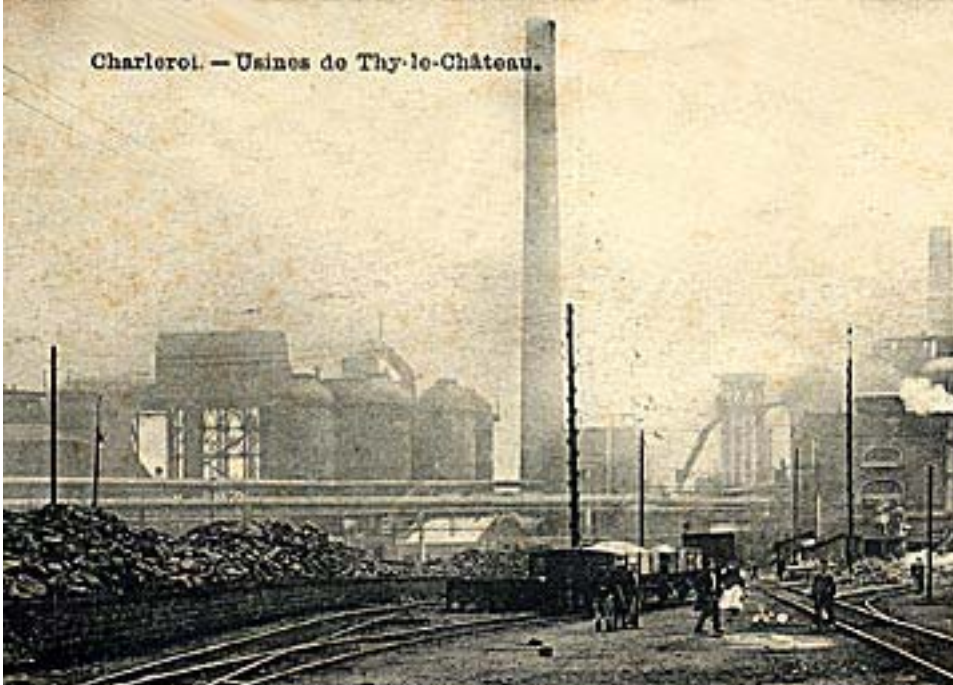


Forges et Foundries de Thy le Château

Thy Marchinelle
Thy le Château



FORNI ELETTRICI



The history

In the middle of the eighteenth century iron ore deposits were found in the Charleroi region of Belgium. A blast furnace was built in Thy-le-Château in 1763, operating on the charcoal produced from the nearby woods.

The river Thyria supplied the necessary power. Thus, the Forges et Fonderies de Thy-le-Château were established. In 1845 the Forges was taken over by Eugène Riche & Co the company in charge of the railway line linking Charleroi and Vireux.

Two coke blast furnaces were built, plus five reheating furnaces and a rolling mill producing 10,000 t a year of railway track and merchant bars. During the latter half of the nineteenth century, the ironmaking puddling process was replaced with the Bessemer steelmaking process.

Later the Thomas process was introduced to refine pig iron containing high percentages of phosphorus. Indeed, it was here at Thy-le-Château in 1878 that Thomas achieved his first success on an industrial level. A coke oven plant was set up in Marcinelle-Wez-St-Martin which was found to be an excellent location due to the presence of coal deposits and navigable waterways. Between 1863 and 1872 two coke blast furnaces were started up in the area as well. In 1888 the Forges et Fonderies de Thy-le-Château merged with the Usines du Midi in Marcinelle. The new company was called Hauts Fourneaux, Forges et Aciéries de Thy-le-Château et Marcinelle.

By the end of the century all the plant had been concentrated in Marcinelle. During the two world wars the company suffered heavy damage but was reconstructed each time.

In 1962 the company's name became Thy Marcinelle and in 1966 it merged with Aciéries et Minières de la Sambre, being renamed Thy Marcinelle et Monceau (TMM). In 1980 TMM was taken over by Hainaut-Sambre, which in turn merged with Cockerill in 1981, the resulting company being named Cockerill-Sambre. The integrated cycle plant in Marcinelle was producing approximately 2 million t/year of steel, 65% of which was devoted to the production of coils, the rest to long rolled products. The latter came off a modern rolling mill, "nr 3", which was made operational in 1971. It was a multi-line, multi-functional plant, made up of 27 stands producing reinforcing bars, merchant bars and wire rod.

The mill's two lines were extremely flexible, working in parallel or in series, according to requirements. It was thus possible to pass from one production programme to another with only brief retooling intervals, and failures could be tackled without stopping the machinery.

In 1988 Cockerill-Sambre decided to stop production of long rolled products to concentrate on the Fiat sector.

The Riva group made an offer for the "nr 3" rolling mill, which was physically separated from the rest of the works by the river Sambre, and invested BF 4 bn to build another steel-works to supply it with the raw material.

The Riva group thus prevented an efficient plant from being dismantled which, after recovering its competitiveness, saved 200 jobs.



90s

Thy Marcinelle produces wire rod up to 16-mm diameters wire in low-carbon steel, deformed reinforcing bars in coils, and a limited quantity of reinforcing bars in straight lengths.

The semifinished products feeding the rolling mill are mostly produced on site. Only a small percentage, coming from integrated-cycle production, is bought on the market. The rolling mill only works to order, with fast programme shifts so as to reduce the amount of product in stock.

The reinforcing bar production is homologated in Belgium Germany, France, the Netherlands, Switzerland and Sweden. The products are sold in Europe, North and South America Africa, the Near East, China and Oceania.

Customers produce electrowelded wire mesh, drawn products, electrode (coated electrodes and welding wire), steel wool, cold rolled products and other products derived from drawn wire.

The scrap yard can be supplied by rail, road and river. The new steelmill has an up-to-date 160-t electric furnace erected in a doghouse, a ladle furnace, an 8-fine continuous casting machine, a plant which filters the fumes and pelletize the dust collected, a closed-circuit water treatment plant serving both the steelworks and the rolling mills. The rolling sector has a mill for bars and wire rod.

Down stream of the 150-t/hr pusher furnace and the nine-stand roughing mill, there are two separate lines, each of which has a five-stand intermediate mill, a four-stand finishing mill a cooling bed, an automatic cutting-to-size and bundling plant a ten-stand no-twist finishing block for wire rod, a controlled-cooling line.



The finished product is loaded onto barge, trains and trailer trucks from three large deposit sheds. The laboratory carries out mechanical and metallographic tests and controls the quality of the finished product.

The steel mill also has two spectrometers to carry out analyses during the manufacturing process.