

# MOULIN VIEUX MAINTAINS HERITAGE OF FRANCE'S GRENOBLE-ISÈRE PAPERMAKING REGION

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*INDEPENDENT MILL PRODUCES SPECIALTY PAPERS FROM RECYCLED PAPER.*

**N**ORTH OF GRENOBLE, WITH THE ALPS STILL VISIBLE in the distance, ancient cliffs form a backdrop to the French town of Pontcharra.

On the edge of town, next to small farming plots, is Papeterie de Moulin Vieux (PMV). The recycled pulp and paper mill specializes in printing and writing paper. Its products range from postal and poster paper to copy paper, prescription paper, and lightly coated papers.

The location is convenient to Lyon, France, and Geneva, Switzerland. Research and technical support are available from the Centre Technique du Papier (CTP) in Grenoble and area universities. CTP has even conducted pilot trials at the mill.

In the tradition of other older French mills, PMV developed as a family operation. The company has been producing graphic paper since 1869, when it was founded by Gaspard Zéphirin Orioli. That's the same year Aristide Bergés harnessed the waters of the Isère to power the paper mills at Lancey and make use of abundant forests in the region.

While many of France's pulp and paper mills are now foreign- or jointly owned, PMV remains independent, and

French. Descendants of Pierre Escarfail, who joined the company in 1889, are still involved in running the Moulin Vieux mill.



*The offices of Papeterie de Moulin Vieux at Pontcharra, France*

The Grenoble-Isère region is one of France's leading papermaking areas. It's home to 15 pulp, paper, and board mills and 35 processing and converting plants. Most of the mills, such as Moulin Vieux, produce specialty papers. Papeterie de Vizille (Vicat—FR), for example, produces featherweight papers, check paper, and map paper.

Other mills in the region include Arjo Wiggins (FR/UK), Aussedat Rey (International Paper—USA), Papeteries Gorge de Domene (FR), Guerimand Voiron (FR/UK), Lystil (Ahlström—SF), Papeterie de Lancey (IP—USA), and Sibille Dalle (Ahlström—SF).

Since 1982, the Moulin Vieux paper mill has operated a subsidiary (SPSD) to produce deinked pulp from recycled paper. SPSPD can produce 60 metric tons/day of deinked pulp. In 1990, the French Environmental Minister awarded SPSPD the Prize for Clean Technology in recognition of its recycling efforts and the chlorine-free (peroxide) bleaching process it uses to whiten the pulp.



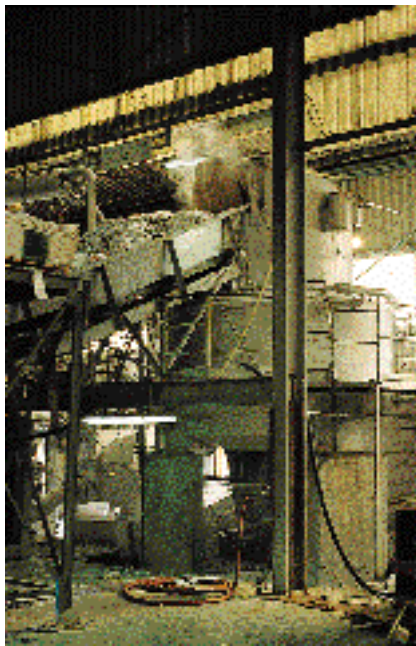
*Farm fields on the edge of town*



*Reclaimed office paper stored for recycling at the mill*



*Philippe Delpech, in charge of quality and development at Moulin Vieux, with a poster printed on the mill's paper*



*Into the pulper*



*Bales of pulp*

About half of the recycled pulp produced at the mill is used to make paper. The mill used to do mechanical pulping and soda cooking, but now it buys the virgin pulp it blends with recycled. For improved printability and stiffness, the mill adds eucalypt pulp to the mixture.

AFOCEL (Association Forêt Cellulose), created in 1962 to conduct forestry research, has had some success in cloning *Eucalyptus gunii* and is conducting studies on species that may grow well in southern France.

The 42,000 metric tons/year paper mill employs about 170 people. The mill uses a Hewlett Packard and Accuray 1180 micro-plus computer system for process

control.

