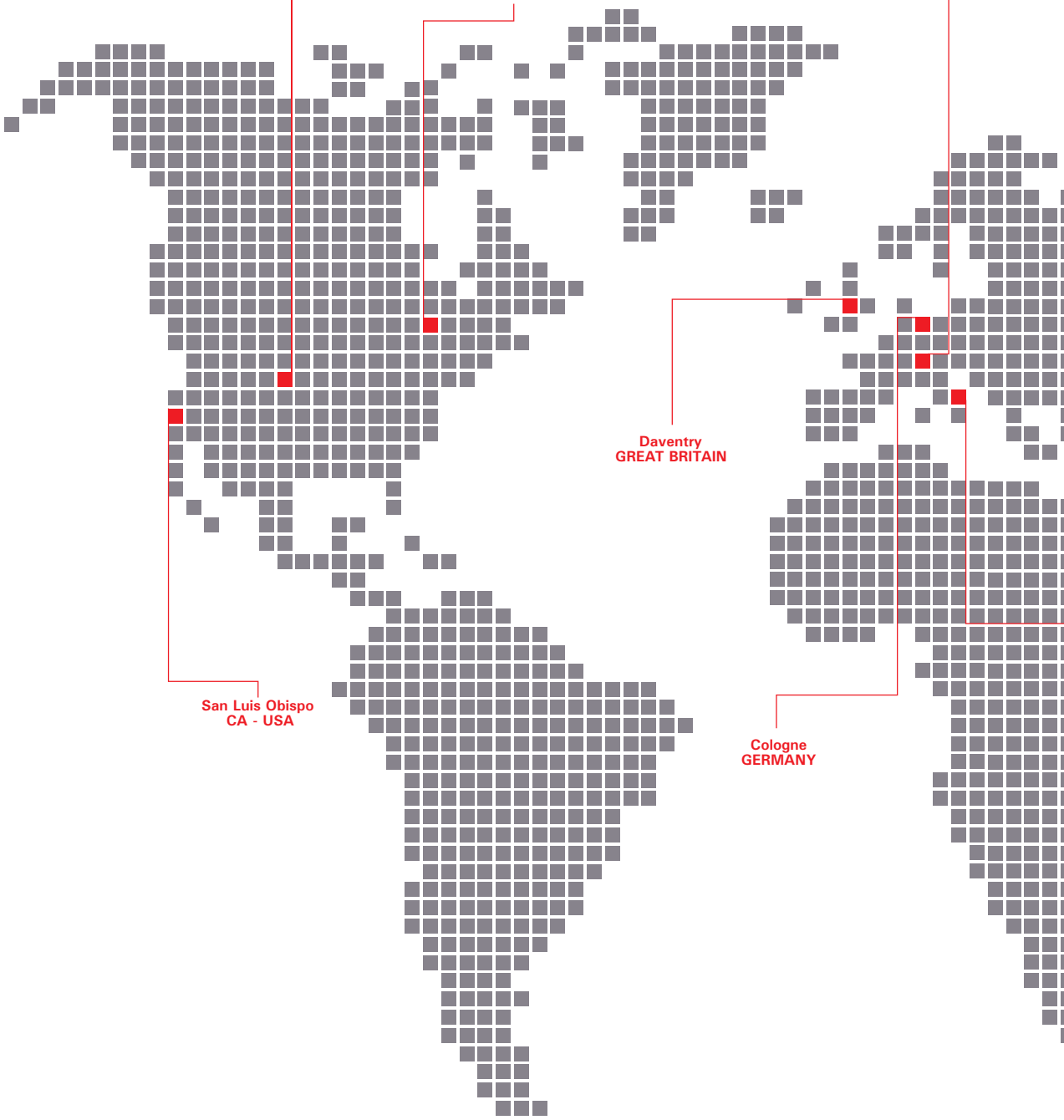

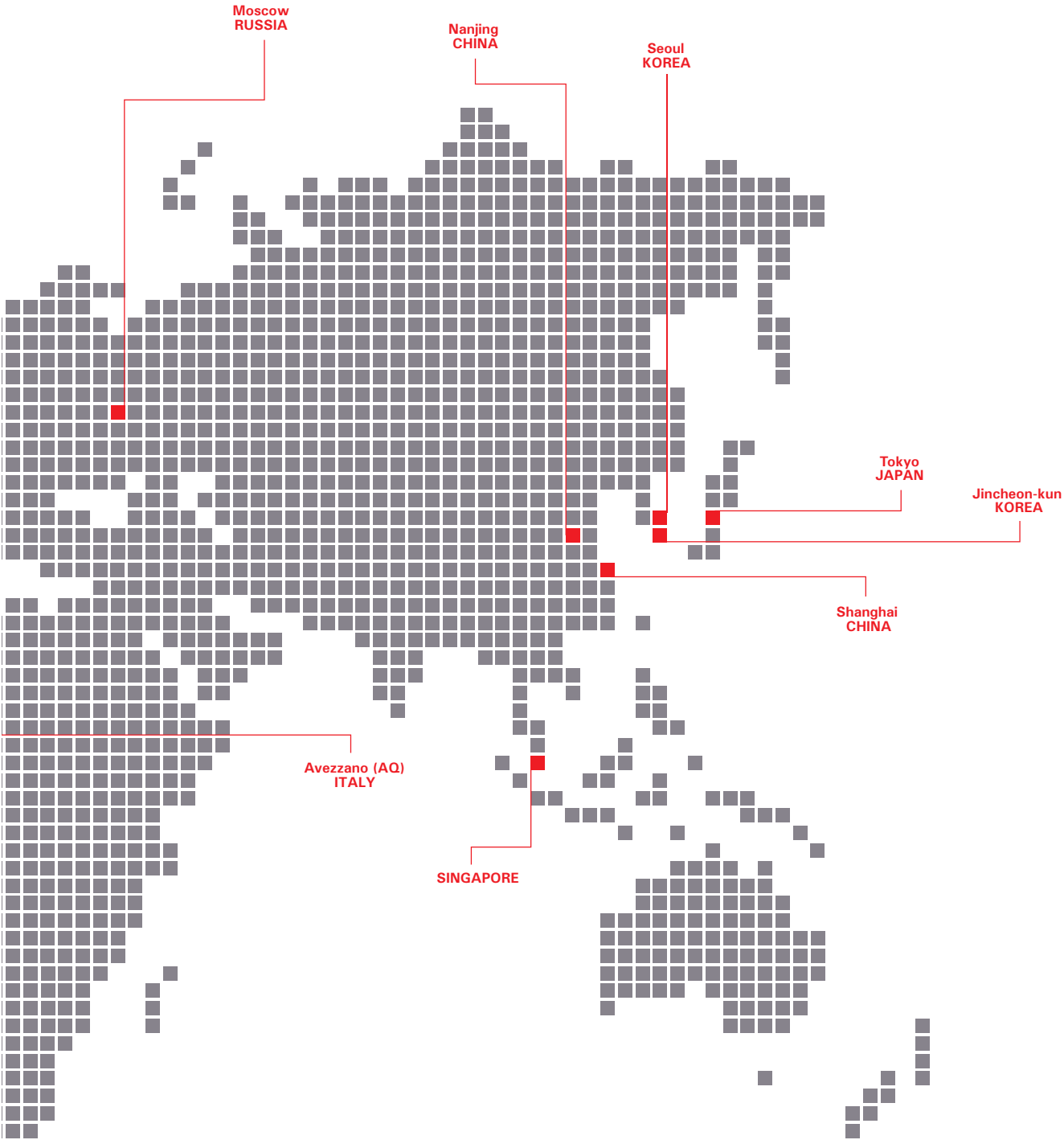
Moscow
RUSSIA
Nanjing
CHINA
Seoul
KOREA
Tokyo
JAPAN
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1960-69

Extensive research and product development lead SAES Getters to acquire the worldwide market leadership in the production and marketing of barium getters for cathode ray tubes.

1970-79

SAES Getters establishes sales subsidiaries in Europe to fulfill the growing market demand.

Manufacturing Locations

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SAES Getters Korea Corporation
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Ph. +82 43 537 6000 - Fax +82 43 537 6008

1971

Development of wire-shaped alkali metal dispensers for photosensitive surface preparation and of porous sintered getters for X-ray and other sophisticated industrial electron tubes.

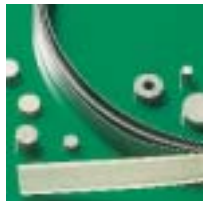
1973

The new Japanese sales subsidiary is inaugurated in Tokyo.

