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## Eltmann PM 3: successful startup

**After exactly fifteen months construction and erection time, with a total investment exceeding 250 million Euro, Papierfabrik Palm's third newsprint line at Eltmann mill started up troublefree last September. The long-standing cooperation between Papierfabrik Palm and Voith Sulzer Paper Technology thus bears fruit yet again.**

**At 5.30 a.m. Central European Time** on September 3, 1999 came that moment again when every papermaker's heart beats faster – the first startup of a completely new paper machine. At the touch of a button. 50,000 kilowatts were unleashed on 10,000 tonnes of high-tech paper machinery before the expectant eyes of a tired but happy crew.

**That day was the culmination** of exactly fifteen months construction and erection time, with more than 500 people working long hours during peak phases. Not to mention the intensive design effort involved in this decision for future-oriented technology – with no existing basis or reference plants.

**To come to the point:** everything went extremely well – as expected – with this startup despite the exceptionally innovative PM 3 concept. Not only does this include a whole series of newly developed components, but also the latest stock preparation technology for recovered furnish, and a completely new effluent treatment system. The startup phase has already been completed in less time than planned, thanks to full compliance with



Fig. 1: Papierfabrik Palm, Eltmann mill, showing the new PM 3 bay.

Figs. 2 and 3: Disperger and deinking systems in the new stock preparation line.







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*Figs. 4 to 7: Eltmann PM 3, rated capacity 250,000 t.p.a. newsprint at basis weight 34-60 g/m<sup>2</sup>. A team well satisfied both with technical results and product quality.*

the speed rise curve. And even more gratifying – to end customers as well as Palm – is the paper quality attained. The target of improved sheet formation with optimally uniform fibre and filler distribution, tear strength and surface quality has been reached in full, as well as superior handling and stability characteristics.

**This pioneering venture** – setting a technological milestone in newsprint production from 100 percent recovered paper –

has certainly paid off. Not only for Palm, but also for Voith Sulzer Paper Technology, whose courage of conviction ideally complemented our own. Eltmann PM 3 is indeed an exemplary reference for efficient and environment-friendly paper recycling to unprecedented quality standards.

**Papierfabrik Palm**, founded more than 125 years ago, has always used recovered furnish and was the first in Germany



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*SensoReeling – the new Voith Sulzer winding technology, Sirius concept.*

to produce good newsprint from 100 per cent recovered paper. This firmly established recycling strategy meant venturing into new realms several times during the company's growth, both in process technology and machinery concepts. Fortune favours the bold, so the saying goes – and the ongoing success of Papierfabrik Palm is proof indeed. Not only courage is required, however, but also know-how and perseverance in developing new ideas and making them work.

**As a family company** now in its fourth generation, Papierfabrik Palm would hardly be able to compete with the large international mergers dominating today's markets without its flexibility and independence. On this basis, Palm has pioneered again and again the quality advances assuring the company of a competitive edge. And most important, the Palm philosophy is the only one which makes sense in central Europe today for publishers, consumers and newsprint

producers alike: the highest possible degree of recycling. This strategy is backed up again and again by sizeable investments such as Eltmann PM 3: production will soon be increased from 180,000 to 430,000 t.p.a.

#### The centrepiece of expansion

Eltmann PM 3, built by Voith Sulzer Paper Technology in Heidenheim, has a



rated capacity of 250,000 t.p.a. at an operating speed of 1,800 m/min or 108 km/h!

#### Technical concept

- Sectionally consistency-controlled ModuleJet headbox for optimal CD profile.
- DuoFormer TQ for optimal sheet formation.
- First ever tandem NipcoFlex press in a newsprint machine, for lowest possible dewatering pressure.
- TopDuoRun dryer section with 38 cylinders.
- HardNip calender.
- Sirius concept for uniform winding with minimal tear.