Paper Technology

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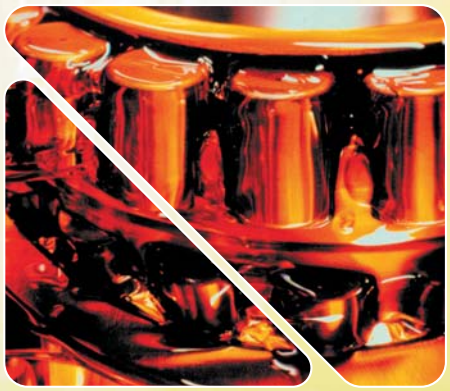

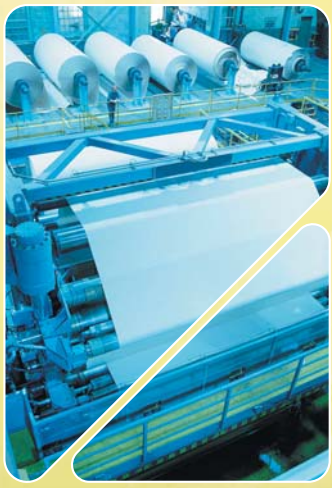

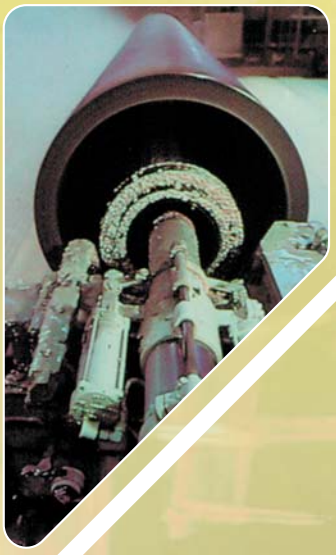

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Paper Technology

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features

FRONT COVER PICTURE

PITA Member Graham Sutton, Managing Director of Metso Paper Ltd, recently set out on "LE-JOG", a nominal 874 mile bike trip (a bit like Easy Rider without Peter Fonda) from Lands End to John O'Groats in aid of Cancer Research UK. His journey across Britain is featured in this month's PITA Affairs on pages 14 and 15. Contributions for this worthwhile cause can still be made via Graham at Metso.

Comment

Will high oil prices blight the expected 2H recovery

By M.E. Marley

After a year of record growth and poor profitability in 2004, European papermakers were looking forward to a better 2005. In the first half, demand was good but profits were undermined by:

- the rising cost of oil-based raw materials
- soaring energy costs
- the strong Euro
- the labour dispute which closed Finnish mills in May and June

The Finnish dispute has had a major impact on profits – it cost UPM 47 days of production and knocked €175 million off the bottom line.

But, the dispute was a temporary event, and the underlying conditions seemed to promise a better 2nd Half:

- raw material costs stabilised in the 2nd quarter;
- the Euro has weakened against the dollar;
- the balance between supply and demand is in the papermakers' favour
- the prospect for higher paper prices is good

The oil price shock

Then, in late July and August, came the oil price shock. Prices surged to a 22 year high of $64 a barrel, following a relentless rise from the $10 price tag of 1999 and the $43 peak of 2004.

The immediate driving force behind the August spike, was the uncertainty created by the threat of terrorist attacks in Saudi Arabia, the world's largest supplier.

Following intelligence reports that terrorist attacks against Westerners were in the final planning stages, the US shut its embassy in Riyadh and its missions in Jeddah and Dharan; and refineries were shut down by ExxonMobil, BP and Valero Energy.

Unfortunately, the terrorist campaign is a long term factor. Since the suicide strikes against the World Trade Centre in 2001, the campaign has spread world wide. In 2002, there were attacks in Tunisia, Indonesia and Kenya, in 2004 the Madrid railway system was bombed and in July 2005, the London transport system.

Some commentators believe that the London and Madrid attacks were an inevitable outcome of the Iraqi war. And, there is a view, that sooner or later there will be a major strike against refining capacity in Saudi Arabia.

Since 2003, the terrorists have been engaged in a campaign to destablise the Saudi regime and drive Westerners out of the country. 92 people have been killed in bombing attacks.

Even if an attack on refining capacity is prevented, the threat is real enough to destabilise the oil market. Security of supply will be a major concern for some time to come.

Rising worldwide demand drives prices

In any case, the price of oil is being driven upwards by rising worldwide demand, in particular from the developing countries of the Far East. China, which consumes only 25% of the crude oil consumed in the USA, is industrialising rapidly and accounts for 45% of the growth in demand.

In the USA itself, refining capacity is hard pressed to meet demand after a decade of underinvestment.

Consequently, when the current crisis subsides, the price of oil is likely to remain above $40 a barrel over the next 20 years, according to the McIlvaine Company of Illinois.

However, the high oil price could become a growth spur rather than an impediment, if there is a determined shift to synthetic oil. "All the Administration has to do is to guarantee that it would purchase any oil made from coal or oil shale for $40/barrel."

Proven and feasible synthetic technology

At the Sasol plant in South Africa, coal is converted to oil by the indirect, two step process from coal to gas and from gas to liquid. GE is now a major supplier of coal gasification plants. Direct liquefaction, which involves hydrogenating coal slurries and then filtering the liquid, is potentially less expensive but is not yet proven.

The cost of producing oil from coal ranges between $25-$40 a barrel. Therefore, a guaranteed price of $40/barrel would be a very good trigger for the needed investment, says Robert McIlvaine.

"If world oil production has peaked or is about to peak, then the only real factor in keeping prices down will be synthetic oil. A large synthetic oil industry would ultimately set the price ceiling whether the oil is natural or synthetic."

Oil story sourced from Julia Kollewe in The Independent and The McIlvaine Company. www.mcilvainecompany.com

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News

Myllykoski plans new newsprint mill

Myllykoski is considering plans to build a greenfield newsprint mill with capacity of up to 400,000 tpy.

The site is likely to be in Eastern Europe - in the Czech Republic, Poland or Slovakia, but non-European locations have not been ruled out.

The proposed start up date is 2007. A European project would bring new capacity to over 1 million tpy:

- In 2002, Myllykoski's 270,000 tpy greenfield mill at Rhein Papier in Germany.
- In 2003, a new 400,000 tpy PM at Stora Enso Langerburgge.
- In January 2006, a 300,000 tpy PM is due to come on stream Holmen's Fuenlabrada Mill in Spain.

Closed loop recycling project based on UK schools

A closed loop paper recycling project based on the collection of used paper from schools is underway in Hertfordshire with the support of a £500,000 grant from WRAP, the government's Waste & Resources Action Programme.

The project, which involves partners from education, local government and industry, 'has real potential to be rolled out nationwide', says Michelle O'Riley of WRAP.

The brainchild of The Paper Trail at Frogmore Mill, the project involves: free collections of used paper, the recycling thereof and the marketing of the end products, i.e.

- the collection of 10,000 tpy of A4 waste copier and other white waste paper from some 550 schools in the Apsley region - defined by a one-hour drive from the Apsley Paper Trail. A fleet of vehicles from The Pearce Recycling Group will collect the paper from the schools.

- recycling into coloured and white paper products at partner mills which include Sappi Graphics Nash Mills and M-real
- the marketing of these products under the Paper Magic brand. The Robert Horne Group will develop and market the products nationally - to the office, schools and personal stationery sectors.

The participating schools will earn 'paper points' for each kilogram of paper they collect. These points can be used i) to purchase the Paper Magic products or ii) for educational visits and workshops at Frogmore Mill where the world's first commercial paper machines were established 200 years ago.

The scheme is being operated on a local level at this stage and will be available to secondary schools only. However, Apsley Paper Trail and the project partners hope to extend participation to primary schools, colleges, hospitals and other municipal facilities and, ultimately, to roll the scheme out to other locations in the UK.

Following a successful pilot, 24 local secondary schools were enrolled in the project and now schools throughout Hertfordshire, North London and the Northern Home counties are being invited to participate.

'We are taking care to ensure that our A4 white office waste paper collections complement existing collections from schools', says John Watson, project director of Paper Magic. 'By keeping these different qualities of waste paper separated at source it ensures that it is recycled into the most appropriate grades, be it newsprint or schools art paper. The WRAP funding is helping to make our vision for Paper Magic a reality.'

Paper Planet, part of the Pearce Recycling Group will provide the collection of paper waste from schools and community groups. Simon Pearce, Managing Director of the company said: 'Take-up of the scheme is anticipated to show a sharp rise over the next few months, rather than a gradual one from the start. A fleet of vehicles is already available and can move very quickly to integrate collections into existing commercial rounds.'

WRAP & Apsley Paper Trail will be reporting on the project in detail in April 2006. Paper Magic:Tel: 01707 320274; Juliet@bluebear.co.uk

PARTNERS IN THE CLOSED LOOP RECYCLING PROJECT

Schools	550 schools in the Apsley Region
Collectors	The Pearce Recycling Group
Recycling Mills	Sappi Graphics Nash Mills and M-real
Robert Horne	Will buy and distribute the end product - the Paper Magic brand
Crowley Esmonde	Will develop stationery for national retail
Local Councils	Dacorum Borough: Support on waste and recycling initiatives. Welwyn Hatfield District Council: School liaison
Waste Aware Herts	Promotion of the Paper Magic Scheme
Market research	by PPL Research

The project is managed by The Paper Trail which is located in Hemel Hempstead at Frogmore Mill and Apsley Mill. It involves partners from education, local government and industry.

Stora Enso: pulp projects in Russia, China, Brazil

Stora Enso is selling its 18.8% stakeholding in Advance Agro of Thailand to Hong Kong investors for $80 million (€65) million.

Enso acquired the shareholding in 1998. Since then the emphasis in Stora Enso's fibre strategy has shifted to South America, China and Russia.

Russia: In July, the Russian Ministry of Natural Resources announced that Stora Enso is planning to build a 1 million tpy greenfield pulp mill by 2010. The mill will produce bleached softwood kraft pulp. Stora Enso confirms its interest but says the announcement is premature.

Stora Enso has six logging sites in Russia, with a combined output of 782,000 m^3/yr of timber.

China: Stora Enso is developing timber plantations in Guangxi province. The company signed an agreement in 2002 with Guangxi Gaofeng to conduct a feasibility study on a 200,000 ha plantation and a 600,000 tpy pulp mill.

Brazil: There are plans to double the capacity of the 900,000 tpy Veracel pulp mill, of which Stora Enso is a joint owner along with Aracruz.

IP restricts focus to uncoated grades and packaging

International Paper is restructuring to focus on uncoated papers and packaging, the two core sectors which account for 70% of sales and 60% of operating profits.

The non-core businesses, which include coated and SC grades, are being evaluated for divestment or spin-off - the evaluation is to be completed by 1Q 2006.

IP is the world leader in uncoated paper with 14 mills and 6.6 million tons of capacity in the US, Brazil and Europe - including Inverurie Mill in Scotland. They produce cutsize, offset, envelope and speciality paper; forms and bristols.

"In uncoated paper, we have low-cost facilities in the right places throughout the world and relationships with the right customers," says John Faraci, Chairman and CEO. "We have potential to improve our cost position in the United States, and we expect continued demand growth in Eastern Europe, Latin America and Asia."

New pulp and paper mill in Brazil

IP's uncoated business will be strengthened by the greenfield mill which is planned for southwest Brazil - in Mato Grosso do Sul state.

The mill will be either a 900,000 tpy eucalyptus pulp mill or an integrated uncoated mechancial mill with a capacity of 500,000 tpy. Engineering studies are expected to be complete by the end of this year.

In packaging, IP has a growing worldwide platform based on i) a capacity of 6.7 million tpy in containerboard and coated board and ii) 128 converting locations in the US, Latin America, Europe and Asia.

Divesting the non-core businesses

The non-core businesses, which accounted for 40% of IP's opeating profits in 2004 - $925 million - are:

- The Coated and Supercalendered (SC) Papers Business, including Inpacel, the coated groundwood mill in southern Brazil. Credit Suisse is advising IP on the divestment of Inpacel which has a 205,000 tpy PM, two coaters, a sawmill and 50,000 ha of pine forestland. Stora Enso is said to be interested in acquiring the mill.
- The Beverage Packaging Business, including the Pine Bluff Mill, Arkansas.
- The Kraft Papers Business, including the Roanoke Rapids Mill, North Carolina
- Arizona Chemical
- Some 6.8 million acres of US forestlands
- The Wood Products Business
- IP's 50.5% stake in Carter Holt Harvey. The evaluation of Carter Holt Harvey is expected to be complete by year-end 2005.

Transformation plan launched in July

The divestments are part of a three-part transformation plan which was launched in July 2005 to boost profitability and 'achieve average annual cost savings of about £400 m a year over the next several years'. The plan also includes:

i) the realignment of businesses in the core sectors

ii) additional cost improvements

Cost cutting initiatives

These measures will create a more-focused asset base from which IP will launch a series of cost saving initiatives including:

- Continuing company-wide manufacturing excellence
- Continuing supply chain initiatives
- Resizing the organization to match the smaller asset base
- Focusing on a more profitable product mix
- The realignment of US mills to match production with demand and reduce higher cost capacity.

IP's distribution business, *xpedx*, will continue to provide efficient supply chain management. It is the No 1 North American merchant, and has global relationships with key manufacturers.

"We already have a strong global position in uncoated paper and have a growing worldwide platform in packaging," says Mr Faraci. "Our portfolio changes will allow us to better focus management attention and financial resources on these key businesses, which represent over 70% of our sales, and can achieve both cost-of-capital returns and profitable growth."

