

Procor – a challenge for Voith Brazil

New production line for corrugating medium and test liner



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In May, 2000, Voith Paper was chosen by Papeles Cordillera S.A., a CMPC Group company, as the supplier of a complete plant for production of Test Liner and Two-layered Corrugating Medium papers, within a basis weight range of 90 to 300 g/m², using mainly recycled paper and pulp in bales.

The CPMC Group is the second major paper manufacturer in Latin America and has 16 paper mills spread over many countries of the continent, producing pulp, printing & writing papers, newsprint, tissue and packaging & board papers. This traditional client has been placing important orders with Voith Paper Brazil in recent years, amongst which we can highlight the Procart project, installed 3 years ago and, that has exceeded the guaranteed production, and a major rebuild of the newsprint machines in Inforsa mill, 2 years ago.

The project named Procor will be implemented in Puente Alto, Chile, where CMPC have already 5 machines running, the new machine will result in the shut down of existing PM 9. The 5.5 m wire width paper machine will have initial production capacity of 150,000 tons/year at a maximum speed of 1,000 m/min, and a total capacity at future of 230,000 tons p.a.

The contract with Voith Paper comprises the supply of the total production line including stock preparation system, the paper machine, the auxiliary equipment, electrification, cranes, piping, project

management, erection, start-up and follow-up after the start-up.

With globalization, the Latin American companies have looked for the optimization of their structures, focusing mainly on their core business. This change resulted in a reduction of their Engineering Departments. Voith Paper has realized this and has build up expertise to support the paper industry in implementing a complete paper production line. In the case of Procor, Voith Paper as the main supplier acts as the contractor for the whole project with the following supply:

Fiber System

- Pulper for recycled pulp, including pulper feeding
- Pulper for virgin pulp, including pulp bale conveying system
- High density cleaning
- Deflaking
- Low density cleaning
- Broke system
- Water system.

Paper Machine

Headbox

One MasterJet F/B headbox with ModuleJet for the bottom wire and one MasterJet F/B headbox without ModuleJet for the top wire.

*Contract signing by the Papeles Cordillera and Voith Paper management:
Osvaldo S. Martin, Voith Paper São Paulo (on the left); Antonio A. Ruiz-Clavijo, Papeles Cordillera; Kurt Brandauer, Voith Paper São Paulo; Pedro H. Barros, Papeles Cordillera.*





Sheet formation

A 29 m long bottom wire with drainage elements and suction roll. A 10 m long top wire, prepared to receive a Duo-Former D. Provision for a second 10 m long top wire.

Press Section

A Tandem NipcoFlex press, the first of the kind in Latin America, with 2 nips for a 1,200 kN/m maximum load and 2 separate pick-up rolls, one between the wire section and the press section and the other, between the first and the second presses.

Dryer Section

The first two TopDuoRun dryer groups of the pre-dryer section are equipped with vacuum rolls and DuoStabilizers.

The after dryer section is equipped with DuoRun groups.

SpeedSizer

For size application on one or both paper sides.

Hard Nip Calender

This calender consists of a vertical two-roll arrangement, with heated bottom roll and EcoNip top roll, for a good paper surface quality.

Reel

With reel spool storage for automated transport and change of reel spools.

Slitter and Winder

Able to manage the whole paper machine production and with capacity to produce sets of up to 8 paper rolls.

Auxiliary Equipment

- Mechanical drive equipment
- Pumps
- Piping and valves
- Steam system
- Vacuum system
- Hood
- Building ventilation
- Cranes
- Paper roll handling system

- Electrification
- Instrumentation
- DCS
- QCS manufactured by Voith Automation

Engineering

- Machine and system engineering
- Basic and detailed engineering for the complete plant
- Process, paper machine
- Project management
- Field management
- Procurement

The erection work on site is expected to start in January, 2001; the commissioning in September 2001; and the start-up is scheduled for December 18, 2001. According to the Procor General Manager, Mr. Pedro Huerta Barros, this project is the beginning of a new era for the CMPC Paper Division, as they have plans to develop this market all over South America, installing similar machines in other countries.