

Press Release

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Pre-engineering project smooths the way Voith rebuilds Renkum PM 2

Papermaker Parenco will have its former graphic paper machine at its paper mill in Renkum, the Netherlands, rebuilt by Voith, which will enable it to produce 385,000 metric tons of packaging paper per year. This was previously announced in June 2015. The grade conversion will be carried out on the PM 2, which was decommissioned in 2009. A pre-engineering project conducted by Voith for Parenco preceded the decision to go ahead with the rebuild.

In future, the mill operator wants to produce corrugating medium and testliner on the PM 2, which will produce 1,100 metric tons per day from recovered paper. The production speed will be 1,200 m/min and the paper will have a basis weight in the range of 70 to 160 g/m². The width of the paper machine made it suitable for conversion to testliner and corrugating medium. "It is actually ideal for it," says Dr. Thomas Elenz, Key Account Manager at Voith, "because a great many of the new machines used in the downstream processing industry call for paper rolls that are 2.8 m wide. The PM 2 has a wire width of 9,200 mm and will produce paper webs that are 8.4 m wide, exactly three times 2.8 m.



There were a number of other points about the condition of the building and decommissioned machine that needed to be addressed, so in the summer of 2014 Parenco engaged Voith to undertake a preengineering project that would focus above all on outlining and defining the technical options and costs for the rebuild. Voith was the ideal partner because it has decades of experience in conducting preengineering projects and studies of this kind. Voith has an expert team of process engineers, electricians and mechanics, backed by engineers from the design, stock preparation and automation areas if necessary, which specializes in these kinds of pre-engineering projects.

Pre-engineering at Voith Head of Pre-engineering Wolfgang Hiller was involved in establishing this segment 30 years ago and since then has advised countless paper mills all over the world. Pre-engineering studies are comprehensive and encompass the paper machine and stock preparation unit as the core delivery, as well as the recommendations for piping, electrical equipment, automation, starch preparation, hall ventilation, vacuum system, fresh and waste water systems, water treatment facility, sludge recycling and energy supply. "We also define the emission values for noise, steam, dust or vibrations and look at the transport infrastructure to and from the paper mill," explains Wolfgang Hiller. Complete safety concepts are also compiled for submitting to the appropriate authorities in conjunction with approval procedures. Voith's range of services even includes accompanying the customer through the public consultation process if requested.

Conversion of a decommissioned system The decommissioned machine and three existing buildings had to be analyzed to deter-

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mine whether they could be re-used for the Renkum PM 2 project. This challenging study had to pinpoint what needed to be rebuilt or modified and which components had to be completely renewed. Moreover, the fact that the PM 2 was connected to the same energy, stock and water systems as the PM 1 on the same site had to be taken into account. As the PM 1 will continue to produce graphic papers, all these loops will have to be separate to convert the PM 2. "A complex job," explains Thomas Elenz. However, it is well worth the effort involved, as a rebuild is much cheaper than a new build on a greenfield site.

Outcomes of the pre-engineering project For the new production line on the grounds of the paper mill a recovered paper store will be established, and the existing buildings will continue to be used. The coarse screening will take place in the old TMP building where TMP (thermo-mechanical pulp) used to be produced. From here, the stock will be pumped through pipes to fractioning and fine screening in a hall previously used for the de-inking process. Most of the machines and equipment for the stock preparation can be re-used.

In May, two months after completion of the pre-engineering project, Voith received the follow-on order from Parenco for the rebuild and turnkey handover of the production line in late summer 2016. The turnkey project contains a Process Line Package incorporating construction works. This means that the customer has just one partner and far fewer interfaces to liaise with, ensuring fast project turnaround and adherence to the agreed costs.

The overall order includes the supply of new machines such as a large IntensaPulper IP and numerous IntegraScreen IS screening

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machines for stock preparation, a MasterJet Pro two-layer headbox, a NipcoFlex press, a SpeedFlow sizing unit, a new CombiDuoRun after-dryer section and all auxiliary equipment such as electrical installations and a process control system in a new joint control room, a complete starch preparation unit, pumps and piping. Voith was also commissioned to supply the following services: the dismantling of pipes, electrical cables and machines, basic and detailed engineering and of course the complete assembly, as well as training the new personnel for a successful start-up.// Voith GmbH Global Market Communications VZ/Vvkm St. Poeltener Straße 43 89522 Heidenheim, Germany Tel. +49 7321 37-8497 Fax +49 7321 37-138497

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Caption:

From left: Parenco Head of Purchasing Raymond Jolink and Dr. Thomas Elenz, Voith Key Account Manager, right after signing the contract.