THE HISTORY OF SAES GETTERS PROVES HOW INNOVATION AND HIGH QUALITY R&D FUEL ALL COMPANY'S ACTIVITIES. FOR SAES' SCIENTISTS INNOVATION IS A MIND SET. THROUGH TECHNOLOGY PARTNERSHIPS AND ALLIANCES, THE SAES GETTERS GROUP HAS BEEN ABLE TO SUPPORT CUSTOMERS' CUTTING-EDGE APPLICATIONS WITH THE DEVELOPMENT OF HIGHLY INNOVATIVE SOLUTIONS FOR THE LAST 60 YEARS.

1976

Development of mercury dispenser strips, to dose the mercury amount in fluorescent lamps under carefully controlled conditions and to minimize mercury pollution.



1977

SAES Getters opens SAES Getters U.S.A. Inc. at Colorado Springs, CO, its first US sales and manufacturing facility.

At the Heart of SAES' Excellence

The speed of the technological evolution that has characterized the last century and that is going to accompany our lives in the new millennium requires a total commitment to innovation. The history of SAES Getters proves how innovation and high quality R&D fuel all company's activities.

For SAES' scientists innovation is a mind set. They are challenged by customers' requests, real market innovators, and are supported by a management policy that every year allocates approximately 8% of sales revenues to research and development activities.
In the new facility in Lainate, in the Milan area, corporate laboratories cover an area of 3,300 square meters, where nearly 100 people are daily committed to investigate problems, develop proposals and test solutions using highly advanced instrumentation and mathematical modeling.

Innovation at SAES is treated as a complex process that starts with the idea conception and ends with the launch of the related products onto the market.
The innovation process takes place in the frame of our Research & Innovation function which includes, besides the Research department, also the Process Technology and Engineering departments.

In order to better focus its Research & Innovation activities, the SAES Getters Group has recently adopted the Stage-Gate® approach for the management of innovation projects, which enables a more effective utilization of resources through a structured screening of the new projects and of their development.

The Group founds its business on competencies that have been acquired in sixty years of activity. The deep knowledge of special metallurgy and vacuum technology paved the way for broader competencies in material science and interests in advanced material applications. These, coupled with the understanding of the gas-surface interaction, and the know-how in UHP gas purification and analysis represent the core and the strength of SAES' capabilities.

A deep understanding of the market needs guides SAES' R&I and the researchers and scientists highly value continuous relationships with industry key players. Not only is this essential to develop the right product with the required features: through technology partnerships and alliances, the SAES Getters Group has been able to support customers' cutting-edge applications with the development of highly innovative solutions.

The over 330 technologies patented during its entire business activity and the hundreds of scientific publications confirm SAES Getters' continuous and unfaltering commitment to innovation, as well as testify to a corporate policy firmly oriented to a strong intellectual property protection.

1979

Launch of coated getter strips for use in particle accelerators.

1981

Development of low activation temperature alloys for use in vacuum bottles and other vacuum insulated devices.

Our Core Competencies

The innovation process at the SAES Getters Group founds its solid basis on core competencies developed in a 6-decade long activity, during which SAES Laboratories have become a center of excellence for material science and have developed an unparalleled know-how in ultra-high vacuum technology, gas-surface interaction and gas purification and analysis. These specific competencies, supported by strong technical capabilities in mechanical engineering, electronics and process simulation, allow the Group to offer premium solutions for highly technological markets. SAES' product applications span from the display industry, in all its forms from conventional cathode ray tubes to the new generations of flat displays, to the manufacturing of components used in several and diversified electronic devices ranging from x-ray tubes to wafer-level MEMS, from applications in particle accelerators and in large vacuum systems for physical experiments to solutions supporting the lamp, semiconductor, optoelectronic and automotive industries.

Special Metallurgy

SAES' skills in metallurgy stem from a scientific approach followed by the company in developing and characterizing getter alloys based on reactive metals. The skills include key aspects, such as the mastering of alloy melting techniques, the understanding of compositional and micro structural aspects of alloys, powder handling and characterization, as well as contamination related issues.

Material Science

The deep understanding of special metallurgy and powder metallurgy developed into a more comprehensive and deeper knowledge in material science. This prompted SAES to expand its interests into new advanced material developments and applications, such as advanced optical crystals, shape memory alloys and metalorganic precursors for chemical vapour deposition (MOCVD).

The understanding of gas-surface interaction phenomena has guided SAES to advanced tailor-made getters and to catalytic materials for environmental applications.

Getter Film Deposition

The increased miniaturization of flat displays and electronic devices called for thinner gettering solutions and SAES Getters has responded by offering porous getter films deposited on different substrates through a proprietary sintering process.

1982

Inauguration of the new manufacturing plant in Nanjing, China, for the production of B&W and color TV getters.