International Paper to Focus on Two Core Grades

UNCOATED PAPER	**Global capacity of 6.6 million tonnes from 14 Mills**
4,800,000 tpy	8 US mills
600,000 tpy	1 Scottish Mill, 2 West European Mills
700,000 tpy	2 East European Mills
500,000 tpy	1 mill in Brazil
New Capacity	A 500,000 tpy integrated mill in SouthWest Brazil or A 900,000 tpy unintegrated eucaluptus pulp mill Engineering studies to be completed this year
PACKAGING	
Containerboard	Global containerboad capacity of 6.7 million tpy
4,600,000	8 US mills and 70 box plant In Europe: 2 Recycling Mills - in France and Turkey 25 box plant of which 2 in the UK In Asia: 6 Box plant; In Latin America, 1 Box plant
Consumer board	
240,000 tpy	Two East European board machines
1,400,000 tpy	Three coated board mills in North America 7 converting plant including 2 in the UK

CEPI reports record output in 1st Quarter

Output of paper and board in CEPI countries increased by 1.7%, or 423,000 tonnes, to 25.2 million tonnes during 1Q 2005 - compared with 1Q 2004. This is first time that output exceeded 25 million tonnes in a single quarter.

Pulp production increased by 1.5% to 10.3 million tonnes. The 2005 figure includes Polish output for the 1st time.

Compared with the 4Q 2004, the output of the various grades was as follows:

- Graphic grades: a 0.6% decline of 80,000 tonnes to 12.5 million tonnes.
- packaging grades: a record 3.6% rise of 346,000 tonnes to 10.0 million tonnes
- Sanitary and household: a 5.2% rise of 78,000 tonnes
- Other grades: a 7.1% rise of 74,000 tonnes.

UPM to reduce unit costs in uc magazine sector

UPM plans to build a 400,000 tpy SC machine in continental Europe as part of a restructuring programme which will enhance its competitive position in the uncoated magazine sector. Designed to reduce unit costs, the programme will also include:

- closures and conversions of older PMs
- a re-division of work between the production lines in different countries.

The new machine is to start up in late 2007, probably at Augsburg or Schongau in Germany or at Stracel in France - mills which were included in the investment assessment. It will produce state-of-the-art SC-A papers; enable UPM to meet the growing demands for quality; and create 'good opportunities for developing service close to Central European customers'.

UPM's capacity for magazine grades will increase by some 200,000 tpy as a result of the new PM and restructuring programme. Uncoated magazine paper is one of UPM's core business areas and one in which it enjoys global leadership. The restructuring plan will be finalized within the next 12 months.

Dispute knocks €175 m off bottom line

The strikes and lock-outs of the recent Finnish labour dispute knocked €175 million off UPM's pre- tax profits for the 2Q - the magazine papers business was the hardest hit.

This resulted in a 2Q pre- tax loss of €50 million compared with a profit of €79 million in 2Q 2004. Operating profits plunged from €87 million to €11 million.

During the dispute UPM's mills ceased production for 47 days - from 15 May to 30 June. As a result, roughly half of the company's 12.6 million tpy of paper capacity was idle. During the 2nd Quarter:

- UPM produced 1,929,000 tonnes, a 27% fall from 2004 levels.
- Paper deliveries fell by 13% year on year.
- Paper inventory levels fell by 434,000 tonnes on the1st Quarter of 2005.

The dispute ended in June with a new labour agreement which 'will create better opportunities to improve the long-term competitiveness of the Finnish units', says Jussi Pesonen, President and CEO .

'However, we will have to consider how to reduce the country risk in paper grades where the production is based only in Finland'.

Continuous improvement in profitability

A continuous improvement in profitability is UPM's most important objective. The focus is on cost efficiency which has already been significantly improved by:

- the cost savings programme completed at the end of 2004
- the target-driven labour negotiations
- the restructuring of North American operations and wood products

Rising demand and tight supply in 2nd H

UPM is looking forward to a more profitable 2nd Half, based on rising demand and tight supply.

'Paper stocks are currently low and the market is expected to be tight for magazine paper, newsprint and speciality papers', says Mr Pesonen. At the same time, demand for papers is expected to be good and average prices to be high.

Demand was good during the 1st Half, following a record-breaking 2004; and, as a result, UPM's order inflow recovered soon after the labour settlement. The order book is now strong.

As in 2004, demand is expected to move up during the 2nd Half. This will create favourable conditions for the price negotiations which are now underway in Europe, having been postponed during the labour dispute.

The position of European paper makers is also being supported by the recent strengthening of the US Dollar. During the 2nd Q, the Euro was on average 5% stronger than the dollar which had a negative impact on profitability.

Price increases have already been implemented in North America and in export markets, thanks to 'the improved balance of supply and demand.'

Magazine grades in the 1st Half

UPM's magazine division was hardest hit by the Finnish labour dispute. The division suffered an 11% decline in deliveries compared with 9% in the fine and speciality sector and 6% in the newsprint sector.

This translated into a significant drop in sales revenue and a plunge into the red. The figures are:

- Magazine paper deliveries down by 269,000 tonne or 11%
- Sales revenue down €150m to €1430 million.
- An operational loss of €21 million- compared with a profit of €25m in the 1st H of 2004.
- An average 4% increase in the Euro prices for magazine papers. In Europe, the price remained static; in the US the $ price rose by 15%

In Europe, 1H demand for coated magazine paper remained static while demand for uncoated grades declined by 5%.

In North America, demand for coated magazine papers fell slightly while demand for uncoated grades increased by 10%. Asian demand remained strong.

BHK prices exceed those of the benchmark pulp

By M. E. Marley

The mid August price for bleached hardwood kraft was €5 above that of bleached softwood kraft, the traditional benchmark pulp, *figure 1*. The prices were €475 and €470 respectively.

But, even though the price of NBSK is expected to fall another $10 in the coming months, the ascendancy of BHK may be short lived since two huge new mills are ramping up to full production –:

- The 900,000 tpy Veracel Mill in Brazil. This joint venture between Aracruz and Stora Enso came on stream in May
- the 1 million tpy mill of APP China, which is based on Hainan Island. It too started to produce commercial tonnage in May.

BHK prices: the countervailing forces

Commentators believe that, as this new tonnage flows into the market, it will be difficult for the big Latin American producers to maintain the $600 price tag which was achieved earlier this year by two successive hikes - the $30 and $20 increases in March and April.

In addition, the stability of BHK prices could be undermined as European mills switch from hardwood pulp to long fibred softwood to take advantage of the low prices.

However, although there have been persistent predictions of a turn down in BHK prices since June, only a $10 dip has taken place, and this apparently in the price of European producers.

The Latin Americans assert that their $600 price remains unchanged, that their order books are full and that the vessels transporting pulp from Brazil to Europe are fully booked.

To some extent, the price of BHK is being underpinned by the scarcity of European birch, a shortage which has its roots in the storm damage of January and the Finnish labour dispute of recent months.

Storms, strikes and lockouts

The storms of 7-9 January felled some 80 million m^3 of forest in northern Europe - the equivalent of five years of harvest. Most of the damage was done to softwood plantations of spruce and pine which deteriorate rapidly once felled. Consequently, the production of pulp from the felled trees has been a priority and the output of hardwood pulps has declined.

In May, the Finnish dispute escalated into strikes and lockouts which lasted until 29 June. Total pulp production - integrated and market pulp - fell by 59% in May, and paper output fell by 55.6% from 2004 levels. In June, the decline was even steeper.

The cut back in output turned the shortage of birch pulp into an acute problem, and while some mills are paying premium prices for birch tonnage, others are substituting bleached eucalyptus kraft (BEK).

Impact on the softwood market

The storm and strike damage has also had a profound impact on the softwood market. In the late Spring, the Spot Market 'was awash' with NBSK and a price differential of $100 opened up between spot and list prices. When spot prices fell to $480 - $500 in mid May, commentators expected an imminent and sharp fall in the list price of NBSK.

But the Finnish dispute took an estimated 375,000 tonnes of pulp out of world stocks, and although Sweden's capacity -to- shipment ratio soared to 99% - to substitute some supplies - the market tightened and along with it, the available spot tonnage.

Consequently, spot prices have remained static since May, with a dwindling number of deals at the higher, $500 end of the price range. Simultaneously, the list price went into steady decline, reaching $580 in August - from the peak of $650 in March.

Some commentators expect a further drop in the price of NBSK since the Finnish mills are ramping up to full production, following the signing of a 3 year labour agreement in July.

A recovery in the 2nd Half?

But there is also an argument for a price recovery: demand is increasing, stocks are low and the European outlook is improving:

- in July business confidence in the Euro zone improved for the first time in 5 months
- The Euro has declined against the dollar
- European pulp consumption rose by 3.8% to 1.268 million tonnes in June - the highest level since March 2004
- Consumer pulp stocks are at their lowest since 2001, having dropped by 5% in June - a drop of 59,461 tonnes to 1.127 million tonnes, according to UIPULP. This represents 28 days of supply compared to 30 days in May 3005 and 31 days in June 2004.

What remains to be seen, is the impact of the recent surge in oil prices and the incipient slowdown in the UK.

Figure 1, below: NBSK prices have come in full circle over the last 10 months and are now down to $590 a tonne, from a high of $650 in March

PULP PRICE MOVEMENTS IN EUROPE 2004-2005

	NBSK List	NBSK Spot	BHK	
August mid	$588		€480	$593
August	$589.04	$480-500	€491	$593.75
July	$594-592	$480-500	€490	$594
June	$605-598	$480-500	€484-492	$595
May	$628-610	$480-500	€461-475	$598
April	$643-638	$520/540	€450-461	$583-597
March	$647-645	$530/550	€418-446	$551-579
February	$630-646	$550/570	€419	$547
January	$622-629		€389-418	$529-542
December	$604-621		€386	$523
November	$581-600		€382	$490-506
October	$580/590			

Courts endorse Klippan resonstruction

Klippan of Sweden has applied to the District Courts in Helsingborg and Mölndal for reconstruction. A proposal for settlement will be presented to the creditors, together with a refinancing plan.

When the reconstruction is comlete Klippan plans to launch a share issue, which if fully subscribed, will raise Sk 200 million.

In the 2Q, Klippan's operating result plunged to a loss of Sk178.7m - a loss which includes Sk101 m for the closure of Mölndal Mill and Sk 7 million for the atttepted purchase of Papeteries de Maresquel, the 90,000 tpy French mill of IP.

The real estate in Möl-ndal is up for sale and the transfer of the papermaking operation to Klippan and Lessebo Mills is underway.

Scottish pulp and paper mill project secures funding

Forscot has secured further equity funding for the integrated forest products complex at Invergordon. This brings total phase-one funding to £700,000, which will finance detailed research and the initial stages of the planning and environmental approvals.

'This completes the first phase of our funding and keeps us on track with our time table' says Ed Gillespie, chairman of Forscot. 'Our aim is to start construction in 2006 and to begin operations in 2008.'

Raising £1 billion in 3 stages

The strategy is to raise the £1 billion required for the project in three stages, through a combination of debt, equity and grants.

Phase l included a £200,000 grant from Ross and Cromarty Enterprise. It has enabled the commissioning of pre-feasibility studies to confirm the project's viability, together with preparation for initial trading and additional funding.

Phase 2 requires £5m-£10m of equity funding to secure the site, broaden the management team, complete the detailed project definition, and secure planning and environmental approvals and construction quotes.

Phase 3 funding will finance construction through a combination of equity, debt and grants.

Integrated pulp, paper and saw mills

The complex will include an integrated pulp mill, paper mill, saw mill and a renewable energy generation plant.

It will process Sitka spruce from Scotland and northern England, a fibre which produces a strong, white pulp ideal for magazine papers and for adding strength to tissue furnishes with a high proportion of recycled fibre.

The pulp mill will produce 550,000 tonnes a year of A+ grade NBSK pulp, a product which at present, is made only in Canada and which commands a premium in a secure market. Currently, the UK paper industry imports around 80% of its virgin fibre.

The paper mill will produce 420,000 tpy of publishing grades for advertising and magazines, for which demand is growing at 3% to 5% a year. Forscot paper will be ideal for the new gravure printing capacity currently being established in England. There is currently no production of this grade in the UK.

The residues from the saw mill and pulp mill will fuel a boiler to power the site. Additional power will be provided by a recovery boiler, which will burn the non-cellulose materials from the pulping process. The surplus electricity produced by the boilers is likely to be classed as green power which can be exported to the grid.

Invergordon has good transport links by sea, rail and road. Most of the raw materials and finished goods will be transported by sea, using the deep water harbour at the Saltburn Pier and an enclosed conveyor system between the pier and the site.

Environmental consultation begins

An environmental consultation document which seeks the views of all interested parties, has been published by Forscot. It marks the first stage of the EIA process, which is set out in the Environmental Impact Assessment (Scotland) Regulations 1999.

The consultation document was drawn up by Environ UK, the independent environmental consultancy which will carry out the EIA for the project.

The document describes the project and its potential environmental impact. Responses are invited from all parties with an interest in participating in the EIA process. These may include the Highland Council, Scottish Environment Protection Agency, Scottish Natural Heritage, the Health and Safety Executive, and a number of other bodies.

The views of all interested parties will be taken into account to produce an Environmental Statement, which will be submitted to Highland Council as part of the planning application for the project. www.forscot.com

Left: Based at Invergordon on the Cromatry Firth, the Forscot mills will import raw materials and export end products by sea, using the deep water harbour at Saltburn Pier and an enclosed converyor between the pier and the site.

Imerys raises the price of kaolins for paper

Imerys is to increase the price of kaolin products for the global paper industry, as of 1 October 2005 or as contracts prermit.This price increase will average:
£15.00 per ton for UK kaolins
$15.00 per ton for Georgia kaolins
$30.00 per ton for Brazilian kaolins.

The primary drivers for the price hikes are the dramatic increases in energy and chemical costs. In the case of Brazil, there is an additional factor - the continuous strengthening of the Brazilian Real over the last two years. This "has significantly impacted the cost of Brazilian produced clays". Imerys produces: white pigments, manufacturing kaolin, GCC and PCC. It has 44 industrial sites in 19 countries.

