

The Vesuvius business model

We operate a profitable, flexible and growth-generating business model.

This model has been developed and refined over many years, within both Vesuvius and Fosco, to build the brand equity of our products through reliability, technology and service.

The foundation of our business model is our worldwide presence, with our industry experts embedded at most customer locations, ideally placed to identify potential process improvements in cooperation with customers.

Our model is supported by our technology centres which develop solutions involving engineered systems and high-value consumables.

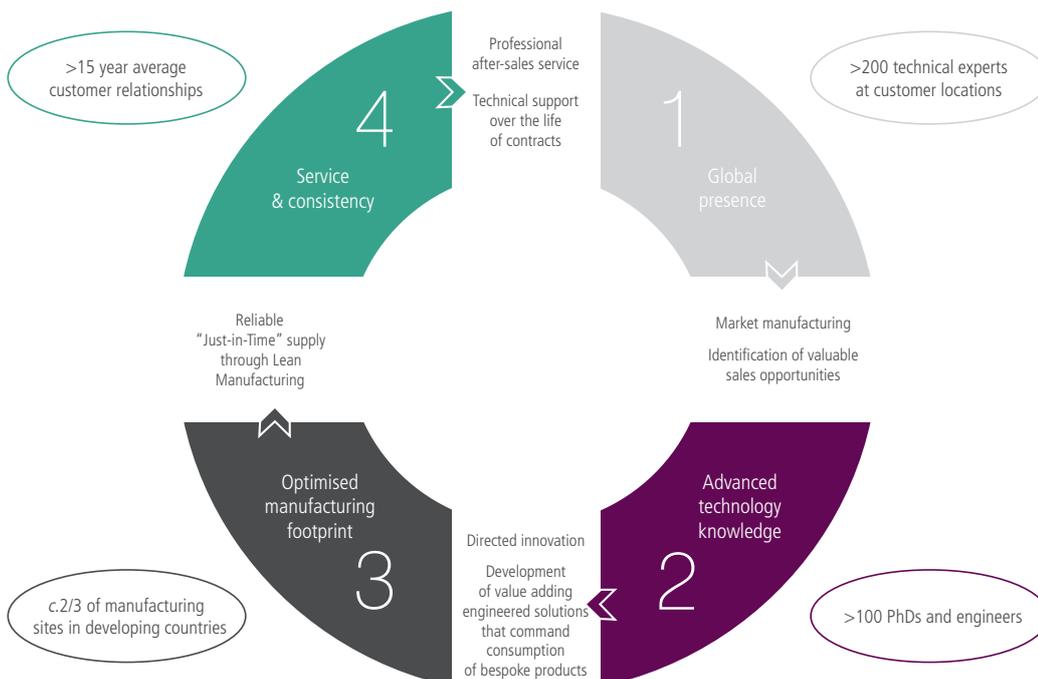
These solutions are industrialised in our low-cost, dispersed manufacturing system within which we are located close to our customers' facilities.

This allows us to supply customers on a reliable, just-in-time and highly competitive basis, essential for consumable goods involved on the critical path of our customers' process.

Thanks to our global presence, these products are serviced at our customers' facilities with the permanent presence of our industry experts.

Our business model:

- › is resilient to end-market cycles due to the flexibility of our diversified manufacturing footprint and adjustable cost base;
- › is profitable, as it allows value pricing for bespoke products; and
- › generates growth, as we can enlarge the accessible market with additional innovative products and solutions.



1. GLOBAL PRESENCE

Vesuvius is present in all six continents, with manufacturing capability within all the main steel and foundry markets. As we sell consumables that are critical to the processes of our customers, we commit to supply into our major end-markets from trucking distance. For the last forty years, Vesuvius has supported the development of global steel and foundry manufacturing processes with new technologies. Everywhere in the world, new steel and foundry plants have been commissioned with Vesuvius and Foseco products to create the best conditions for a successful start. To facilitate this, Vesuvius has established manufacturing plants in emerging countries from the very beginning of their industrialisation. The breadth and depth of the experience and expertise we have developed over these years with our customers is peerless.

Our knowledge of end-market processes, specifications and techniques around the world gives our experts a unique ability to support our customers no matter what their required configurations. This has contributed to the trust built with our customers in the reliability of our service and assistance. Local manufacturing, local expertise, and leveraging a global knowledge of our customers' processes gives Vesuvius a special relationship with its customers, to help them optimise their process and their product performance.

To support our global presence, we hire and train local engineers in most developing countries, who are then progressively integrated within the Vesuvius network of experts and offered international careers. These technical experts become partners of their local customers and help them meet their aims for continuous improvement, whilst maintaining the utmost level of reliability. Through this close technical relationship, we can identify together new development opportunities to create value in the customer's process.

2. ADVANCED TECHNOLOGY KNOWLEDGE

The ability to support our customers' development and to anticipate their future needs results from the capacity of our Research and Development centres to leverage their knowledge in the most advanced ceramic and metallurgical techniques. Our laboratories are equipped with state-of-the-art equipment and utilise the most advanced technologies of simulation and finite element analysis to simulate the behaviour of molten metal in a customer's specific equipment configuration. Our three central laboratories explore the fundamental aspects of the casting process with the most sophisticated equipment, whilst our eight local development centres feed on these fundamental findings and elaborate custom-designed, customer-specific solutions that will create value for our customers and help them differentiate from competition.

SIX RESEARCH CENTRES AND
EIGHT DEVELOPMENT LABORATORIES
EMPLOYING MORE THAN 100 PhDs
AND ENGINEERS

These innovations can then be tested at the customer's facility with the highest level of confidence in their suitability, based on Vesuvius experience and on past success.

3 OPTIMISED MANUFACTURING FOOTPRINT

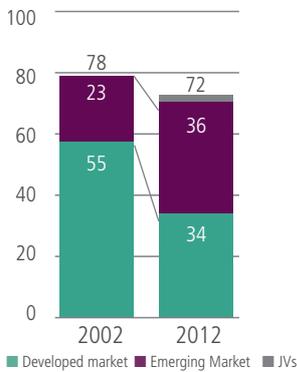
4 SERVICE & CONSISTENCY

When successfully tested, our products can be manufactured at a short distance from our customers' plants, guaranteeing just-in-time delivery and a competitive cost. To enable us to supply most customers from trucking distance, we optimize our cost competitiveness by investing in the lowest cost production site in a given area and, together with the large volume of pieces we produce, this provides our customers with the best balance between value and cost for our high technology solutions.

Being global, we can ensure a local service to our customers, including the management of an optimal level of inventories at their location, high quality technical support and a unique capacity to be reactive in modifying our production and supply of product and service to reflect any unexpected change in customers' requirements.

This high level of service relies on our technicians' presence permanently on the customers' shop floor, leveraging their worldwide expertise accumulated in Vesuvius over many years.

EVOLUTION OF NUMBER OF PLANTS AND PEOPLE OVER TEN YEARS SITE LOCATIONS



RECENT RECOGNITION

SSAB SSAB EMEA most valued supplier award 2011

AK Steel AK Steel sets world casting record — Vesuvius valued partner in this achievement

SIEMENS VAI Vesuvius is key partner of the world's first automated ladle operation

EVOLUTION OF NUMBER OF PLANTS AND PEOPLE OVER TEN YEARS HEAD-COUNT