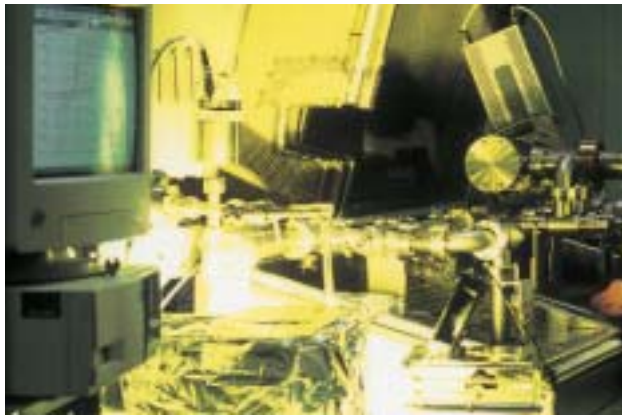
1984

The Avezzano industrial complex is established near Rome, for vertical integration and quality control of all getter alloys used for the production of evaporable and non-evaporable getters.

Ultra-High Vacuum Technology

Creating and maintaining ultra-high vacuum in a variety of systems pose challenges that only a deep knowledge of the various facets of vacuum science and technology can overcome. Thanks to its wealth of experience and to sixty years of leadership in vacuum related products, the SAES Getters Group can offer an all-round approach: the development of getter pumps adds up to the know-how built in the selection of materials and components, the evaluation of the outgassing and permeation and the vacuum system engineering.

Gas-Surface Interaction



The deep understanding of the gas-surface phenomena has played a fundamental role in the optimization of the getter alloys and it has also allowed the development of special catalysts addressed to gas purification for the demanding semiconductor industry and to environmental applications.

Chemical and Physical Analysis

A key point in understanding the material properties is their characterization via chemical and physical analysis. The capability to carry out the complete series of tests in-house guarantees SAES Getters' on-time and highly reliable results. Among the wide range of tests available at SAES Labs are: Atomic Absorption Spectrophotometry, Inductively Coupled Plasma Spectrophotometry and Scanning Electron Microscopy.

Gas Purification

The knowledge of the kinetics of the gas-surface interaction and of the bulk diffusion mechanism of getter materials has been instrumental in the development of the gas purification business. SAES Getters researchers and engineers have a wealth of expertise in designing and assembling ultra-high purity systems, suitable to handle gases whose purity is better than 1 part-per-billion of atmospheric contaminants.

Gas Analysis

SAES Labs have built up a long tradition of competencies in trace gas analyses, which started with the widespread use of various types of mass spectrometers to analyze the residual gases in vacuum devices. Residual gas analysis techniques have been specifically studied and implemented not only for conventional vacuum systems, but also to cope with the increasing miniaturization of the volumes to be analyzed, as in the case of OLED and MEMS devices.

1986

SAES Getters S.p.A. gets listed on the Italian Stock Exchange Market.

1987

Acquisition of SAES Pure Gas Inc. in San Luis Obispo, California, a leading company in the engineering and manufacturing of bulk and point-of-use gas purifiers for the semiconductor industry and other high-tech markets.

Advancing the Management of Innovation

While it is widely recognized that the introduction of new products has an increasingly greater importance on sales as well as on profits, specialized literature reports that only one in seven new projects delivers successful products. Thanks to its superior technology and to the sharp focalization on customers' future needs, the SAES Getters Group has always enjoyed market success in the development and introduction of new products.

To continue this tradition in a market environment which is characterized by increasing complexity and rapid technological changes, SAES Getters has recently updated and implemented a more formalized process to select and run new projects in the frame of the R&I function.
The new product development (NPD) process is based on the Stage-Gate methodology. This approach helps identify, organize, deploy and control the steps necessary to ensure the effective and efficient implementation of new projects, with the ultimate goal to improve the chances for product success and reduce time-to-market.
Particularly, the innovation process articulates in a string of phases of activities (stages) and of assessments and decisions (gates). The project selection process is based on criteria aimed at maximizing the chance of success by deep assessment of a number of technical, economical and strategic parameters.

Key principles of SAES Getters' adoption of the Stage-Gate methodology are:

- production of superior, differentiated products
- continual interaction with customers and users throughout the development process
- solid planning and sharp, early product definition before development begins
- cross-functional effort and empowered project leaders and teams
- tough go/kill decisions at the gates to focus resources on the most promising projects
- facilitation of clear project prioritization and resource allocation

The Stage-Gate NPD process requires the contribution of different functions within the Group, from research to engineering, from intellectual property protection to marketing, supervised by a steering committee.
A dedicated resource, the multi-project portfolio manager, coordinates the entire process and ensures it is evenly, correctly and timely carried out.