DuPont CSE raises price of paper protectants

DuPont Chemical Solutions Enterprise has raised the price for all grades of Zonyl and Foraperle paper protectants, effective, as of 15 July, or as permitted by contracts.

The list prices will be increased up to 15%, depending on the different products. The price increases will support innovation and the development of sustainable products which will enable DuPont CSE to maintain its leading position in surface protection solutions to the paper industry.

The hikes will also enable the company to keep pace with rising costs for raw materials and transportation.

Rising cost of coatings raw materials

Wacker Polymers has raised the European prices for coatings raw materials:

- by 5% for Pioloform polyvinyl butyrals and
- by 8-10% for Vinnol surface coating resins.

The increases are driven by cost increases in transport, energy and environmental protection.

Clariant predicts further price increases in 2 Half

Clariant achieved satisfactory 1st Half results and expects continued improvement in the 2nd H of 2005, although there will be a need for further price increases to offset the cost of raw materials. While these costs stabilised in the 2nd Q , they are still relatively high.

The 1st Half 2004 results benefited from a pick up of momentum in the second quarter when sales - in Swiss Francs - increased by 3% over 2004 levels. Growth was especially strong in Germany, Clariant's largest market.

For the 1st Half, net income rose 30% to CHF 146 million compared to 2004. Price increases were achieved across all divisions but the positive impact was more than offset by higher raw material costs.

Clariant expects to be able to sustain the 2Q momentum and to achieve 'solid growth in sales and improved operating margins in 2005', according to chief executive Roland Loesser. There is however, a main area of uncertainty - 'the current volatility of raw material prices'.

Rising raw material costs and negative currency effects had a depressing impact on the profits of the 1st Half when Gross Profit declined to CHF 1.252 billion (1.342 m)
Performance Improvements: The Performance Improvement Programme (PIP) is delivering positive results. It is creating efficiencies, cutting costs and is on-track to create savings of CHF 800 million by the end of 2007.

Cost savings of CHF 50 and CHF 70 million were delivered in the 1st and 2nd Quarters, bringing the total savings generated by the programme so far to CHF 270 million. These savings are being achieved amid overall sales growth.

As an example of the benefits of PIP, the number of warehouses used by the company has been sharply reduced - by more than half in Europe and by about one-fifth in Asia.

Raw material costs remain a big question mark, and, given the volatility of oil prices, accurate forecasting is difficult. However, Clariant expects that the cost of its principle raw materials will decline over the year and that the negative effect of the relatively high raw material prices will be more than offset by: organic sales growth; further price increases; the positive effect of performance.

Finnish dispute hits 2nd Quarter earnings

The 13% plunge in the 2Q earnings of Minerals Technologies - down to $13m from the $15m of 2004 - is attributed largely to the labour dispute which closed Finnish mills earlier this year. The dispute caused a drop of 1.7 million tonnes of paper output before it was settled on 29 June.

The company's Finnish manufacturing facilities supply precipitated calcium carbonate (PCC) to a number of paper mills.

In Europe, sales of PCC for papermaking fell by 14% .The margin was also reduced by the development and 'ramp-up' costs at the new merchant PCC plant in Germany, where there is an ongoing coating programme.

In North America, the company's largest market, 2Q paper PCC sales grew by 8% to $108.8 million from $105.3 million in 2004. Some 3% of this growth is attributed to the Maine facility, which restarted in May 2004.

Worldwide, the tonnage of PCC used for filling and coating paper was flat for the second quarter.

Sales of Specialty PCC grew by 7% to $14.1 million during the 2Q - the result of increased sales from the Brookhaven plant in Mississippi, and the Lifford plant in England. In Asia, margins were affected by the higher than anticipated start-up and ramp-up costs at two new PCC facilities in China.

Collectively, the Finnish dispute, and the Germany and Chinese costs, had an adverse impact on production margin and operating income of approximately $5 million.

Hercules reports 2Q profit dip despite rising sales

Hercules reports a 2Q decline of 6% in profit to $71.1 from ongoing operations, despite a 6% increase in net sales to $538.6 million.

The decline is attributed to significant increases in raw material, energy and freight costs. But the rise in raw material costs seems to be slowing down -

- the 2Q increase was $18million year on year
- but only $0.7 million from the 1st to 2nd Quarters of 2005.

In the Pulp and Paper Division, there was an 8% increase in 2Q net sales. But operational profit remained flat because of rising costs and the Finish paper strike which cost Hercules $2.9 million.

Sales growth was driven by a 5% increase in volume, a 4% positive impact from the exchange rate and a 1% increase in price. "Our Pulp and Paper unit is beginning to benefit from the business model improvements being implemented to reduce its cost structure and organizational complexity, says CEO Craig Rogerson. "During the second Half of 2005, we expect lower general and administrative costs in Pulp & Paper to drive stronger results".

Buckman Labs wins 2005 MAKE award

Buckman Laboratories joins Microsoft as a winner of the MAKE award - granted to Most Admired Knowledge Enterprises which transform knowledge into wealth - creating ideas and products.

Following honourable mentions in previous years, Buckman was the outright winner in 2005 of the 4th annual North America Award.

"Our continued success as a company is directly related to our ability to share knowledge throughout our organization and with our customers', says company chairman, Kathy Buckman Gibson.

"We developed key business processes that focus on the creation and sharing of knowledge with our customers." These processes have enabled "an unprecedented level of intimacy in our customer relationships, which has contributed to significant growth over the last couple of years."

Buckman Laboratories is headquartered in Memphis, Tennessee.

Omya UK moves to new head office

Omya UK is relocating to a new headquarters in Derby, to a purpose built office which accommodates up to 100 staff.

The office will house the customer service departments for all of the company's business units; Paper, Polymers, Coatings, as well as the central functions of logistics, finance and IT.

"Over the years Omya UK has grown significantly by acquisition", says MD John Wright. "The move brings together the customer service and office based support functions for our business units, currently located at Dorking Surrey, Worksop Nottinghamshire, Matlock Derbyshire and Melton East Yorkshire". Customers will benefit from simplified and streamlined systems and communications. The address is: Omya UK Ltd, Omya House, Stephensons Way, Wyvern Business Park, Chaddesden, Derby DE21 6LY.

For enquiries to the Paper Business Unit please contact: Orietta Laughlin, Tel: 01332 887441; Fax: 01332 887049; email: orietta.laughlin@omya.com

Kemira reports a 35% increase in profit in 1st Half

The 2Q revenue of the Kemira Group rose by 15% to €526.2m - despite the €30m lost sales during the Finnish labour dispute. The 56 day dispute, which was resolved on 29 June, cut into Pulp & Paper Chemicals' operating profit by about €12 million. The Group's 2nd Q growth is attributed to

- the acquisition of Finnish Chemicals in April. The deal made Kemira the world No 2 in pulp and paper chemicals.
- within industrial chemicals i) the Verdugt acquisition in early 2005, and ii) the increased selling prices of titanium dioxide. The average Euro price of titanium dioxide was about 8% higher than 2004 which offset the higher costs of raw materials.
- acquisitions made in the latter part of 2004 in paper and water treatment chemicals. Sales of specialty chemicals were boosted by the acquisition of EQUIP International, a Canadian paper chemicals company with annual revenue of €8 million.

During the 1st Half, Pulp and Paper Chemicals (P&PC) generated a 14% increase in revenue to €314.9 million. Stripping out the impact of acquisitions and the Finnish dispute, growth was 2%. The rise in raw material prices evened out and P&PC succeeded in passing on raw material price increases into selling prices.

The operating profit was €18.3 million (16.7 million) in the 1H, of which acquisitions accounted for €1.9 million.

The capacity utilization of P&PC units is expected to be good during the latter part of the year. Although, the cost of raw materials, especially in energy, are putting pressure on earnings, the company expects that the 2005 results will surpass those of 2004.

Industrial chemicals: Titanium dioxide accounted for 53% of revenue in the 2Q. Sales volume was comparable to that of 2004 but the average price in Euros was 8% higher. The rise in titanium dioxide prices is expected to will even out during the latter part of the year.

A focus on Research and Development

To foster innovation, Kemira intends to increase its investments in R&D to some 4.5% of net sales. This emphasis is reflected in the a new Pulp & Paper Technology Centre which was opened at Vaasa in Finland at the beginning of June.

The new Centre will consolidate Kemira's position as a developer of chemical solutions for papermakers – ranging from retention and sizing to water treatment, deposit control, and bleaching. It "will leverage the extensive R&D technological expertise that has been developed at Vaasa over the last 50 years," says Pekka Autio, who heads up the new Centre. The Vaasa unit employs some 250 people of which 70 in the Pulp & Paper Technology Centre. Kemira has another 9 R&D units, the most important of which are in Marietta and Columbus in Georgia, USA and in Krems Austria.

Nalco expects rising sale and prices in 2nd Half

Nalco expects " a strong second half" following an increase in sales momentum in the 2nd Quarter and the prospect of stabilising external costs, reduced internal costs and rising sales prices.

"Price increases agreed upon with customers will approximate $150 million, or about 5% for the year", says William H. Joyce, CEO of Nalco Holding.

During the 2nd Quarter:

- Nalco achieved a 13% increase in sales compared with 2Q 2004 - up to $836.3. Pricing accounted for 4.8% of this increase, ie an additional $36 million in sales revenue. An addition $96 million is expected from increased prices in the 2H of the year. Although price increases are lagging behind rising costs, the gap declined in 2Q and is expected to reverse in the balance of the year.
- The cost of raw materials and other purchased materials rose by $40 million, similar to the 1Q increase. Over the year as a whole, a total increase of $145 million was expected.
- Cost reduction activities are expected to generate savings of $83 million in 2005 with run-rate benefits of $97 million.

Despite rising sales, Nalco's 2Q earnings were pushed into the red by restructuring and process optimization charges of $17 million. As a result, year on year earnings fell from the $2.4 million profit of 2Q 2004 to a net loss of $5.8 million.

In Paper Services the nominal sales growth was up 9.4% in 2Q while organic growth was up 7.1%. Organic sales growth excludes impacts from currency changes and any acquisition/divestiture activity.

Nalco provides integrated water treatment and process improvement services, chemicals and equipment programmes. It has operations in 130 countries and achieved sales of $3 billion in 2004.

PITA Affairs

CONTENTS >

The Director's Diary

Looking back at what I have written in previous years I always seem to say that this is a strange time of year. Well this year has been no exception but for quite different reasons. Normally we would consider the mid summer months as a quiet period for the PITA office but this year that illusion has been shattered with Working Group meetings running on into July coupled with all the activities involved in preparing for the FRC Symposium in Cambridge in September which the PITA team are organising for the first time.

All of that work was on top of the preparation of the new 2005-2006 Year Book which went to press on time and was with the members as planned in the first week of August. Try as we do, members will always pick up mistakes, some down to us but others due to a lack of timely information. Please see the separate panel on p12 for an update. In addition we were hit with another problem arising from an error at the printers. Several members have pointed out that their Year Books were missing pages 33 to 47, a complete 16 page section. These Year Books have been replaced but I would request that all members check their copies carefully if they have not already done so and advise us immediately if there is a problem.

I mentioned that this is a strange time of year and it can therefore be a time when people do strange things but often in a very good cause. I learned rather late in the day of Graham Sutton's planned charity motorbike ride but was pleased at the time to email all PITA members to tell them what Graham was up to. Now we can go one better. In his own inimitable way Graham has produced a personal record of his journey which I am delighted to publish within PITA Affairs. I know some PITA members have already contributed to Graham's campaign and the sum of £800 has been raised thus far. Having read his story I am sure many of you will want to add to that amount. Please make your cheques payable to Cancer Research UK and send them to Graham at the Metso office or donate on line as indicted at the end of the story (p14-15).

SPCI

As long as many of us can remember, every three years in June the papermaking world gathers in Stockholm for the SPCI exhibition and conferences. This is a truly international occasion and we were again proud to be part of the show with a stand in the name of Paper Technology in the "Trade Press" village right in the centre of the main hall. In addition to providing an opportunity to meet with the many visitors from around the world this was also an occasion for all the Technical Associations to get together and swap ideas. By the end of the week I felt the leaders of the different Associations were as relaxed with each other as I have ever seen them and as a consequence ready to work together for our mutual good. In respect to the exhibition, times are changing and in response to comments from exhibitors, after 2008 SPCI will move to a four year cycle with the equivalent Finnish exhibition PulPaper doing likewise in the middle of that period so that there is a major Nordic based exhibition every two years.

ZELLCHEMING 100 years

Very soon after SPCI the leaders of the World Technical Associations gathered in Wiesbaden to join with the members of ZELLCHEMING to celebrate the 100 year anniversary of the German Association, the oldest of all the technical associations. In true Germanic style there were many long speeches in the official ceremony on the Wednesday morning, fortunately with simultaneous translation into English! Listening to the history of ZELLCHEMING I was struck by the parallels with our own Association, albeit 15 years behind. Tributes came from all quarters with Angelo Loreiro, President of EUCEPA speaking on behalf of the European Associations and Wayne Gross, President of TAPPI speaking on behalf of the other world Associations. A very proud occasion and one I was very pleased to be part of.

