



Growth and development

Siempelkamp invests
in its Krefeld location



Inauguration ceremony in the Foundry (from left to right):
Dr Ing. Hans W. Fechner, chairman of the executive board of G. Siempelkamp GmbH & Co. KG;
Gregor Kathstede, mayor of the city of Krefeld;
Michael Szukala, managing director of G. Siempelkamp GmbH & Co. KG;
Stefan Mettler, managing director of Siempelkamp Foundry;
Dr rer. nat. h. c. Dieter Siempelkamp, chairman of the advisory board of G. Siempelkamp GmbH & Co. KG



By Ralf Griesche

Our business success is founded on innovative concepts. However, to ensure future success the general conditions have to provide a solid base. By 2009, Siempelkamp will have invested 54 million euros in new production equipment at the Krefeld location.

The first construction phase, which will benefit the machinery and plants business unit with an investment of 13 million euros, is well advanced. Two machines, giants in their class, have already been brought into the new 3,000 m² shop area. Both machines are unique in Europe and will machine large workpieces.

The turning lathe from Heyligenstaedt in Giessen is approx. 5 m (16 ft) in height, approx. 20 m (66 ft) in length, and sits on a foundation that is 4.45 m (15 ft) deep. This machine will machine parts with a length up to 12 m (39 ft) and a piece weight of over 100 t (110 US ton). It will be used, for example, for the machining of infeed and outfeed rollers, large cylinders and the main shafts for windmills.

The second machine, a gantry-type VMG 6 PS portal milling machine from Schiess, has a mounting length of 22.5 m (74 ft), a working width of 7 m (23 ft) and a height of 6 m (20 ft). This universal machine will lathe, drill and mill. The milling spindle can machine at a maximum output of 100 kW at high precision. Key data for the gantry include: 26 m (85 ft) working length and 13 m in height, the workpieces to be machined can be up to 6 m (20 ft) in length and 7 m (23 ft) in width. The foundation consists of a monolithic concrete block which was poured in 72 hours from

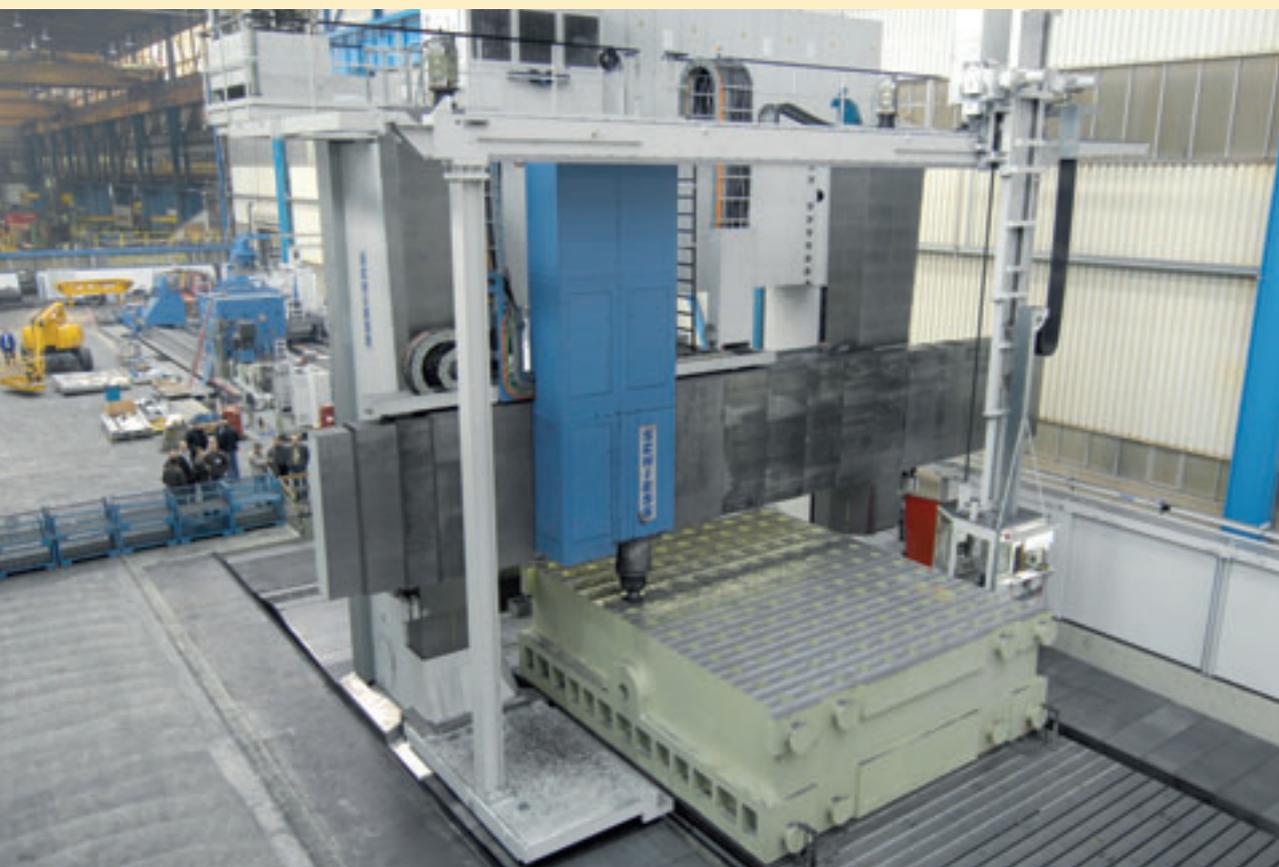
6,400 m³ of concrete at the end of August 2007. This gantry is the first machine of its kind to be installed in Germany. The other nine predecessors were all manufactured for export.