The SAES Getters Group values the implementation of this new innovation management system as a great asset to continue the successful tradition in product innovation that has distinguished the company throughout its entire business history.

1988

A new manufacturing plant becomes fully operative in Jincheon-kun, Korea, for the production of barium getters for B&W and color cathode ray tubes.

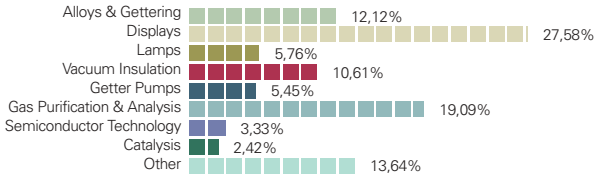
1990

First development of industrial purifiers (point-of-use, area and larger sizes), based on special getter alloys and catalytic materials, for purification of process gases to meet semiconductor manufacturing requirements.

Intellectual Property: a Competitive Asset

In an increasingly competitive knowledge-based economy where intangible assets, such as brand awareness and innovation, have become keys to the corporate success, intellectual property protection plays a fundamental role. The SAES Getters Group has regarded its intellectual property as a strategic asset since its business inception and has always had an active role in managing the intellectual capital with dedicated resources.
Key activities of SAES Intellectual Property department are the support during the patent approval process, as well as the obtainment of trademark registrations; the continuous monitoring of the new patents, released both in SAES' traditional application fields as well as in the new areas of business that the company is evaluating; and the technical assistance during litigation for an effective legal protection of the company's rights.

If the number of patents is an indication of the capability to innovate, SAES Getters can surely be proud of the over 330 inventions - including products and processes - that have been patented by the company in its sixty years of activity. The chart on the side, providing at-a-glance breakdown of the innovations patented for each business segment, shows how significantly the Group has contributed to a variety of application fields through the provision of innovative and competitive technological solutions.



1994

Launch of high capacity non-evaporable getter pumps using newly developed sintered blades and disks, to improve mechanical characteristics and pumping speeds.

1995

Opening of the SAES Getters Shanghai representative office and of the Singapore sales subsidiary.

SAES GETTERS STRIVES TO PROVIDE CUSTOMERS WITH HI-TECH TOP QUALITY PRODUCTS AND SERVICES. THE GROUP'S FOCUS ON THE STRATEGIC VALUE OF TOTAL QUALITY MANAGEMENT ALSO RESULTS IN VERTICAL INTEGRATION OF THE PRODUCTION PROCESSES. THIS ALLOWS SAES GETTERS TO OPTIMIZE PRODUCT QUALITY WHILE FACILITATING THE DEVELOPMENT OF INNOVATIVE PRODUCTS AND PROCESSES WHICH ARE RESPECTFUL OF THE ENVIRONMENT AND OF THE NATURAL RESOURCES CONSERVATION.

1995

Expansion of the Avezzano industrial complex leads to the set up of state-of-the-art production processes for advanced products used in lamps, flat panels and getter vacuum pumps.

1996

The Group's headquarters and laboratories move to a new 15,000 sq. mt. facility in Lainate, in the Milan area.

We Care: an Integrated Management System

To ensure continuous product improvement and strong market leadership, the SAES Getters Group remains loyal to its traditional core values and is committed to building an integrated Quality, Environment, Safety and Ethics Management System.

The Group is certified under the UNI EN ISO9001:2000 Quality Management System, with corporate certification covering all the manufacturing facilities.
Quality excellence at SAES Getters results in vertical integration of production processes. This allows the Group to optimize product quality and to apply a close cost control policy, while facilitating the development of innovative products and processes, which are respectful of the environment and of natural resources conservation.

The process approach is another distinctive mark of the Group's Quality Management System. Structuring activities and related resources as a value-added process leads to improved performance, to consistent results and to the determination of clear responsibility in the managing of key activities.
The evaluation of risks, consequences and impact of activities on stakeholders, as well as a more effective human resources management can also be more consistently achieved through process-structured activity.

SAES Getters' focus on the strategic value of total quality management shows in the continuous and attentive control of customer satisfaction, through adequate performance monitoring tools, and in the responsive implementation of proactive quality policies based on the analysis results.