Working Groups

It is not normal to be having Working Group meetings in July but as I mentioned in the introduction, this year that is precisely what happened. All three meetings were essentially re-arranged dates due to earlier postponements and turned out to be real crackers of meetings. First up was the **Finishing Group**, who in a change from their normal pattern of meetings went outside the immediate paper industry for their venue at

Mondi Board, Preston. This is a purpose built facility, approximately ten years old, producing sheet corrugated board on a JIT basis with all orders received and delivered within a 24 hour time frame. Plant Director Neil Rance and Operations Manager Eric Marshall gave much of their time to explain the intricacies of the operation before leading the Group on a tour of the factory. Bearing in mind all the previous discussions about location of meetings and the ease of access, the **Environmental and Raw Materials Groups** took a real flyer in locating their July joint meeting at one of the far flung outposts of the industry, the Smith Anderson Fettykill mill at Leslie in Fife. They were rewarded for their daring with a record attendance of 27 people who crowded into the mill training room on what was one of the hottest days of the year. Almost half those present had flown in from the south of England, travelling on from Edinburgh airport in series of shared vehicles. It was all well worthwhile as there was something for everyone on a crowded Agenda including, after a warm welcome from Group Chief Executive Brian Henry, a splendid presentation from Keith and Jamie Verden-Anderson about the mill and it's Liquid Food Carton recycling project, the only one of its kind in the UK. The visit concluded with a tour of this traditional mill to see the equipment involved. The final Working Group meeting was that of the **Papermaking Group** who met at MY Packaging in Leeds who produce all sorts of display packaging for food and other consumables such as chocolate and alcohol, using amongst other grades, FBB from Iggesund Paperboard, Workington mill. A planned one hour presentation from Technical Manager Zaman Haroon at the beginning of the meeting ended up running all the way through to lunch such was the level of discussion and interaction between the members and Zaman. I do not think any of us realised there were so many different ways of making a carton! Despite the length of this discussion the Members still managed to squeeze in some discussion about the Fact Sheets and the programme for the 2006 Papermaking Conference.

2006 Papermaking Conference

The planning for the 2006 Conference is well advanced and we are shaping up to have a very strong mill oriented programme. The response to the Call for Papers has been excellent with many papers offered with a strong mill content giving case studies identifying cost savings and efficiency improvements. The problem will be how to squeeze them all in to a two day programme and still leave enough time for visiting the many Display Stands that will support the conference. In that respect almost all the available 34 Display Stands have now been taken so if you are still dithering you had better speak to David Cole very quickly! This is really going to be a "must attend" event for every mill in the UK (and beyond), so make a date in your diaries now, 14th and 15th March 2006.

Association Finances

I have made little secret in recent months of the poor trading performance of the Association in 2006. Advertising revenue in the Journal on which we have relied so much in recent years to underwrite the Association's finances has nose dived, in common with the rest of the publishing world. As a result we are looking at a significant deficit in the current financial year. Whilst every effort is being made to develop other income streams your Board of Directors have had to look critically at the situation and in order to mitigate the loss in the current year have taken the one off decision not to publish Paper Technology in November 2005.

John Clewley

NESDG DINNER DANCE
12th November 2005

The last function of the NESDG will be the very popular Dinner Dance.

Venue:- Airport Thistle Hotel
Telephone 0870 333 9149 Fax 0870 333 9249

Tickets cost £30/head and can be obtained from John Allan
Telephone 01224 319043 or e:mail jcallan@zetnet.co.uk

As usual these can be paid in advance or on the night at the latest.

Rooms (£40 double bed & breakfast) should be booked direct with the hotel mentioning the function.

The evening will be a celebration of the NESDG and we hope as many people who have attended over the years will attend.

Year Book Corrections

1) There is only one Mike Ward (page 67) and he does now work for Midland Research Laboratories, not SCA Hygiene Products. This was a very late change that we managed to squeeze in, unfortunately we forgot to remove the old entry!
Apologies to all concerned.

2) Paul Keen's mobile number is incorrect (page 46). It should read 07816 053778.

3) The email address for Ian Knowles is incorrect (page 48). It should read ian.knowles@eu.sunchem.com.

Obituary

Martin Stevens 1943-2005

Martin Stevens died suddenly on Sunday 17th July, leaving his wife Sharon and two children Josh and Zoe. He was particularly proud of his children's sporting achievements, having himself excelled at rugby and cricket from his early years in Barry, South Wales, where he grew up. To give them the best opportunities in sport Martin had relatively recently moved the family home to Somerset so that the children could attend a well known school, strong in sporting tradition, disregarding totally the extra miles that would add to his own workload.

Martin joined Croxton + Garry as it was then known, in 1971 as a Paint Sales Representative, having already made his mark with previous companies such as BP and Laporte Synres . What was immediately striking to his new colleagues was Martin's charisma and dynamic personality – here was a born salesman.

For much of his career at Omya his manager - and mentor - was Max Hart who employed Martin on the agreement that Martin had his hair cut to be more in keeping with the company's image and on a number of occasions, Max had to remind Martin that his entertainment expenses were rather extravagant. But Martin always regarded entertainment expenses as an investment and he wasn't going to change, always in the fast lane, living life to the full. But what an investment it proved to be, with success after success culminating in Martin managing the Paper Division from obscurity to a prestigious Department. Running the Social Committee, founder of the Omya UK Golf Day – who else – perfect host, entertainer, these were Martin's true strengths. Many will never forget the parties he organised, not to mention the sore heads the following morning - forget going to bed when Martin was running the show. Brian Williams, Technical Manager of M-real Sittingbourne Mill spent many hours in the company of Martin and comments that in business situations his manner was no different, he would sit back, relax and let the world go on around him….although sometimes getting a straight answer on an issue was sometimes a struggle! Brian goes on to comment that as a personality in our business, Martin will be sorely missed. The whole growth of the calcium carbonate business in the UK during the 80's was quite dramatic and owed a lot to the efforts of Martin Stevens.

Martin of course had to face the computer age, not really his forte, particularly e-mails, although he did acquire a remarkable proficiency with the delete key! Martin much preferred the personal touch, his relationship with customers and colleagues was second to none, and many of them were present at the funeral to pay their last respects.

Friend, colleague, rebel, Martin was all of these and always with sincerity and compassion. He was also a strong supporter of PITA, a member for many years and more recently an active member of the Coating Working Group. In addition he always encouraged others to be involved with the Association and ensured there were good papers at the Coating Conference from Omya.

(Based upon a tribute to Martin given at his funeral by a long time Omya colleague Pat Pearson edited in the PITA office to include, inter alia, comments from Brian Williams)

Martin's family have asked that any donations in memory of Martin should be made to the British Heart Foundation or the Great Ormond Street Children's Hospital. The PITA office will be happy to co-ordinate any such donations and pass them on to the appropriate contacts.

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- All Dispersants
- Boilout/Felt Cleaning Chemicals
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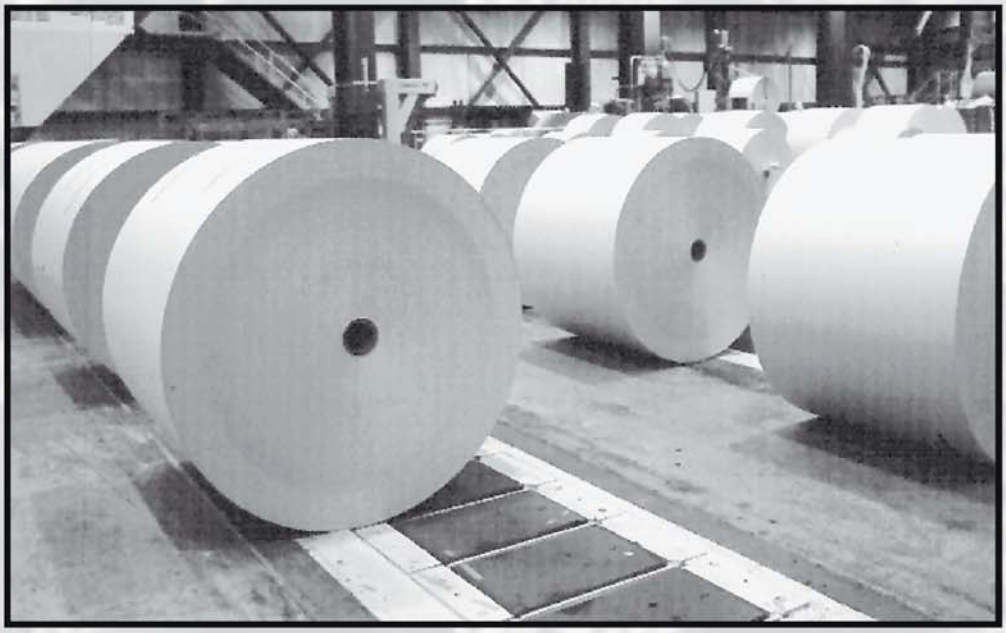
- Polymers for Retention, Drainage, and Formation
- Sizing Chemicals
- Dry and Wet Strength
- Dye Fixatives
- Defoamers
- Pulp Mill Chemicals
- Pulping Aids
- Metals Management
- Pitch and Stickies Control
- Deinking Chemicals
- Repulping Aids
- Tissue Softeners/Debonders
- Yankee Adhesion and Release Agents
- Wetting Agents
- Coating Chemicals
- Antiskid Silica
- Boiler and Cooling Water Chemicals
- Effluent Treatment



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LE – JOG: "A personal report of a special journey"

Sandra Bennett (left) and Lucinda Barker from the Metso office get Graham on his way.

Now the real journey begins!

The Eden Project

The Journey

"Metso Paper LE – JOG 2005": Land's End to John O'Groats, 9th / 10th July 2005.

Distance recorded 1,015 miles.
Duration 36 hours

Points of interest visited en route:

Mount St Michael
Eden Project, St Austell
Stonehenge
Lake District
Angel of the North
Lindesfarne
Firth of Forth, and its bridges
Blair Atholl
Loch Ness
Castle Urquhart
Fort William
Glen Coe

The Man

Graham Sutton, Managing Director, Metso Paper Limited.

Metso Paper is the world's leading supplier of paper making machinery: Part of Metso Corporation of Finland, with 22,000 employees in 50 countries worldwide, and annual sales of some 4billion Euros.

The Machine

Honda GL1500 "Goldwing" Aspencade
6 cylinder1520cc "Boxer" engine
99bhp, 111ftlbs torque,
maximum speed 125mph.

Specification includes reverse gear, cruise control, central locking, adjustable air suspension with on board compressor, radio cassette, intercom, etc, etc.

Dry weight approx 800 lbs, meaning the fully laden machine weighs in at somewhat more than half a ton.

The Cause CANCER RESEARCH UK

I lost a number of close family members over a time period of just a few short years: My grandfather to lung cancer, my cousin, who was just 21, with testicular cancer, leaving a baby, not yet a year old; and hardest of all, my dear old mum with ovarian cancer, at 58 years of age.

Incidentally: Seeing the difference made by blood transfusions during my mum's treatment, I was prompted to become a regular donor myself, and recently received a silver award for 25 donations.

I am also registered as a bone marrow donor, with the Anthony Nolan trust.

I have encouraged many friends and colleagues over the years to become donors, and recommend it most highly now to you, dear reader!

Commentary

The weekend of 9th July was pretty much the hottest since time began, with temperatures well above 30C.

With the journey down to Land's End, and the return from John O'Groats, the total itinerary covered 2,000 miles, over the course of 4 days.

Motorcycling, even on a luxury machine like the Goldwing is surprisingly physical, and I lost 14 pounds in weight during the 4 days. Considering the cost of petrol and new tyres, however, liposuction would have been cheaper!

Regarding roads and riding, many people had commented that I should allow extra time for the Northern Scotland leg of the journey, as the 'A' roads up there are not quite what "we" would consider to be 'A' roads.

And how right they were.

On the other hand, it had certainly cooled down by that stage of the journey, and the riding "fun factor" was at a definite high, particularly over the last 50 miles or so.

A description of that stretch of the road supersedes any requirement to even mention the other 900 - odd miles: A full speed, two mile straight, back off the throttle for a gentle right hander, into the next mile long straight to test whether you really believed the speedometer last time!

There are alpine - style hairpins with crazy gradients; bends of every shape and kind.

There was even, I noticed on the return journey, a superbly banked right hand bend, so perfectly profiled it looked as though it might have been designed by super computer; but which, in reality, was probably simply left that shape in order to avoid having to dig out beneath the shoulder of the road?

That's serendipity for you.

Sponsorship

I would be most grateful for any offer of sponsorship for this event, all in aid of Cancer Research UK.
Please visit my web site,

www.justgiving.com/metsolejog

where you can donate on line, with complete security, by credit card.

Please: Dig deep.

Most sincerely: Thank you!

Graham Sutton

The Angel of the North

Firth of Forth Railway Bridge

Loch Linnhe (near Fort William)

Stonehenge

Made it – now I have to get home!

