

## Italcementi, the history and future of cement in 150 years



**From the first test in 1864 in a house in Scanzo, near Bergamo, to operations in twenty countries and four continents. From grinding the first products in one wheat mill to 53 cement plants and around 20 thousand employees in the world. A history of innovation in products and production processes and of close partnership with the greatest engineers and architects that spans three centuries, from the first major works in the 19th century to the great challenges of the new millennium**

Italcementi celebrates its 150th anniversary. The origin of the company, with 53 cement plants in twenty countries and four continents, dates back to the second half of the 19th century in Scanzo, near Bergamo, where the *Società Bergamasca per la fabbricazione del cemento e della calce idraulica* (Bergamo Company for the production of cement and hydraulic lime) was set up. The first tests for the production of cement, carried out in a small kiln in a house in Scanzo using marl limestone from nearby hills, marked the first steps of a company that has become one of the world leaders in the building materials industry, with operations in many markets, and a leader in the innovation of products and production processes, increasingly oriented to sustainability.

The first materials were burnt in the Scanzo kiln on 8 February 1864. The product was ground by a miller in a watermill and used to make hydraulic cement that showed, for those times, extraordinary properties.

The Scanzo cement became quickly famous and was used for various large projects, among which the **bridge over the Adda river** with 16 arches in Rivolta d'Adda (next to Bergamo), the **Santa Lucia railway station in Venice**, where the effectiveness of the binder made the difference even underwater and the **Suez Canal in Egypt** (operations in the Egyptian marketplace will significantly return later in the Group's history).

Production reached 7000 tons of cement in just two years and further expanded in 1872 with the acquisition of the initial competitor in Palazzolo.

In the early years of the 20<sup>th</sup> century, the management of the *Società Bergamasca per la fabbricazione del cemento e della calce idraulica* went to the **Pesenti family**, who merged their company with that of Scanzo: the result was a group with 12 cement plants and more than 1500 employees and a production of more than 210,000 tons. The head office was in Bergamo, in via Madonna della Neve, where the Group's headquarters are still located.

In 1927, around sixty years after its establishment, and with its shares floated at the Stock Exchange for two years, the company took its current name: there were 33 cement plants with a production of 1.8 million tons, equal to 44% of the domestic market, which made the company the industry leader in Italy, a position it has kept until today. Growth was managed by **Cesare Pesenti**, an industrialist and a man of culture, who distinguished himself for the publication of an essay on reinforced and semi-reinforced concrete which is still popular. He was the first to understand the need for continuous energy supply at competitive costs for his facilities, especially through hydropower plants. In Italcementi's history, power plants have developed significantly since 2001, when **Italgen** was set up, which presently owns 14 hydropower plants connected by a network of 400km of power lines and a photovoltaic plant in Emilia Romagna, plus various other plants abroad.

Already in the 1920s, Italcementi's industrial strategy was geared towards technical progress, and research developed in two directions: development of new products and adoption of new processes. The company developed partnerships with foreign laboratories of scientific research and with big foreign companies, to acquire new processing systems and to improve production quality. **Granite Cement** is, for example, one of Italcementi's patented special products, by means of which the company achieved excellent results, and that represented in those times a pride for the whole nation, able to prevail over all other countries in the development of the cement industry.

The deep connection between Italcementi and the academic world led in 1927 to the setting up, at Politecnico di Milano, of the **Scuola Master Fratelli Pesenti**, a post university high education training programme on building materials which is still active today.

After World War I, the Group continued its progressive expansion, also by acquiring other companies. Production, supported by new studies, diversified and cements obtained from natural marl were accompanied by artificial cements, produced from different mixes: normal and high-strength Portland cements, quick setting cements and **white cement**, exclusively produced by Italcementi in its Alzano Lombardo plant, near Bergamo, with the use of raw materials without or almost without iron oxides and other colouring agents.

In the 1940s the control of the Group was taken by **Carlo Pesenti**, a key figure for the company development. A twofold strategy was implemented. On the one hand, the technical and production consolidation of cement, with a wide accrual of technological knowledge achieved by building brand new plants, which gave the company the opportunity not only to keep its leading position in Italy but also to position itself as a technologically advanced company. On the other hand, industrial diversification with the acquisition of various companies, that gave Italcementi a central role in the Italian business world.

In 1953 Italcementi, together with other major Italian companies, set up **SISI** (Sviluppo Iniziative Stradali Italiane – Italian Road Project Development) to study the issues of development and of the improvement of the highway network in Italy. This company prepared the draft project and the feasibility study for the **Autostrada del Sole (Milan-Rome Highway of the Sun)**, which celebrates its 50<sup>th</sup> anniversary this year.