The SAES Getters Group recognizes that the protection of the global environment is an essential social duty for all human beings in the 21st century and that a substantial role needs to be played for the conservation of Earth resources. The Group is aware that all industrial activities, products and services may have a potential impact on the environment and, for this reason, strives to achieve a sound and consistent environmental performance for all its products and processes.

All SAES Getters' companies are committed to developing advanced products that exhibit safe and environment-friendly features by restricting the use of environmentally hazardous substances in products, encouraging a responsible exploitation of all natural resources and promoting projects for waste material recycling.

To confirm SAES Getters' efforts in preventing pollution and minimizing environment impacts, while still pursuing the continual improvement of their business performance, the following Group's manufacturing facilities have been ISO14001 certified: SAES Getters S.p.A. in Lainate (Milan), Italy; SAES Advanced Technologies S.p.A. in Avezzano, AQ, Italy; SAES Getters Korea Corporation in Jincheon-kun, Korea; and Nanjing SAES Huadong Getters Co. Ltd. in Nanjing, P.R. of China.

1996

The joint venture Nanjing SAES Huadong Getters Co. Ltd. is formed in Nanjing, China.

1996

Development of High Porosity Thin Film (HPTF) getters, for field emission displays and for application in a wide range of electronic devices.

SAES GETTERS' PRODUCT LINES BASED ON THE EXPLOITATION OF THE PROPRIETARY GAS-SURFACE INTERACTION TECHNOLOGIES, TYPICALLY USED IN VACUUM APPLICATIONS AND FOR ULTRA-HIGH PURITY GAS HANDLING, ARE OPERATED THROUGH TWO BUSINESS UNITS, THE INFORMATION DISPLAYS AND THE INDUSTRIAL APPLICATIONS UNITS.

THE SIX BUSINESS AREAS UNDERLYING THIS STRUCTURE ARE COMMITTED TO ENSURING THE BEST CUSTOMER SATISFACTION IN SPECIFIC MARKET SEGMENTS, WITH THE SUPPORT OF A SALES & SERVICE GLOBAL NETWORK DISTRIBUTED ACROSS EUROPE, AMERICA AND ASIA.

1997

Launch of new barium getters (High Yield Frittable and Fast Flash) aimed at improving the quality and efficiency of color cathode ray tubes.

1998

SAES Getters Technical Service Co. Ltd. is formed in Shanghai, China, and located in the Zhangjiang Hi-Tech Park, to best address the increasing technical requirements of the Chinese semiconductor and high-tech markets.

Cathode Ray Tubes

SAES Getters is the Color Cathode Ray Tube (CCRT) and Cathode Ray Tube (CRT) industry's worldwide leading provider of evaporable getters. With three manufacturing plants located in Italy, China and Korea exceeding an overall yearly production capacity of 250 million pieces, for the last 30 years SAES Getters has been unanimously recognized as the number one getter supplier for all kinds of cathode ray tubes. Excellent quality, extremely wide product portfolio, vertical integration and a worldwide logistic network are the key factors that motivate customers to choose SAES Getters not only as a supplier, but as a strategic business partner.

Flat Panel Displays

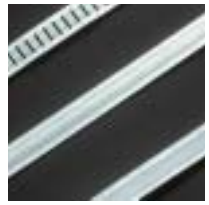
A strategic supplier of technology innovation for the flat panel display industry, SAES Getters offers solutions that meet the most severe requirements in terms of vacuum maintenance, impurity removal and controlled mercury release in cold cathode fluorescent lamps for LCD backlighting. SAES' evaporable and non-evaporable getters, desiccants, alkali metal sources and mercury dispensers support most of the cutting-edge flat panel developments – including Plasma displays, Field Emission Displays (FEDs), Vacuum Fluorescent Displays (VFDs) and Organic Light Emitting Diode (OLED) displays – by delivering the highest display efficiency and lifetime extension.

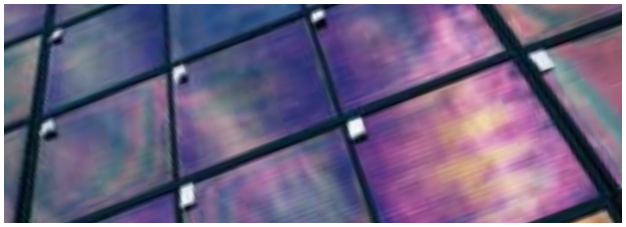
1998

Development of next-generation lamp products, such as oxygen dispensers and advanced mercury dispensers (StahgSorb Wire and Total Quality Shield).

