

Confidence fully justified – Burgo Ardennes PM 1 modernization



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Graphic*

“For this vital modernization project, we placed our entire trust in Voith Sulzer Paper Technology. We are extremely satisfied both with the project handling and execution, with the commissioning and above all with the results.”

This how Claude Taverdet, General Manager Burgo Ardennes Paper Mills, lauded the successful modernization of PM 1 at his plant in Virton, Belgium. The resultant improvements both in production capacity and quality now make this company one of Europe’s leading manufacturers of coated base paper.

In 1989 the decision by former pulp mill Cellulose des Ardennes to commence paper production created quite a stir in the papermaking world. Three years later in 1992, the company’s first Voith paper machine went into service with two off-line coating aggregates for an output of about 580 tonnes/day.

After some structural problems and lengthy shutdown periods, the company was taken over in 1994 by Cartiere Burgo



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Italia, who proceeded with expansion plans which also included substantially increased production.

During the following years, production outputs were achieved with PM 1 in the 54-200 g/m² range which significantly exceeded the original design output. However, further increases aimed at 1,000 t/day were thwarted by bottlenecks in drying capacity and in various peripheral aggregates.

Investigations soon showed that the paper machine itself could certainly produce more – subject to modernization. Against strong competition, Voith Sulzer Paper Technology received the modernization order in 1998.

Upgrading this paper machine involved retrofitting a ModuleJet to the existing headbox for basis weight cross-profile regulation, replacing the third press with a NipcoFlex shoe press, and carrying out small modifications to the predrying section. The result was that immediately after recommissioning, all guarantees were not only fulfilled more quickly than expected, but significantly exceeded.

After a “paper to paper” interruption lasting only 14 days, Cartiere Burgo restarted production in July 1999 at the Belgian plant with what is now its most efficient machine for coated base paper. Operating speeds and outputs well exceeding 1,000 m/min and 1,000 t/day respectively are no longer any problem.

Scope of modernization

- Detailed engineering, delivery and retrofit of Voith Sulzer ModuleJet and Profilmatic cross-profile regulation system to the existing headbox.
- Installation of dilution water loops to the ModuleJet, with deaeration tank and vertical screen, including electropolished piping both for the LC and HC loops from vertical screen to headbox.
- Installation of NipcoFlex press for the third nip, complete with hydrostatic oil supply aggregate and control system.
- Hot air injection piping for the predrying section.

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Fig. 1: Burgo Ardennes Paper Mills, Belgium.

Fig. 2: Claude Taverdet, General Manager Burgo Ardennes Paper Mills.

Fig. 3: Julien Verhoeven, Technical Manager Burgo Ardennes.

Fig. 4: Final installation of the pre-assembled NipcoFlex press.