Siempelkamp will use the milling machine and its special machining heads to machine many different workpieces in the future, including large press tables for multi-daylight and metal forming presses. The gantry can also machine housings for diesel engines of ships, as well as extra-long hotplaten. The first portal is installed; a second will follow at the end of 2008 and will start production in February 2009.

Construction phase II

The planning for the second construction phase has started and will directly connect to the shop that houses the lathe and milling machines. An investment of 17 million euros will build another shop with an area of 3000 m².

This building will accommodate a new vertical lathe with a surface plate diameter of 16 m (52 ft). The lathe will be used to machine large workpieces, such as mill heads manufactured by the Siempelkamp Foundry. One advantage: using the new lathe, machining processes that were previously carried out by contract



Portal milling machine with a 200 t (220 US tons) press table



Siempelkamp –
on Siempelkamp Street

Find: 250 kg (551 pounds) bomb from World War II



manufacturers will soon be performed at Siempelkamp's own production facility in Krefeld. Thus, tedious and expensive transportation to machine shops will no longer be necessary. Siempelkamp service now includes another important aspect.

Altogether, the machinery and plants business unit will have invested 30 million euros by 2009. Both construction phases will result in a unique competence center for the machining of large steel components and castings. With the Heyligenstaedt turning lathe, the gantry-type portal milling machine and the vertical lathe, Siempelkamp provides customers with an expanded range

of services that will attract worldwide attention. Additionally, the new shops will be utilized for job order production.

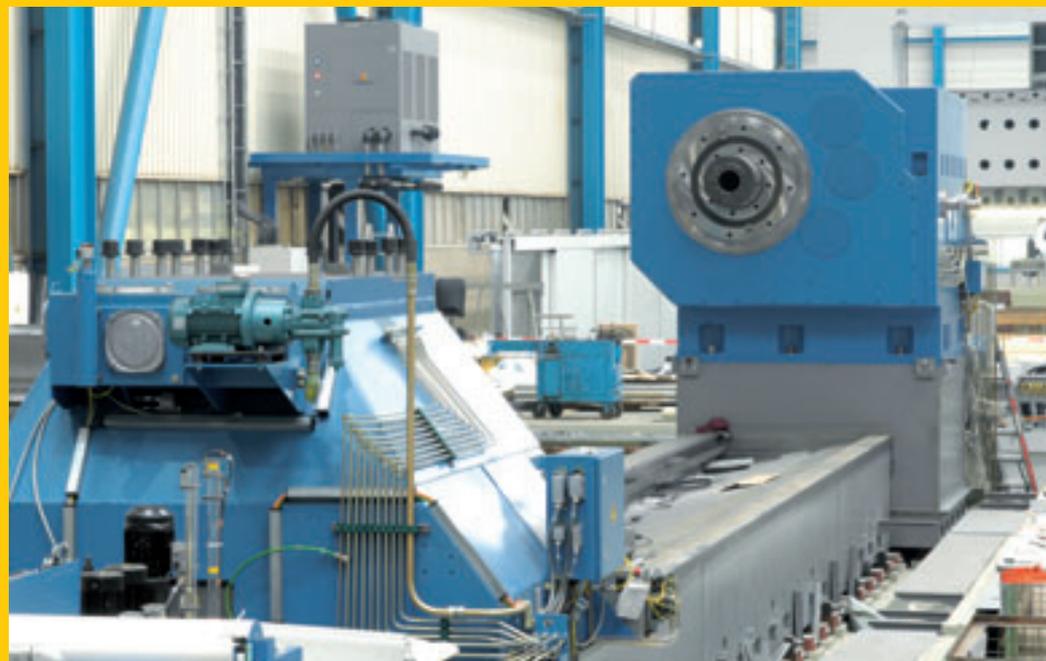
Modernization and capacity expansion for the foundry