1999

Introduction of the St 787 series, non-evaporable getters capable of withstanding lamp manufacturing critical conditions and to deliver improved safety and ecological content.





Lamps

The leading supplier of high quality, innovative non-evaporable getters (NEG) and metal dispensing products, SAES Getters fully addresses and solves many key issues of the lamp industry related to vacuum purity maintenance, filling-gas purity and lamp processing for street, industrial and commercial lighting.
SAES' advanced mercury dispensers for fluorescent lamps support the most important lamp manufacturers worldwide in fully complying with stringent mercury dosing regulations, thus ensuring minimal environmental impact.

Electronic Devices

This Business Area offers solutions for an extremely wide and diversified range of electronic devices, whose functioning requires either vacuum or a high purity rare gas atmosphere to operate, and it addresses several different market segments: avionics, medical, security & defense, telecommunications and automotive. Applications of its sintered porous NEG products span from mature electron tubes to detectors and sensors, while the alkali metal dispenser product line fulfills the needs of the photosensitive device industry.

2001

Ernst & Young's World Entrepreneur Award Year 2000 is granted for the first time ever to an Italian: Paolo della Porta, President and Group CEO of SAES Getters, is selected among the 22 best entrepreneurs of 19 countries.

2002

Launch of IntegraTorr, an innovative non-evaporable getter (NEG) pumping solution for particle accelerator vacuum chambers, developed by CERN and branded by SAES Getters under a license agreement.

Vacuum Systems & Thermal Insulation

Expertise in gas-surface interaction, vacuum technology, outgassing and permeation of materials has led the Group to the development of getter pumps and solutions for vacuum systems and vacuum thermally insulated devices. SAES Getters' NEG pumps are used in industrial and scientific applications, such as analytical instrumentation, vacuum processing systems and particle accelerators, to achieve extremely low pressures or to ensure higher production and process yield. Special applications in the high energy field also benefit from SAES' very thin and particle-free getter films, obtained by means of advanced sputtering processes.

Our vacuum thermal insulation solutions include NEG products for cryogenic applications, evacuated dewars, thermal bottles and solar energy collectors and pipes. Vacuum insulated panels typically used in home and industrial refrigeration, in the oil extraction industry and in insulated shipment and transport applications are also encompassed in the product portfolio offered by this Business Area.

Semiconductors

The mission of this Business Area is the development and marketing of advanced gas purification technologies supporting the semiconductor and other hi-tech industries. Providing purification for Ultra-High Purity (UHP) bulk gases and specialty gases, as well as in-situ purification for processing tools, SAES Pure Gas – member company of the SAES Getters Group – offers a complete product portfolio, tailored to a wide range of flow rates and gas applications, and sets the market standard in terms of superior technologies, impurity removal and purifier lifetime.

2003

Massimo della Porta is appointed Chief Executive Officer of the SAES Getters Group.

2003

The SAES Getters Group receives the ISO9001:2000 Quality Management System Corporate Certification and confirms its commitment to customer satisfaction and to continuous product & service improvement.

IN-HOUSE DEVELOPMENT AND MANUFACTURING OF ADVANCED MATERIALS SUPPORTING SOME OF THE MOST INNOVATIVE TECHNOLOGIES AND EMERGING INDUSTRIAL APPLICATIONS IS THE CHALLENGING FOCUS OF THE NEW ADVANCED MATERIALS BUSINESS DEVELOPMENT UNIT AT THE SAES GETTERS GROUP. THANKS TO THE EXCLUSIVE BLEND OF TECHNOLOGICAL COMPETENCIES AND FARSIGHTED MANAGEMENT CAPABILITIES, THE GROUP IS UNIQUELY POSITIONED TO OFFER COMPETITIVE ADVANTAGES TO THE NICHE MARKETS OF THE OPTOELECTRONIC MATERIALS, SHAPE MEMORY ALLOYS, MEMS AND METALORGANIC PRECURSORS. WITH THE PLUS OF A WORLDWIDE SALES & SERVICE NETWORK.

2004

Launch of DryFlex, the desiccant solution for OLED display lifetime extension, delivering superior moisture chemical sorption and extreme geometry flexibility.

2004

Development of the advanced optical crystals supporting a wide range of optoelectronic devices: Stoichiometric Lithium Niobate, Optical-Grade Congruent Lithium Niobate and Tantalate and High Grade Nd:YAG.