Mill equipment includes:

- One 650 m/min vertical/twin-wire Over Meccanica paper machine trimming at 2.7-m
- One Allicoat SP coating machine (12g/m<sup>2</sup>/side)
- Two on-machine soft calenders
- One 2.7-m reeler
- Two 1.45-m cutters (60 metric tons/day).

A blade metering size press is used to apply coating and color, followed by infrared and cylinder drying.

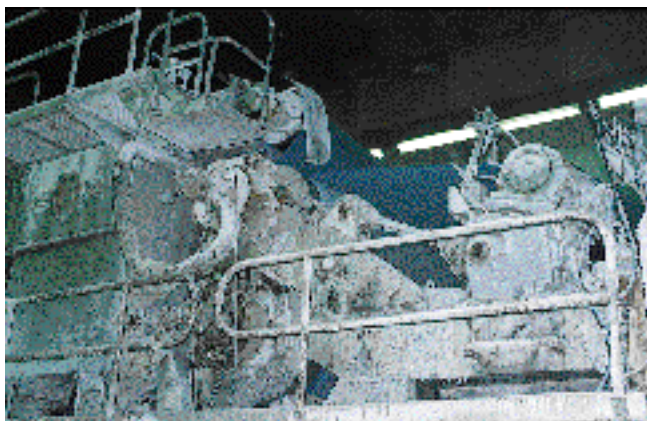
## FRANCE



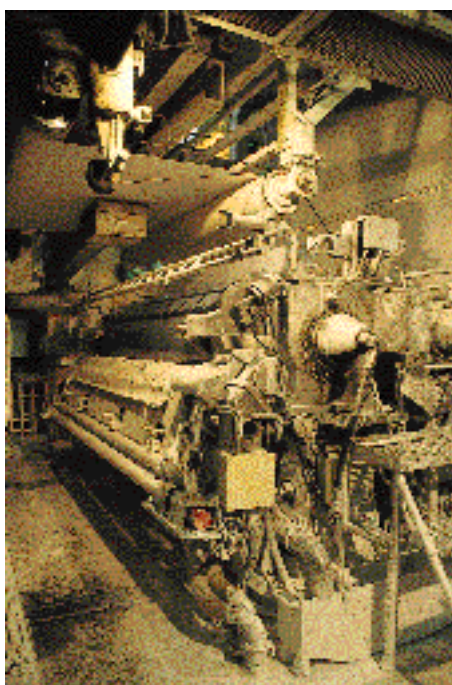
*Flotation deinking*



*The mill has modernized its chemical storage and mixing area*



*The twin-wire*



*Coating*

In the finishing area, the mill has two automatic ream packing, cartoning, and palletizing lines capable of handling 100 metric tons/day. The mill is also equipped to convert small reels.

The mill's in-house laboratory tests the paper for smoothness, porosity, strength (burst and tear), caliper, stiffness and whiteness, as well as other properties, noted Philippe Delpech, quality and development manager.

The mill sells its paper throughout Europe and North America and in Africa and Brazil. It claims to be the European leader for screen printing postal paper and is among the leading suppliers of high-brightness specialty papers. Exports account for about 25% of Moulin Vieux's total sales. Customers can buy in sheets, reels, or cut sizes. Graphic papers are available in grammages of 50–130 g/m<sup>2</sup>.

Moulin Vieux's "Nature Range" papers contain 50–100% recycled pulp. Within that group, its "Biocopie" copy paper is made from 100% post-consumer reclaimed fibers, 70% of which are from unbleached, deinked papers. The paper has a substance weight of 80 g/m<sup>2</sup> and

coating weight of 2.5 g/m<sup>2</sup> per side. Filler content is 14–16% calcium carbonate. Whiteness ranges from 78–82 ISO and opacity is 89–91 Datacolor.

The company's woodfree coated poster papers, designed for outdoor use, have high wet-strength (>20mn in soda). Standard weight is 120–130 g/m<sup>2</sup>. Coatings vary, depending on whether the paper is intended for offset or silkscreen printing. Filler content ranges from 18–25%. **TJ**

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*Meadows is editor of TAPPI JOURNAL.*