Since 2001, Siempelkamp foundry has continuously carried out modernizations and expansions of its productions equipment and facilities. To a large extent, the sales increase over the last few years has become possible because of these expansion measures, which were carried out gradually.

The foundation for the portal milling machine is being prepared



Turning lathe by Heyligenstaedt





March 11, 2008, inauguration of the foundry extension

Furthermore, the expansions are the foundry's answer to the continuing high demand from the capital goods industry and the customers' demand for an extension of the range of casting products. Again, in 2007, the foundry has positioned itself as a worldwide market leader in the production of heavy and large castings made of spheroid graphite and flake graphite cast iron. With a total order value of 169 million euros, the company achieved growth in the total order quantity of 30.7% compared to the previous year. Because of the above-average increase in the areas of mill construction, wind power plants, and nuclear technology, as well as press and engine construction, the foundry's sales volume grew by 15.9% – a new record high. The figures demonstrate that the positive development of the market for cast iron components continues.

The construction of a new production facility will significantly expand the capacities

of the foundry. After a record time of only nine months, the new molding shop was inaugurated on March 11, 2008. Equipped with the latest crane system, the new facility allows for highly economical production processes. The total area of 2,100 m² will result in a yearly capacity increase for castings with a weight up to 50 t (55 US ton).

This 20 million euro project is Siempelkamp's second largest investment in the history of the foundry. The project was made up of two construction stages and has been managed by a planning team of only four people. During the inauguration ceremony, Krefeld's mayor Mr. Gregor Kathstede emphasized the importance of the Siempelkamp company for the Krefeld location more than once. He also praised the exemplary commitment of the company regarding the implementation of the extensive construction activities.



The pattern storage during construction

enough until it reached the optimal temperature of 1,350 °C. Afterwards, in a spectacular rain of sparks, the contents of the pouring basin flowed into the mold that was dedicated to this baptism by fire.

The technical equipment that will be used inside the new molding shop is setting trends for the future: not only does the line of products under the future roof of the new molding shop deserve attention, but also the technical equipment that will be used here. The goal was to make production processes more economical and improve the working conditions for our employees.

The square footage of the new molding shop alone is exemplary. The shop dimensions include 1,000 m² of molding area, 200 m² of ramming space, 300 m² of storage area and 620 m² of traffic area.

The creation of another molding pit area, this time with 1,000 m² in size, will offer the possibility for the use of universally distinguishable molding pits in the future. The new molding shop can be divided into as many as 26 pits and can thus be used with flexibility as never before.

A special technical highlight is the new pouring ladle transport. By using a newly implemented rail transport cart, the distances for the transport of molten iron

are shortened and previously necessary work processes are saved. Amongst other things, the direct supply of core intensive products is guaranteed through the close proximity to the core-making shop.

For all arising transport routes a new crane system consisting of eight cranes was installed. The transverse run of the cranes enables access to and area utilization of the entire shop.

The future molten iron transport will be carried out by three ladle handling cranes which can carry a load of up to 80 t (88 US tons) each.

The climate control inside the enclosed crane cockpits and the improved climate and sonic conditions inside the shop are worth mentioning as part of the modernization measures.

Furthermore, the amount of supply air and discharged air areas in many parts of the shop were increased so that a significantly better air exchange becomes possible. The use of a perforated wall surface reduces the noise level inside the shop.

Pattern and flask storage

Further expansion phases include a new pattern storage area with the latest storage technology, and an adjacent flask storage area. This second investment stage will cost approximately 6 million euros and will cover a total area of 25,000 m².

All improvements are dedicated to higher efficiency and improved working conditions. All in all, the investments clearly underline a true commitment to the Krefeld production location.



The new production facility inside the foundry