Calendar of PITA Events

Date	Event	Venue	Organiser
SEPT 2005			
20	Digital Printing Paul Raine, Arjo Wiggins R&D	Stoneywood House Aberdeen	Scottish District Ewen Jardine, Tel: 01337 857682
29	From Reel to Box – a joint presentation by Neil Rance of Mondi Packaging UK Ltd and Ken Swarbrick of Prosize Co Ltd	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
OCT 2005			
13	Bio Kat VIAGA for Bugs in Effluent Systems Nation Resource Protection Ltd	The Fernhurst Hotel, Bolton Rd Blackburn (opp. Ewood Park)	North West Discussion Group J.D. Smith, Tel/Fax: 01254 830986
18	Calendering on PM A4 Speakers from Voith and Tullis Russell	Tullis Russell Glenrothes	Scottish District Ewen Jardine, Tel: 01337 857682
27	The Potential for Ultrasonic Flow and Level Monitoring in the Paper Industry Ted Farnon of Micronics Ltd	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
27	Energy	tba	Southern District Dennis Jewitt, 01732 883727
NOV 2005			
10	Suction Rolls – Modification, Updates and Overhauls Bender Machine Services Ltd	The Fernhurst Hotel, Bolton Rd Blackburn (opp. Ewood Park)	North West Discussion Group J.D. Smith, Tel/Fax: 01254 830986
12	Dinner Dance	Airport Thistle Hotel, Dyce (6.00 for 6.30 pm)	Scottish District Ewen Jardine, Tel: 01337 857682
22	Coating Methods to Minimise Print Mottle Janet Preston, Imerys and Thomas Steinmacher, BASF	Carrongrove Mill Denny	Scottish District Ewen Jardine, Tel: 01337 857682
24	Hydrodynamic Cavitation – Chemical Free Water Treatment Robert Kelsey & Dr Wiley Wang (VRTX Technologies)	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
JAN 2006			
12	A presentation by Iggesund Paperboard (Workington)	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
13	Local Speakers + Burns Supper	Dean Park Hotel, Kirkcaldy	Scottish District Ewen Jardine, Tel: 01337 857682
26	PITA – the future: Working Groups – What they can do for YOU	The Fernhurst Hotel, Bolton Rd Blackburn (opp. Ewood Park)	North West Discussion Group J.D. Smith, Tel/Fax: 01254 830986
FEB 2006			
9	Mini Conference on Energy	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
23	Control Technology/Applications	tba	Southern District John Brazier/David Chamberlain Tel: 01483 412000
23	New Technologies Kadant UK Ltd	The Fernhurst Hotel, Bolton Rd Blackburn (opp. Ewood Park)	North West Discussion Group J.D. Smith, Tel/Fax: 01254 830986
MAR 2006			
7	AGM & Mini Conference on Safety	Dean Park Hotel, Kirkcaldy	Scottish District Ewen Jardine, Tel: 01337 857682
9	AGM followed by a Papermaking Quiz Night	The Red Hall Hotel and Restaurant, Bury	Northern District Sharon Hoole Tel: 01254 55101. Fax: 01254 672236
23	New Innovations in the Hot Stuff (Steam) Kadant Johnson Systems International Ltd	The Fernhurst Hotel, Bolton Rd Blackburn (opp. Ewood Park)	North West Discussion Group J.D. Smith, Tel/Fax: 01254 830986
APR 2006			
6	Environmental Legislation – AGM	tba	Southern District Kate Cathie, Tel: 01795 564627
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Fibre raw material technology for sustainable paper and board production

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Compression refining is one of the new technologies being developed in The Netherlands to minimise fibre damage and thereby prolong the fibre recycling loop.

The new developments, which are designed to counteract the degrading effects of processing on fibre, fall into two main categories:

- *preventive technologies such as compression refining and*
- *restorative technologies - to upgrade fibres which have been degraded during the papermaking, converting and recycling processes.*

The development work follows a research project on "Fibre raw material technology for sustainable production of paper and board". The quality changes during processing were assessed, and it was concluded that the development of new technologies should focus on:

- *fibre flexibility and relative bonded area*

The detrimental effects of recycling on fibre potential have been identified. Fibre degradation, which is due to repeated physical and mechanical impact and the use of additives, results in:

morphological changes
changes in chemical composition
accumulation of fines and non-fibrous substances

These reversible and irreversible changes affect process and product performance, mainly observed as decreased runnability due to slower dewatering, lower strength potential and increased chemical and energy consumption.

New upgrading techniques have been developed in order to minimise the degradation effects as well as to improve recycled fibre characteristics. Chemical, enzymatic and mechanical technologies have been investigated for the prevention of unnecessary fibre damage and for upgrading of damaged fibres.

The most promising techniques, compression refining and enzymatic upgrading, have been validated at pilot scale and in production circumstances.

The proposed technologies will result in a more sustainable use of recycled fibres, due to both enhanced fibre potential and increased availability of recycled fibres. They also contribute to decreased energy consumption and reduction of required additives.

The co-operation between the paper industry, suppliers, research institutes and universities has lead to a successful new network of knowledge providers. This has created new opportunities for development potential for the paper industry.

Due to the growing demand for paper and board the use of fibres has increased rapidly during the last 20 years. With this growth, the demand for recovered fibres has stimulated an increase in appropriate processing technologies, and significant innovations and optimisations. These developments have created the possibility of processing even lower quality recovered fibres into still higher quality products.

However, the fibre recycle loop is still closing. This is resulting in continuously more fibre degradation due to fibre damage, mixing of paper qualities, and the accumulation of fillers and paper additives.

Paper production from recovered fibres therefore requires special processes to deal with lower quality fibre raw materials. At this moment the quality is decreasing to such a level, that paper production using these fibre raw materials has become more and more uneconomical.

In order to be able to maintain production capacity and paper quality in the future, new developments have to be made in the area of restoring fibre quality potential.

More fundamental knowledge is required about fibre and pulp changes during fibre processing and the subsequent paper production processes. This knowledge should be used for the development of new technologies to prevent fibre degradation and to restore the value of degraded fibres.

Aim: The general aim is to develop new innovative technologies for the processing of fibre raw materials for paper and board production. This includes the following objectives:

- closure of the fibre cycle
- more effective use of fibre raw materials
- improved control and efficiency of fibre processing
- improved product quality
- strengthening and broadening of the knowledge infrastructure of the Dutch paper and board industry

Approach: The project “Fibre raw material technology for sustainable production of paper and board” is one of the activities in the Fibre Raw Material programme of the Dutch Competence Centre Paper and Board, and is supported by the Ecology, Economy and Technology Pro-

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The Effect of Operating Parameters on Hydrocyclone Efficiency

All new pulp and paper mills use primarily hydrocyclone separators in their pulp cleaning systems. Design variations to optimize processing for special purposes have been used to a very limited extent.

In considering the application of a cleaner, the system and not the individual cleaner should be the basis for an evaluation. If the reject rate can be reduced and clean pulp still produced, substantial saving can be realized in power, number of units, pump size, space, fibre loss, and other factors. A sensible approach to a production system can result in a compromise, a balance between capital investment, energy cost, space requirement, and cleaning efficiency of the system.

The performance of the hydrocyclone depends on the various factors such as:

- *properties of fibres and contaminants to be removed*
- *operational consistency*
- *reject rate*
- *pressure difference etc.*

The purpose of this study is to find the effect of all the operating parameters on the efficiency of the cleaner system.

Centrifugal cleaning is often considered as the removal of contaminants from the pulp slurry through the action of centrifugal force. Although this is an oversimplification, the centrifugal cleaning process does involve the rapid rotation of the pulp slurry within the cleaning device and the subsequent classification of particles according to their densities and hydrodynamic properties. This is different from the screening process, in which the particles are classified only on the basis of size and shape.

Centrifugal cleaners can be divided into two categories based on specific gravity: Forward cleaners for the removal of contaminants with specific gravities greater than 1.0 and Reverse cleaners for the removal of contaminants with specific gravities less than 1.0.

There are two other types of centrifugal cleaners based on cleaning principle: the hydro -cyclone and the centrifuge. The hydrocyclone is a fixed-wall cleaner in which the centrifugal action is achieved by the tangential introduction of the feed stream into the cleaner body. In contrast, the centrifugal action in a centrifuge is established and maintained by the rapid rotation of the cleaner perforated screen.

A classic hydrocyclone, *figure l*, generally consists of a conical or cylindrical-conical pressure vessel, with a tangential inlet at the largest diameter of the cone or cylinder. At the base of the cone or cylinder, centered axially at its maximum diameter, is a vortex finder

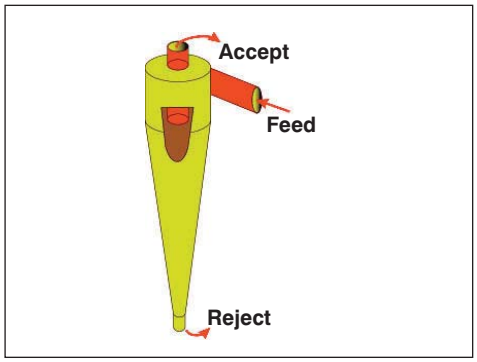

Figure 1 Hydrocyclone

often called an overflow nozzle. At the opposite end, the apex or minimum diameter end of the cone, is the underflow tip.

There are wide ranges of potential application sites for centricleaners, including:

- Pulp mills - prior to screens or refiners.
- Secondary fibre systems - prior to screens or refiners.
- Paper machine stock preparation systems - prior to refiners, to protect the plates; or,
- after refiners, to protect downstream equipment from broken refiner plates/ fragments
- Broke systems - prior to deflakers or refiners

Typical solid impurities:

Impurities in the pulp fall into two main categories

- Those which originate with the raw material and could be intrinsic or extrinsic: (sand, stones, branches, shive, bark, intrinsic silica and fines.
- Those which are introduced into the pulp during processing - ash, metal and rust.

Contaminants or impurities which are introduced with wood or agri- residues, are generally the most difficult to deal with, but they rarely cause equipment failure. Stones, sand and tramp metal can cause equipment failure, but they are easy to separate and remove. This separation should be done as early in the process, as possible. Most of the contaminants left in the final product sometimes originate from the raw materials.

Basic design of hydrocyclone:

Utilizing the results of the studies of Kelsall and Dabir Bahram using water, we see that the tangential velocity distribution shows the highest velocities near the centre line of the cleaner. The tangential velocity, V_t can in fact be related to the radii of maximum tangential velocity, R and is represented with the relationship[11]:

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Mike Johnson
ABB

Manufacturing Improvement in the Paper Industry

In the drive to increase greater effectiveness, a mill needs to use all the tools at its disposal.

But, in many cases, the Paper Industry is not utilising its workforce efficiently and is therefore losing the benefits created by motivated and involved employees.

In too many cases, improvement projects lose credibility because they do not target what an improvement team will see as significant and valuable. As a result, commitment is low.

The recipe for a successful project involves three elements: i) A cross-functional team drawn from mill personnel; ii) A structured process which provides the team with a route map through the stages of problem solving; iii) A facilitator who is trained to guide the team through the process, develop their skills and introduce problem-solving tools.

The team members own the solutions which are developed during the process. Their task is to persuade their managers and peers to buy into the process of change.

This broad approach blends the technical advances in chemistry, machinery and control systems with motivated teams committed to improvement. It delivers results.

PITA Papermaking Conference 2004

The pressure to get more product out, at a lower cost, with improved quality is a major driver for most of the industry.

Improvements in manufacturing have traditionally been led by improving technology and improving control processes, however there is another string to the improvement bow. This can be delivered through your people in a structured process to deliver genuine sustainable business improvements with no or low cost solutions.

In many cases the Paper Industry trains its employees but does not receive the full transfer value for that training back in the workplace. The training is not focused on projects that will deliver and implement business benefits as well as producing motivated and involved employees.

This paper describes a structured process that has been proven to produce both. There are two phases to the process:

a) The target for improvement
b) The implementation process

The target for improvement

This must be real in a business sense. In too many cases, improvement projects lose credibility simply because they do not target what an improvement team will see as significant and valuable. As a result, commitment is low.

Establishing a target involves taking a new look at how the business is performing. There are many manufacturing measures in the industry including: Yield, Downtime, Quality, Efficiency, and Absolute Efficiency.

Typically definitions will vary from plant to plant as historically, and over time, the measures have been refined to reflect what the management want to portray.

Overall Equipment Effectiveness or OEE is a high level measure typically associated with Total Productive Manufacturing (TPM) which can be used to assess asset performance by:

- Calculating current and historical levels of operational effectiveness.
- Providing benchmarking against targets and World Class data.
- Determining gap analysis, to establish where performance can be improved.
- Providing the basis for a loss management system.
- Monitoring the improvement process

The starting point of OEE is Ideal Performance. That means running 8760 hrs per year, at the Maximum Proven Rate, with No Quality Problems – A tough target that nobody achieves!

Losses from Ideal Performance are attributed to 3 areas: Availability Rate, Product Rate and Quality Rate.

OEE is defined as:

Availability Rate x Product Rate x Quality Rate

And is simply defined as:

$$\frac{\text{How much good product did we make?}}{\text{How much good product could we have made?}}$$

How much good product could we have made? World Class standards for OEE are generally accepted as follows:

- For single product process plant, World Class OEE > 95%.
- For batch plant, World Class OEE > 85%

When this information is collected in a benchmarking exercise and displayed in a waterfall of losses diagram as shown in *Figure 1*, meaningful targets for improvement emerge.

The concept of continual improvement means that we are never trying to reduce the losses to zero; this search for perfection is one of the main blocks to the process of change – it seems impossible to reach. In most cases a 50% or 25% reduction in the loss will bring significant business benefits.

At this stage we have enough information to prepare a project brief with a vision, objectives and benefits. However since we have no

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Recovery and Utilization of Fibre from Recycled Papermill Sludge

A viable papermaking fibre can be obtained from dried papermill sludge, according to the Canadian research work described in this feature.

The sludge, which was obtained from tissue and newsprint mills, was dried in a production scale AGES/KDS Micronizer at one of the mills - an energy efficient system which dewaters the sludge mechanically and leaves it amenable to fibre separation.

The papermaking fibre was fractionated from two sources of dried sludge and successfully utilized in handsheets blended with TMP pulp.

While average fibre length is not reduced by AGES/KDS drying, many fibres did appear to have been damaged by the recycling and/or KDS process. This damage includes: fibre collapse, twist, kinks, transverse cracks in the cell wall and longitudinal splits.

Despite the observed damage, the intrinsic strength of the recovered fibre was found to be acceptable for use as a papermaking fibre. Indeed, the recovered NP/TM fibre has a higher intrinsic strength than the TMP pulp, which can be attributed to the high proportion of strong, chemical fibre in this sludge.

However, the tensile indexes of the handsheets were strongly influenced by

Environmentally favourable waste management policies enacted in the 1990's in Canada and the United States have succeeded in diverting large quantities of waste paper from diminishing North American landfill capacity. These policies have also given rise to a thriving recycled paper manufacturing industry in North America.

In 2004, 4.9 million tonnes of recovered waste paper was used by the Canadian paper recycling industry satisfying 23.8% of Canadian industry fibre requirements while in the United States 37.1% of fibre requirements were met by the 50.3 million tonnes of recovered fibre[1,2].