Optoelectronic Materials

The newly constituted Business Development Area delivers advanced optical crystals to the optoelectronic device and solid-state laser marketplace. With a product portfolio including Stoichiometric and Optical-Grade Congruent Lithium Niobate and Tantalate, as well as High Grade Nd:YAG laser crystal rods, plus with full mastering capabilities in the crystal growth, fabrication and characterization processes, the SAES Getters Group offers customers a real competitive advantage as a reliable supplier of added-value photonic materials.

Shape Memory Alloys

The mission of this new Business Development Area is production and marketing of Shape Memory Alloy (SMA) components for industrial and niche high-technology applications. SMAs are a group of innovative materials showing superelasticity and the unique property to return to a predetermined shape when heated. SAES Getters masters in-house a vertically integrated production process, from raw materials to "trained" components, offering flexible tailor-made solutions and complete process and product control. SAES' competencies also include specific know-how in implementing SMA materials in final devices. Typical SMA applications are actuators widely used in the automotive, transportation and domotics industries.

Metalorganic Materials

This new Business Development Area offers premium quality metalorganic precursors for a wide range of electronic and microelectronic Metal Organic Chemical Vapor Deposition (MOCVD) applications, among which ferroelectric memories, high-k dielectrics, electro-ceramic thin films and superconductors. Excellence of SAES'

precursors is guaranteed by our distinctive chemical synthesis know-how and by an accurate monitoring of the quality standards throughout the entire manufacturing process.

Getters for MEMS

To specifically support the technology trend of increased miniaturization of electronic devices, as well as to address more sophisticated geometry requirements, SAES Getters has developed an advanced thin film technology fully compatible with microelectronic hermetic packages, Micro Electro Mechanical Systems (MEMS) and Micro Opto Electro Mechanical Systems (MOEMS): the newly launched product line consists of getter thin films, few-micron thick, that can be deposited and patterned on different substrates (wafers, lids, plates) in a variety of shapes.
SAES' thin film getter solutions increase long term reliability and lifetime of vacuum or inert gas hermetic packages, by keeping the operational conditions under control through chemical sorption of all active gases. The manufacturing process in cleanroom environment ensures the highest quality standard for all these new getter films.

2004

Development of Shape Memory Alloys, whose superelastic and shape-memory properties are exploited in components used in several industrial applications.

2004

Launch of PaGeWafer, the getter solution ensuring vacuum long-term stability of hermetically wafer-level packaged MEMS.

WE WILL BUILD ON OUR CORPORATE CULTURE, MADE OF COMPETENCIES, VALUES, PEOPLE AND COMMITMENT. WE WILL STRIVE TO CONTINUE LEADING THE EDGE OF INNOVATION AND SUPPORTING THE MARKET NEEDS, TO DELIVER SUPERIOR TECHNOLOGIES TO THE ADVANCED MATERIAL MARKETS.

WE WILL MAKE SURE THAT NEW PRODUCTS ARE TUNED TO CUSTOMER'S REQUIREMENTS, TO KEEP ON OFFERING COMPETITIVE ADVANTAGES WHILE ENJOYING BUSINESS SUCCESS. WE WILL ENHANCE PRODUCT AND PROCESS QUALITY AND CONTRIBUTE TO THE ENVIRONMENT PROTECTION, BOOSTING OUR CORPORATE INTEGRATED MANAGEMENT SYSTEM.

Empowering Innovation

Our corporate culture, made of competencies, values, people and commitment will continue representing the pillar on which the SAES Getters Group will build to develop new challenging technologies and to expand into constantly evolving markets.

Our determination to drive innovation and support the market needs will guide us in setting state-of-the-art management and organizational processes, as well as in offering superior quality solutions to the advanced material industries: this strategy has proven successful for sixty years in our getter-based businesses, in which we will also actively continue to invest.

Our passion for research & development will be nourished by long-term and mutually beneficial cooperation with customers, ensuring that new products are tuned to their real requirements and that the Group keeps on offering competitive advantages while enjoying business success.

Our sound financial position will enable us to make organic growth investments to balance our manufacturing capacity with the market demand and to pursue an active acquisition strategy, with the goal of increasing our know-how and market share in the value-added advanced material fields.

Our global thinking, epitomized by our worldwide sales & service network and production capabilities, will support everyone doing business with SAES Getters: the geographical closeness to our customer base will continue to be a fundamental strength of the Group.

Our all-round commitment will entail strengthening the corporate Integrated Management System, ensuring that our technological and market competitive edge is always matched by responsible care for quality, environment, safety and people.

On top of all of this, our mission will still be what we have been perfecting over the years: supporting your innovation.

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