In the 1950s, the relationship between the Bergamo company and the world of architecture and top-level engineering expanded further, a strong and synergic bond that has led to the construction of some of the most significant Italian and international architectural works. The **Pirelli Skyscraper** was built in 1956 in Milan, based on a project by **Giò Ponti** with

**Pierluigi Nervi** as structural engineer, which remains one of the tallest buildings in reinforced concrete in the world.

On its 100th anniversary, in 1964, Italcementi had the 13th biggest turnover among Italian companies. 1964 was also the year of a new partnership with **Nervi**, who was called to the Vatican to conceive the new hall for the Pope's general audience. Nervi worked together with the Group to develop concrete types that would not only meet the needs of the structural projects, but that would also ensure durability over time. Today the **Nervi Hall** (which bears this name in honour of its designer) is considered one of the great monuments of contemporary architecture and engineering.

In 1984, when his father Carlo died, **Giampiero Pesenti** took on the Group's leadership and decided to focus the Group on its core business, with a careful programme of efficiency and development in the cement industry.

In the late 1980s, Italcementi pushed the Group's internationalization by acquiring activities in the United States. In April 1992 with the acquisition of **Ciments Français** – a company more than twice as big as the Bergamo group – the company globalization took place in just one shot. That transaction beat three records at the time: it was the most relevant industrial acquisition carried out by an Italian group abroad, it was the most important capital increase (5 billion francs) ever decided at the Paris Stock Exchange and the fastest increase in size ever recorded by an Italian industrial company, whose turnover rocketed from 1,500 billion ITL before the acquisition to a consolidated turnover of more than 5,000 billion ITL for the new group.

The acquisition changed the shape of the Group: the weight of Italy on revenues decreased from 97% to 27.5%, while cement plants increased to 51 in 13 countries. The first integration process, alongside the Executive Committee that defined the Group strategic lines, was the establishment of **CTG** - Centro Tecnico di Gruppo (Group Technical Centre) – in charge of the whole research and development activity, which has always been one of the main axes in the history of Italcementi. The union between the Italian and the French companies was sanctioned in 1997 by the launch of the **Italcementi Group** logo.

The road to internationalization had been taken. Attention was focused on the development of emerging countries, with an approach to market diversification in geographical areas with higher growth potential. The first steps were directed towards Eastern Europe (Bulgaria), and then the company expanded towards the East, where new companies were acquired in Kazakhstan and Thailand. The next step was India, the third world market of cement.

Africa did not remain outside the group's development plans: alongside its operations in Morocco, the Group entered Egypt in a leading position. This portfolio diversification strategy towards emerging countries has led to an increase in the weight of this group of countries to more than 50% of Italcementi Group production capacity.

In 2004, **Carlo Pesenti**, son of Giampiero representing the fifth generation of Pesenti linked to Italcementi, was appointed Group's CEO. Carlo continued and further pushed Italcementi's international growth, and focused his industrial vision on innovation and sustainable development and in 2013 he was appointed, for the second time, co-chairman of the Cement Sustainability Initiative (CSI), the first formal commitment towards sustainability undertaken by some of the major cement producers worldwide.

Starting from the second decade of the 21st century, Italcementi has implemented its strategic plan for the renewal and adjustment of its main cement plants to the Best

Available Technologies (BAT), in line with its commitments towards industrial and environmental efficiency. After revamping the Calusco d'Adda cement plant near Bergamo, also the plants of Martinsburg, USA, Ait Baha, Morocco, Matera, Italy and Devnya, Bulgaria, were taken to a level of industrial and environmental efficiency. This year, on the occasion of the 150th anniversary of the Group's establishment, the renewed cement plant in **Rezzato, Brescia**, will be opened. The plant was built in 1964 on the occasion of Italcementi's 100th anniversary. With an investment of 150 EUR million, this cement plant will become the most efficient and environmentally-friendly in Europe.

Alongside its production activity, under the leadership of Carlo Pesenti, Italcementi Group has strengthened its commitment in the field of research and for the sustainability of new materials. For this purpose, to capitalize even more on the Group's know how that has led to filing more than 60 patents over 10 years, **i.lab** was opened in 2012, the prestigious Research and Innovation centre designed by US architect Richard Meier. Thanks to its solutions for technological and environmental sustainability, it has received the Leed Platinum certification. i.lab hosted in 2013 the **Arcvision Prize**, a prize reserved to young women architects that summarizes Italcementi's commitment towards innovation and sustainability and its attention towards the world of architecture.