While the benefit of paper recycling from an environmental perspective is clear, the environmental impact of the waste material (sludge) generated from the process is uncertain at best. The amount of sludge generated is a function of the deinking process, the raw material and the finished product quality.

Throughout the recycling paper manufacturing process, high priority is given to the activity of preserving incoming fibre. However, plenty of usable fibre escapes the process along with the undesirable contaminants. Some 20 to 40% of the incoming furnish is commonly lost in the form of sludge[3,4].

The final waste material is a wet mass of wood fibre, inorganic clays and filler, and other contaminants, commonly held together with highly charged coagulants and long chain synthetic polymers. It is the disposal of this material that has become one of the most important issues facing the recycling industry.

Today's predominant sludge management options include landfilling, incineration and land application[4,5]. The practice of landfilling has declined in recent years, as mill owned sites reach maturity and new sites are too costly and onerous to construct.

Incineration requires large capital investment for specialized equipment that can efficiently combust wet, mineral rich material.

Finally, land application, which gained popularity in the 1990's, is becoming increasingly controversial as special interest groups contest the benefits of adding municipal biosolids or industrial sludges to agricultural or forest covered lands[6-9].

The lack of suitable, long term alternatives for sludge management has prompted the development of an economical means of recovering usable fibre from recycled paper mill sludge.

In this study a specially designed vertical-shaft impact mill (AGES/KDS Micronizer), was employed to mechanically dewater and prepare papermill sludge for further processing. The AGES/KDS system uses significantly less energy than a thermal drying system and renders the sludge in a form amenable for fibre separation[10].

Recovery of fibre lost from the recycling paper making process and dried by the AGES/KDS Micronizer is evaluated as a source of fibre for re-introduction to the paper making process.

Three main criteria determine the value of this material as a potential source of fibre for papermaking.

i) The first factor is the yield of usable fibre available in the mixture.

ii) The second factor is the condition of the fibre, including characteristics such as length and fibre damage.

iii) The third factor is a measure of the fibres performance in a network or in other words, the paper strength. Optical properties are of less importance in this study as the fibre can potentially be used in processes where cleanliness of the fibre is not critical, such as linear and paperboard applications.

Drying Capability of AGES/KDS Micronizer

Recycled paper mill sludges representing a range of recycling operations in North America were collected. The mills included:

- a 100% recycled newsprint mill (NP)
- a 100% recycled tissue mill (TM) and
- a combination recycled newsprint (80%), tissue mill (20%), ie NP/TM.

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University of Manchester	Manchester	Bob Wilde	0161 306 3904	r.wilde@umist.ac.uk
PIPEWORK & VESSEL FABRICATIONS				
Bender Forrest Ltd	Rossendale	Stefan Wilds	01706 225521	swilds@bendermachine.com
PRECISION PNEUMATICS				
Fine Controls	Wirral	John Donaldson	0151 343 9966	John@finecontrols.com
PROCESS CONTROL				
BTG	North Harrow	John Munday	020 8515 6050	sales@btgppt.com
PROJECT ENGINEERING/CONSULTANCY				
Bender Forrest Ltd	Rossendale	Stefan Wilds	01706 225521	swilds@bendermachine.com
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
PULP AND PAPER MILL DESIGNERS & ENGINEERS				
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
QUALITY CONTROL INSTRUMENTS				
Tendring Pacific	Saffron Walden	Anton Hutson	0870 240 1886	anton@tendringpacific.com
QUALITY INFORMATION SYSTEMS				
QISoft Limited	Leyland	Tim Perris	01772 641133	info@qisoft.com
RAW WATER TREATMENT				
Huber Technology	Chippenham	Nick Hunt	01249 765000	nh@huber.co.uk
KWI (UK) Ltd	Flintshire	Phil Woollen	01352 700224	info.uk@kwi-intl.com
REBUILDS, MAJOR				
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
Sandusky Walmsley	Bolton	Tony Pope	01204 396060	tpope@sanwal.co.uk
Voith Paper	Manchester	Keith Millington	0161 655 2912	keith.millington@voith.com
REBUILDS, RECONDITIONED PLANT/PARTS				
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
REEL & PALLET WRAPPING SYSTEMS				
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
REEL STANDS				
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
REFINING AND DEFLAKING				
JOCRO Technology	Bolton	Joe Crook	01204 840937	bryants-house@supernet.com
Pilao International Ltd	Darwen	Mel Hadfield	01254 873871	info@pilao.co.uk
REPLACEMENT PARTS				
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
Sandusky Walmsley	Bolton	Derek Lees	01204 396060	dlees@sanwal.co.uk
RF/AIR DRYING				
Greenbank Engineering	Blackburn	David Wilkinson	01254 690555	info@greenbanktechnology.co.uk
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
ROLL GRINDING, REFURBISHMENT & SERVICING				
Bender Machine Services	Rossendale	Steven Withers	01706 225521	swithers@bendermachine.com
Sandusky Walmsley	Bolton	Tony Treloare	01204 396060	tatreloare@sanwal.co.uk
Voith Paper (Service Centre)	Manchester	Robert O'Shaughnessy	0161 655 2933	robert.o'shaughnessy@voith.com
ROLLERS				
Sandusky Walmsley	Bolton	Mike Valentine	01204 396060	mavalentine@sanwal.co.uk
ROTARY JOINTS AND SYPHONS				
Deublin Ltd	Hampshire	Denzil Ralph	01264 333355	dralph@deublin.co.uk
Kadant Johnson Systems International	West Yorkshire	David Moss	01943 607550	david.moss@kadantjohnson.co.uk
SEALS				
Advanced Sealing Solutions Ltd	Northampton	Paul Marchant	01604 830183	paul82@netlineuk.net
John Crane UK Ltd	Manchester	Gary Webb	07711 650660	gary.webb@johncranemcr.co.uk
SHOWER SYSTEMS/SPRAY NOZZLES				
Spraying Systems Ltd	Farnham, Surrey	Rowland Bailey	01252 727200	info@spray-uk.co.uk
SITE SERVICES				
Bender Forrest Ltd	Rossendale	Stefan Wilds	01706 225521	swilds@bendermachine.com
Clearwater Poole	Bury	John Poole	0161 797 3437	jpoole@clearwaterpoole.co.uk
SIZING				
Mare Paper Chemicals Group	Luton	Mitch Cook	01582 811900	mitch.cook@maregroup.co.uk
SLITTING & CUTTING EQUIPMENT				
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
SLUDGE DEWATERING				
Huber Technology	Chippenham	Nick Hunt	01249 765000	nh@huber.co.uk
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk

Products & Services Directory

For a more extensive and fully searchable listing, visit www.pita.co.uk

COMPANY	LOCATION	CONTACT	TELEPHONE	E.MAIL
SLUDGE PROCESSING AND UTILISATION				
EnviroSystems (UK) Ltd	Preston	Liz Russell	01772 860085	liz@envirosys.co.uk
Huber Technology	Chippenham	Nick Hunt	01249 765000	nh@huber.co.uk
SOLENOID & CONTROL VALVES				
Fine Controls	Wirral	Gareth Hall	0151 343 9966	Gaz@finecontrols.com
STEAM AND CONDENSATE SYSTEMS				
Deublin Ltd	Hampshire	Denzil Ralph	01264 333355	dralph@deublin.co.uk
Kadant Johnson Systems International	West Yorkshire	David Moss	01943 607550	david.moss@kadantjohnson.co.uk
STICKIES CONTROL				
Kolb Distribution	Lancashire	Malcolm Austin	07720 287460	malcolm.austin@kolb.ch
Luzenac	Toulouse, France	Kari Alenius	0800 032 3114	kari.alenius@europe.luzenac.com
STOCK CHEST CLEANING				
Spraying Systems Ltd	Farnham, Surrey	Rowland Bailey	01252 727200	info@spray-uk.co.uk
STOCK PREPARATION				
Sandusky Walmsley	Bolton	Alan Morley	01204 396060	amorley@sanwal.co.uk
Voith Paper Fibre Systems	Manchester	Darryl Holt	0161 655 2907	darryl.holt@voith.com
John Wilkie - Hett GmbH	Perthshire	John Wilkie	01764 685267	WilkieMaryfield@aol.com
STRETCH FILMS AND WRAPPING MACHINES				
Pesmel of Finland	West Yorkshire	Jukka Tamminen-Jackson	01924 848399	jukka.tamminen@pesmel.com
STROBOSCOPES				
Euroto Ltd	Bolton	Tony Aspinall	01204 665050	sales@euroto.co.uk
SYPHON SYSTEMS				
Deublin Ltd	Hampshire	Denzil Ralph	01264 333355	dralph@deublin.co.uk
TESTING AND ANALYTICAL SERVICES				
BC Paper	North Wales	Rebecca Snell	01248 370588	r.snell@bangor.ac.uk
University of Manchester	Manchester	Bob Wilde	0161 306 3904	r.wilde@umist.ac.uk
THERMAL SPRAY/METAL SPRAY COATING SERVICES				
Bender Machine Services	Rossendale	Steven Withers	01706 225521	swithers@bendermachine.com
TRAINING				
Bury College	Bury	Jean McLaughlin	0161 797 4325	jeannie.mclaughlin@burycollege.ac.uk
Paper Classroom	Bolton	Steve Mann	07780 614148	steve@paperclassroom.com
PITA Trainers	Bury	John Clewley	0161 764 5858	info@pita.co.uk
University of Manchester	Manchester	Bob Wilde	0161 306 3904	r.wilde@umist.ac.uk
USED RECONDITIONED MACHINERY				
John Wilkie Papermill Services Ltd	Perthshire	John Wilkie	01764 685267	WilkieMaryfield@aol.com
VACUUM PUMPS & SYSTEMS				
Flowtech Pumps	Manchester	Ian Pendleton	0161 794 8038	ipendleton@pumpgroup.co.uk
Gardner Denver Nash UK Ltd	Winsford	Alan Birchall	01606 542421	alan.birchall@gb.gardnerdenver.com
VALUATION SERVICES				
John Wilkie Papermill Services Ltd	Perthshire	John Wilkie	01764 685267	WilkieMaryfield@aol.com
VALVES				
Lohse GmbH	Croydon	Kevin Bracken	020 8667 3013	kevin.bracken@voith.com
VIBRATION EQUIPMENT				
Monitran Ltd	Buckinghamshire	Suzanne Pearl	01494 816569	suzanne.pearl@monitran.co.uk
WASTE TRIM REMOVAL SYSTEMS				
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
WATER CLARIFICATION				
Huber Technology	Chippenham	Nick Hunt	01249 765000	nh@huber.co.uk
Jarshire Ltd	Slough	Bob Longbottom	01753 825122	sales@jarshire.co.uk
John Wilkie Papermill Services Ltd	Perthshire	John Wilkie	01764 685267	WilkieMaryfield@aol.com
KWI (UK) Ltd	Flintshire	Phil Woollen	01352 700224	info.uk@kwi-intl.com
WATER RECOVERY				
Huber Technology	Chippenham	Nick Hunt	01249 765000	nh@huber.co.uk
KWI (UK) Ltd	Flintshire	Phil Woollen	01352 700224	info.uk@kwi-intl.com
WEB BRAKE DETECTION				
Fine Controls	Wirral	John Donaldson	0151 343 9966	John@finecontrols.com
WET/DRY STRENGTH RESINS				
Mare Paper Chemicals Group	Luton	Mitch Cook	01582 811900	mitch.cook@maregroup.co.uk
WIRE AND FELT CLEANERS				
Kolb Distribution	Lancashire	Malcolm Austin	07720 287460	malcolm.austin@kolb.ch
WRAPPING EQUIPMENT				
Pesmel of Finland	West Yorkshire	Jukka Tamminen-Jackson	01924 848399	jukka.tamminen@pesmel.com

Industry Update

UK endorses PEFC and SFI forest schemes

Another two forest certification schemes have been added to the list of those which meet UK Government contract requirements for legal and sustainable timber, according to an announcement by DEFRA. They are:

- The Programme for the Endorsement of Forest Certification Schemes (PEFC) and
- the North American Sustainable Forest Initiative (SFI)

That there are now 4 endorsed schemes 'is good news for the paper industry which imports woodpulp from a number of countries – 1.8 million tonnes in 2004', says Kathy Bradley, CPI Director of External Affairs.

The UK is the world's No 6 pulp and papers market and the European No 2. It has been the focus of a high level of activity from paper specifiers seeking assurance of well managed forestry sources. Credible forest certification schemes demonstrate that the woodpulp used in the UK comes from well managed forests.

PEFC and SFI made the necessary amendments to their procedures to meet the requirements of the UK assessment process which also stipulates regular reviews of all the approved schemes.

For further details please contact Kathy Bradley, on 01793 889635 or 07889 441402, or alternatively

Paper Industry International Hall of Fame

Later this year, six new members, including one from Finland, will be added to the Paper Industry International Hall of Fame in Appleton, USA - in recognition of their contribution to the world paper and allied industries. The new inductees will bring the membership to 70.

The international hall of fame is housed within the new Paper Discovery Centre, an interactive museum that celebrates everything related to paper. The centre is located along the banks of the Fox River in Appleton.

Two of the inductees are being recognized for technology; one for leadership; one for academic; one in the categories of R&D, entrepreneur and academic; and one for leadership and entrepreneur. They are:

- Robert C. Buchanan, non-executive chairman of Fox River Paper, USA.
- Professor Johan Erik Gullichsen, president & owner of Arhippainen, Gullichsen & Company, Finland.
- Dr. Michael J. Kocurek, professor and department head, Department of Wood & Paper Science, North Carolina State University.
- James Kress, chairman of Green Bay Packaging, U.S.A.
- Bruce Purdy, VP and director (retired) of Appleton Wire Works. Albany International Corporation, USA.
- Dr. W. Howard Rapson, professor of chemical engineering (deceased), University of Toronto, Canada.

The 11th annual induction ceremony will be held at the Radisson Paper Valley Hotel in Appleton, Wisconsin on 13 October 2005. The keynote address will be made by Peter H. Vogel, Jr. who is CEO and president of NewPage Corporation, formerly part of MeadWestvaco.

Mr. Buchanan joined Fox River Paper Co. in 1966 and in 1974 became company president. In 1989 he launched a programme of investment in technology and acquisitions and Fox River Paper's revenue has grown from $6 million to more than $200 million. The company is among the market leaders in the premium writing, text, and cover papers market.

In October 2000, the Paper Industry Management Association named Buchanan Executive of the Year, observing that a small paper company can prosper in a land of ever-consolidating giants.

Professor Johan Erik Gullichsen started his career as a research assistant at the Finnish Pulp and Paper Research Institute in 1962. In 1970, he co-founded Arhippainen, Gullichsen & Co and in 1989 was appointed professor, Pulping Technology, Helsinki University of Technology.

Professor Gullichsen is an innovator in the MC processing of pulp fibre suspensions, a consistency which allows a three-fold reduction in water usage. MC technology enhances pulp quality, reduces environmental impact, and results in reductions in chemical usage, fibre losses, effluent and energy. It has been especially valuable in the processing of recycled waste paper.

He is the recipient of more than 60 patents and has over 180 publications around the world.

Michael J. Kocurek, Ph.D is department head of the pulp and paper science programme at North Carolina State University.

In 1970, at the University of Wisconsin, he led the creation of a new academic programme oriented to pulp and paper processes. The Department of Paper Science and Engineering rapidly gained national recognition.

In 1986, Dr. Kocurek became executive director of the R&D Herty Foundation where he brought about significant expansions and improvements.

Since 1970, Dr. Kocurek has taught over 5,000 paper industry employees from more than 50 corporations in regional and in-mill short courses. He has edited and authored numerous written and video paper industry publications.

In 1958 James Kress assumed leadership of operations for Green Bay Packaging, a company founded by his father. During his 54-year tenure, the company grew from 640 employees and four divisions to 2,632 employees and 24 divisions. Today he is

please e-mail kabradley@paper.org.uk.

The FSC and CSA forest certification schemes were acknowledged as meeting the UK Government's legal and sustainability criteria in November 2004. www.paper.org.uk.

Allimand invests €1.5m

Allimand of France has invested €1.5 million in a super-sized Tacchi lathe which combines milling and turning and allows the turning of large pieces up to:

15 meters in length
1,550 mm in diameter
40 tonnes in weight.

The combination of milling/turning permits the complete production of a piece on one machine. Material handling times are reduced and waiting delays between machining are eliminated.

The new lathe also combines the functions required for the manufacture of crown roll shafts: turning, milling, multiple drilling, deep-drilling, grinding and boring.
www.allimand.com

Andritz acquires Lenser Filtration

Andritz AG has signed an agreement to purchase Lenser Filtration of Germany, subject to the approval by antitrust authorities.

Lenser produces filter elements from thermoplastics for solid/liquid separation in filter presses. It has operations in the UK, France, Romania, the US, China and Malaysia. The acquisition will enable Andritz to offer complete solutions for dewatering.

In 2004, the acquisition of the filtration technology of Netzsch, Rittershaus and Blecher, made Andritz a leading suppliers of filter presses.

chairman of the board of the largest privately-held corrugated manufacturer in the US.

In 1991, Green Bay Mill closed its pulp mill and began producing linerboard and corrugated medium from recovered paper, of which it recycles more than 400,000 tpy. In 1992, the mill converted to a closed water system - one of the first in the world.

Bruce Purdy joined Appleton Wire Works in 1944 and developed the automated wire loom which transformed the production of paper machine clothing. Before this, it took 4 years to train a weaver to operate the wire weaving technology of the early 1900s. At the start up of the automated loom, May Tournow, the forelady of the winding department, ran the largest loom in the plant. She had never run a loom before.

Mr Purdy retired in 1973, but remained active in the company until 1990 - as a director of Albany International, the company formed by the merger of Appleton Wire Works and Albany Felt Company.

W. Howard Rapson of Ontario, who died in 1997, is the father of chlorine dioxide bleaching, one of the major developments in the history of the pulp and paper industry. With Chlorine Dioxide, kraft pulp can be bleached to high brightness without sacrificing strength. This led to the wide-spread use of elemental chlorine free (ECF) bleaching sequences which are much friendlier to the environment.

Dr Rapson was editor of the industrial textbook of the day, The Bleaching of Pulp (1963). He also has over 117 publications.

He was a research chemist at Canadian International Paper Company prior to joining the University of Toronto as a professor of chemical engineering in 1953. He became a professor emeritus in 1981 until his retirement in 1997.

CPI statistics for UK papermaking

CPI has launched its 2005 Reference Statistics for the CPI Papermaking Sector.

Produced by the CPI Statistics Department, the booklet provides a statistical overview of the Papermaking Sector Body in 2004, alongwith a summary of results and key figures from the past 10 years. The statistics show:

- Apparent Consumption of Paper & Board;
- Production of Paper and Board;
- Sales of Paper and Board;
- Raw Materials, Human Resources, Financial and Energy Statistics;
- International Statistics.

To purchase a copy of Reference Statistics (Papermaking Sector) 2005, contact Lee Edmonds on 01793 889611 or email info.dept@paper.org.uk. www.paper.org.uk.

New chairman for CPI Papermaking Sector

David Steele, MD at International Paper (UK), has been elected chairman of Papermaking Sector of the Confederation of Paper Industries (CPI). He succeeds Don Coates, Chief Executive of St Regis Paper Co.

David joined the paper industry in 1994 as a HR Officer with Tullis Russell in Markinch, and in 1996 moved to International Paper's Inverurie mill as HR Manager.

After appointments as Converting Manager and Operations Manager, he was appointed Joint Managing Director (Manufacturing) in 2000, and then Managing Director International Paper (UK) the following year. David is currently a serving member of the European Papers Division's Lead Team at International Paper.

"I am extremely pleased and honoured to be offered this role and very much look forward to tackling the challenges the Sector faces during the next two years," says Mr Steele.

New MD for Curtis Fine Papers

Curtis Fine Papers has appointed Keith Chapman (50) as managing director. He has a wide range of management experience in manufacturing businesses, including a period as MD of Bibby and Baron - a reel to reel printer and paper bag manufacturer.

"The breadth of skills and knowledge he has gained as chief executive for several manufacturing businesses is particularly impressive, along with his results led focus and strategic approach", says Alistair Gray, non-executive chairman at Curtis "Of equal value to Curtis is his past experience of leading a management buy-in and management buy-out."

Mr Chapman will relocate from Wilmslow, Cheshire to Scotland to take up his position with Curtis Fine Papers.

Curtis markets and sells papers worldwide and has recently refocused its business to concentrate on niche markets for graphical, converter, security and speciality publishing papers. Sales turnover in 2004 was £35million.

In January 2005, Curtis consolidated its entire papermaking operation at Guardbridge Mill near St Andrews following the closure of Dalmore Mill.

Dr. Byron Jordan of Paprican is the new International Convener on optical properties. He succeeds Dr. Anthony Bristow of Sweden.

Georgia Pacific honours Sandusky

Georgia-Pacific presented Sandusky with an award for technical innovation in paper machine design at this year's supplier recognition event.

The event was centered on the theme of 'Focused for the Future' ... if suppliers increase the profitability of GP by providing innovative products then these same suppliers will experience success and profitability themselves.

Of GP's 10,000 worldwide suppliers, only 200 companies were chosen to be present at the 2005 event.

Jaakko Pöyry expands in Sweden

Jaakko Pöyry has acquired Scancontrol of Sweden, an automation and electrical engineering company with sales of €4 million.

The acquisition reinforces Jaakko Pöyry's automation engineering services in Sweden and expands its operations into packaging and paper converting.

The Jaakko Pöyry Group's Forest Industry business group operates under the brand name Jaakko Pöyry. It had net sales of €186 m in 2004 and has offices in 19 countries.

ISO appoints International Convener on optical properties

Dr. Byron Jordan of Paprican is the new International Convener on optical properties - following his election in June, during the international ISO/TC6 meeting in Stockholm, Sweden. The convenership was previously held by Dr. Anthony Bristow of Sweden.

Dr Jordan is Head of Optics and Standards at Paprican. His official ISO title is: International Convener of ISO Technical Committee 6 on Paper, Board and Pulps, Working Group 3: Optical Properties (ISO/TC6/WG3).

The TC6 Working Groups develop Standards which: i) are globally relevant to market needs ii) have no adverse effect on fair competition, and iii) do not give preferences to the requirements of specific countries when different needs or interests exist.

Several Paprican experts are actively in ISO/TC6 committees. The Canadian Advisory Committee to ISO/TC6 represents Canada on all voting matters dealing with new or revised Standards on Paper, Board and Pulps. It is chaired by Dr. Maurice Douek who comments:

"Paprican's involvement in the development of ISO Standards is critical in order to ensure fair representation of the Canadian pulp and paper industry's interests and to eliminate trade barriers. Our experts provide consultation and technical assistance to Paprican's Member Companies on all matters dealing with the application of National and International Standards. Their presence on these committees ensures that we stay abreast of new developments at the international level."

Dr. Jordan has been an active member of ISO/TC6/WG3 for the past 28 years. He helped in resolving an international calibration dispute which could have caused excessive bleaching expenditures. His research on the perception of whiteness led to the development of a whiteness measurement for indoor viewing of fine papers.

In addition, his development of a technique for measuring residual ink in recycled paper led to the commercialization of the Effective Residual Ink Concentration instrument (ERIC), which is now being used worldwide. ERIC technology is proceeding toward adoption as an ISO Standard.

Dr. Jordan will be responsible for managing WG3 activities on ISO Standards for the optical properties of paper and board. At the present time, the WG3 work list comprises a total of 15 Standards, at various stages of review.

WG3 also oversees the activities of five ISO-authorized laboratories responsible for issuing reference materials for calibrating brightness, whiteness, colour, and fluorescence. Paprican's Optics Laboratory is one of these.

"The ISO/TC6 Working Group on Optical Properties deals with a number of issues of strategic importance to the pulp and paper industry worldwide', says Joe Wright, President and CEO of Paprican. 'With his experience and track record of excellence, Dr. Jordan is well equipped to lead WG3 and to ensure that it is well positioned to respond effectively to the global needs of the pulp and paper industry."

Paprican is The Pulp and Paper Research Institute of Canada, a not-for-profit institute which provides cost-competitive research and technology transfer addressing both the short- term and strategic needs of its Members.

M-real pledged to London's recycling effort

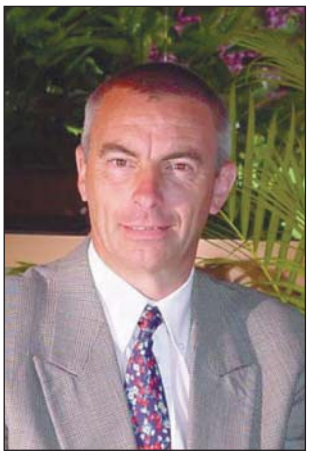
Three of the UK's largest office suppliers have pledged £50,000 to support London Remade's work in developing robust markets for the Capital's recycled materials, reflecting the increasing importance of good environmental performance in the business sector. They are

- M-real London's office, the local manufacturer of recycled office papers has developed a local recycling loop.
- Office Depot, a supplier of recycled stationery
- Brother, a supplier of environmentally sound printers and fax machines.

M-real is sponsoring London Remade for a second year: "Working with London Remade has really helped us develop a local recycling loop - by developing networks with London-based organisations that produce the waste paper used in the production of our recycled products,' says marketing manager Jude Fanner.

All three companies are leaders in environmental office solutions. They have been involved with London Remade for a number of years, providing advice and industry knowledge on environmental products and receiving consumer feedback and environmental support in return.

"We are really pleased that these respected companies believe in our services and wish to continue their support", says Danny Silverstone, chief executive of London Remade. "Through our connections we are able to obtain a greater insight in to the issues businesses face on a daily basis and develop practical and innovative solutions that deliver environmental benefits."



Alain Lèbre, deputy general manager of CTP

CTP appoints deputy general manager

Mr Alain Lèbre (49) has joined CTP as deputy general manager. He reports to Jacques Strum, the MD of the French Pulp and Paper Research & Technical Centre.

The new post of deputy manager was announced in the strategic plan of 2004.

Mr Lèbre was educated as a papermaking engineer at the French Engineering School of Paper and Printing Industries – (EFPG, Class of '77). He worked for Measurex and Schlumberger before running Perfojet, ICBTValence-France and then Cellier. In recent years, he has been a Company creator and manager.

Mr Lèbre's managerial experience and industrial knowledge – especially in the papermaking sector – were the determining factors in his selection as Deputy General Manager of CTP. He will aid Jacques Strum in:

- daily in-house management of the research supporting divisions: documentation, communications, computing service, technical section, among others;
- coordination of selling actions and follow-up;
- fostering connections with other organizations, such as EFPG, a neighbour of CTP, in order to create mutual advantages in terms of management.

The appointment consolidates the CTP's Strategic Plan which aims to establish CTP in the top rank of France's Technical Industrial Centres.

Pira International acquires Intertech

Pira International has expanded its global information services with the acquisition of Intertech of the USA, a move which will enable Pira to become one of the world's leading providers of technical conferences - with more than 60 events each year.

The acquisition 'provides Pira with the ideal platform to develop and expand our services outside of the traditional base in Europe', says MD Michael Hancock. 'It also broadens our offering in fast-moving industries and technologies such as organic electronics".

Based in Portland, Maine, Intertech specialises in technical conferences, publications and consultancy and is an information provider to industries such as organic electronics, minerals and fillers, colour and pigments, and specialty chemicals. Every year it holds some 20 conferences in the US, Europe and Asia.

The acquired business will operate as part of Pira International and will market its particular services under the 'Pira-Intertech' name. Contact Mike Hancock, on Tel: 01372 802000; Email: michaelh@pira.co.uk

Board Changes at Tullis Russell

Tullis Russell has appointed Chris Parr as managing director of its papermaking division in Markinch. Chris who joined Tullis Russell in 1994, moves from his current role of group finance director and takes over from Don Munro who will take up the role of chief executive of the Tullis Russell Group.

Current chief executive, Fred Bowden retains the role of group chairman, with particular responsibilities for overseeing the relocation of Tullis Russell's transfer product range from its Hanley plant to the specialist coating division in Ansan, Korea. This is due for completion in early 2006 after which date he will take early retirement from day-to-day duties, remaining as non-executive chairman.

"Set against the backdrop of a strong set of financial results and our recent acquisition of the *Gemini* brand, this represents an exciting time for Tullis Russell", says Fred Bowden. "This Group restructure will ensure that there is an experienced team in place to ensure the business continues to move from strength to strength and I wish my colleagues every success in their new roles." www.trg.co.uk

Tullis Russell achieves FSC certification

Tullis Russell has achieved Chain of Custody Certification from the Forest Stewardship Council (FSC) for the processing, sales and distribution of certified coated and uncoated paper and board.

The company can therefore label products which have been made from FSC pulps. This gives customers the assurance that these products have been produced from material which originates from responsibly managed forests.

"There is a growing demand among printers and designers for FSC paper and we can now assure them that we are responding to that demand", says Malcolm Sinclair, Marketing Director at Tullis Russell. "The FSC certificate reflects Tullis Russell's ongoing commitment to producing paper and board from renewable resources. Details of the products that will benefit from the chain of custody accreditation will be announced in the near future."

FSC is an international, non-governmental organisation dedicated to promoting responsible management of the world's forests. To gain FSC certification, a forest must be managed in a manner which is beneficial to the environment and the society as well as economically viable.

The FSC system monitors forest practice and then tracks the wood fibre though the supply chain - from forest to end user to ensure that, at all stages, the interests of good environmental practice is observed.

To achieve the certification, Tullis Russell was independently audited by BM TRADA Certification. Such audits will continue on an annual basis to ensure that the highest standards are maintained.

"Only a small number of paper manufacturers have achieved FSC certification so far", says Alasdair McGregor, Product Certification Manager of BM TRADA. The certification demonstrates that Tullis Russell is serious about raising environmental awareness within the paper industry. It is vital we continue to receive industry buy-in and Tullis Russell is helping to set the pace."

Garnetts sets Hard-To-Tear standard for gift wrap

The revolutionary gift wrap made by Garnetts of West Yorkshire is engineered to a Hard-To-Tear standard which can now be licensed by other producers.

In their research into the gift wrap market, Garnett's of West Yorkshire, discovered that the performance and durability of gift wrap is highly important to consumers and is the major factor in their decision to purchase.

But there is a problem - the consumer doesn't know if the materials are going to be up to the job until they purchase the product and start to use it.

To provide consumers with this all-important product confidence and reassurance, Garnett's have designed a specific criteria for performance of gift wrap - the Hard-To-Tear or HTT standard.

From now on, the HTT standard will be a prominent part of all Garnett's material labelling. It will enable consumers to buy gift wrap with absolute confidence in its strength and tear resistance.

Garnett's own gift wrap material incorporates the HTT standard as a matter of course. From its first development work on gift wrap, the company deemed the properties of reliability and durability to be of the highest importance.

The new HTT standard and its legally registered HTT logo can be used by other gift wrap producers who

i) produce products that conform to the standard and
ii) license the standard from Garnett.

All product testing will be conducted exclusively at Garnett's and the use of the standard will commit the user to regular testing of all materials which are to carry the HTT logo.

To protect the standard, Garnett's will police the use of the logo by monitoring the gift wrap products which carry it. Products which carry the logo will be bought by Garnetts and subjected to independent testing. Where a seller of a gift wrap product is using the logo without obtaining the licence appropriate action will be taken.

The HTT standard is designed exclusively for final finished gift wrap; it cannot be applied for materials of any intermediate stage of the manufacturing process. This means that all materials presented for qualification must be offered in a consumer-ready condition and it is against this state that the test will be conducted.

"The introduction of this HTT standard, the setting of the gift wrap industry criteria and the establishment of the registered HTT logo are critically important steps in the raising the professional profile of what is now an extremely competitive and highly fragmented industry and should be welcomed by all players and consumers", says Cliff Barry, Managing Director of Garnett's.

TPT joins Picon

Turning Point Technologies, a specialist supplier and systems integrator, has joined Picon's continuously growing membership base.

Picon provides a comprehensive range of support for its members and for the paper and paper industries in general. Picon services include: industry representation, technical and standards advice, export and exhibition assistance and publications.

"TPT are the eighth new member to have joined this year", says John Brazier, chief executive of Picon. "We are continually updating and extending our services to ensure that they fully reflect the needs of our expanding membership." www.picon.com. Tel: 01483 412000

IP Inverurie places lucky vouchers in Duo reams

To promote its *Duo* office range, the Inverurie Mill of International Paper is placing thousands of lucky vouchers inside the Duo reams - the vouchers can by cashed in with Cadburys Gifts Direct for chocolate related gifts.

The promotion was inspired by the fact that the IP marketing department is based at Inverurie, right next door to the paper machines - only through a close relationship forged between marketing and manufacturing teams could it be achieved.

"In such a competitive marketplace with a largely homogenised product it really was essential to capitalise upon the fact that the marketing department is based on the manufacturing site at our paper mill in Inverurie", says Michelle Myron, marketing specialist at International Paper.

The promotion placed Inverurie's papermakers on a learning curve amid a challenging logistical exercise. 'The manufacture and packaging of paper is a complex process at the best of times so we had to carefully plan the way we were going to be able to place the vouchers inside the reams of paper', says Mike Cowie from International Paper manufacturing.

Duo Lucky Paper is one of IP's largest ever promotions for the Duo range of Paper and it is a first for the paper industry - no paper maker has ever placed winning vouchers inside the actual ream of paper.

The promotion is aimed at the end-user and predominantly the 'office' sector.

There are plans to re-use the new manufacturing process for a new promotion during Easter 2006. www.duopaper.co.uk

Installations

Mill	Supplier	Equipment review
Abu Dhabi National Paper Mill U.A.E.	OverMeccanica Italy	A 40,000 tpy tissue machine, a deckle of 3.6 m and a max operating speed of 2000 mpm. It will bring the total site capacity up to 65,000 tons. website: www.pinepaper.com
APP Perwang Mill Indonesia	Aker Kvaerner	The upgrade of two fibre lines. The cooking plant of the Pulp 8 fiberline will be modernised and the entire Pulp 9 fiberline will be rebuilt and upgraded. Includes new equipment and process systems. which will improve quality and environmental profile Kvaerner Pulping will provide engineering, procurement and supervision (EPS) services.
Asia Pulp & Paper Gold East Paper Dagang, Jiangsu Province China	Greycon, UK	A Mandarin version of X-Trim, a software package which improves trim and reduces knife change. At Dagang it is improving yield and efficiency by simultaneously optimising the OMC winders, rewinders, and sheeters. The 1.9 million tpy mill produces double coated paper on 3 PMs, one on-line and two off-line coaters; 22 sheeters, five guillotines, and two rewinders. website: www.greycon.com
Asia Pulp & Paper Jambi Mill Indonesia	Aker Kvaerner	The upgrade of a fibre line with new equipment and process systems which will improve quality and environmental profile. Involves a rebuild of the cooking plant. Start up in 1Q 2007.
Botnia Pulp Mill Fray Bentos Uruguay	Honeywell	A $7 million order for the automation system for the new pulp mill in western Uruguay. The mill, which is scheduled for start-up in 3Q 2007, will produce 1 million tpy of bleached eucalyptus pulp. Includes an Experion Process Knowledge System (PKS), quality controls for two drying machines and an OptiVision system. Experion collects and integrates process and business data across the entire facility, making information available where and when needed. The drying machines have QCS to control the pulp web moisture and thickness. OptiVision will monitor the mill's production and quality data and generate related reports Metsä-Botnia, which was established in 1973, produces bleached pulp grades. Botnia is the second largest pulp manufacturer in Europe. website: www.honeywell.com
Domtar Ashdown Mill Arkansas USA	Metso Paper	A high capacity Roll Wrapping and Handling line for start-up by August 2006. The fully automated system includes a modularized StreamLine kraft roll wrapper with four industrial robots. The conveyor system collects rolls from PMs 61 and 62 and brings them to the wrapper. The rolls are then removed to the warehouse and upended for pick up by clamp trucks. This system will be delivered after full-scale workshop tests, with full "plug and play" features. Also includes: installation supervision, start-up assistance, training and spare parts.
Dresden Papier Faehrbruecke Mill Germany	Parsytec, Germany www.parsytec.de	The Espresso web inspection system for PM5. With a high resolution of 250 μm Espresso can detect the smallest defects which enables the mill to adapt its processes to the specifications of the pharma and food industries. Espresso is also a lean hardware system comprising one inspection frame, one inspection terminal, and only one system cabinet. This enables rapid and frictionless commissioning.
Guizhou Chitianhua Paper Industrial Co Guizhou Province China	Andritz Group Graz Austria	An €18 million order for the pulp drying plant for the world's largest bamboo pulp mill which will have a capacity of 200,000 tpy and will start-up in the first half of 2007. Andritz will provide engineering, procurement and supervision services (EPS).
Hamburger Spremberg Schwarze Pumpe/Spremberg Germany	Voith Paper Automation and Papierfabrik Hamburger Spremberg GmbH & Co.	A full-service agreement for the Voith Automation systems on PM1 - the QCS system which started up in late 2004; OnQ measuring and control system and the PM actuators. From a new service support centre at the mill, Voith specialists will provide round the clock assistance - covering basic service and preventive maintenance. Fast emergency assistance and remote diagnostics are also included. The latter enables Spremberg to plug into the expertise of all Voith Automation experts on special subjects. Training programmes for the technical operating and maintenance personnel complete the scope of service. The aim is to provide the mill with the long-term, high availability of its automation system. The greenfield Spremberg mill, which started up more than a year ago, produces white and brown corrugated base.

Mill	Supplier	Equipment review
Indonesia Engineering Resources Kerinci Mill Sumatra	Metso Paper	A 414,000 tpy fine paper line which will be operated by an associate company of April Group. Start-up is scheduled for 2H 2006. Includes a PM along with stock prep and finishing lines. The PM control system will be supplied by Metso Automation. The line will produce uncoated woodfree fine paper of 50 to 120 g/m^2. The machine will have a production speed of 1600 mpm and a trim width at reel of 8.6 m. website: www.metso.com
International Paper Commercial Printing & Imaging Papers Worldwide	Liaison Technologies	The provision of product information management (PIM) with UCCnet connectivity in order to provide IP's trading partners with new levels of real-time product information. The PIM system will enable them to print online product catalogues directly from IP product information. The Liaison Enterprise Content Director permits disparate IT systems to pull information from constantly updated data pools which are maintained by Liaison, using industry standards such as UCCnet, papiNet, CIDX and XML technology to ensure accurate data synchronization. Built for sharing data with trading partners, PIM is delivered as a managed service with customizable workflows, a validation engine and active data repository.
International Paper Mogi Guaçu Mill Brazil	Aker Kvaerner	The upgrade of the bleach plant, including a Compact Press. The aim is to ready the plant for the production of elemental chlorine-free pulp and prepare it for a future capacity increase. Start-up is scheduled for November 2006. Kvaerner Pulping will provide engineering, procurement and supervision services.
Juan Romani Esteve La Pobla de Claramunt Barcelona region Spain	Kadant Lamort	Stock Prep equipment for the upgrade of the folding boxboard middle layer. The 250 tpd pulping system is designed to process paper from the household stream, ie with a high contaminant level. Includes a Hydrapulper with 8 mm perforations and its complete De-trashing system. The Vorto rotor and extraction plate ensure a stable downstream operation.
Kappa Kraftliner Piteå Mill	Kalmar	Five new lift trucks to handle the wide and heavy rolls of kraft liner which can weight up to 4.3 tonnes each. The rotating driver's seat of the Spirit Delta Space cab enables the truck to be safely driven in reverse, at normal operating speed. This provides the visibility required for lifting and transporting two rolls at a time - loads which block the driver's view when driving forwards. Piteå's two PMs produce 700,000 tpy of kraft liner, 40% of which will be handled by the 5 trucks, the remainder being loaded automatically onto special trailers for onward transportation by sea. The Kalmar DCE 80-6s are designed to handle two rolls stacked one on top of the other. They are fitted with integrated Cascade clamps which produces the correct gripping pressure. The plates that hold the rolls have been extended by 40% in order to ensure a precise and gentle grip on the rolls of kraft liner. website: www.kalmarind.com
Kartonagen Schwarzenberg Erzgebirge Mill Germany	Voith Paper	The modernization of stock prep feeding on the vat former machine. The aim is to increase the capacity of the stock prep and approach flow system capacity and improve finished stock quality. Includes: high density cleaning, a Fibersorter and various screen plates and baskets for pulping and stock prep screening. This summer an MSS screen with C-bar screen basket together with Elephant filter and heavyweight cleaning will be installed in the approach flow system. In addition, the stock prep screens will be fitted with new baskets. Voith will supply basic process, control and instrumentation engineering, erection supervision and start-up assistance. The mill produces various grades of recycled board of 450 to 1050 g/m^2.
Lwarcel Celulose e Papel Lencóis Paulista City São Paulo State Brazil	Metso Automation	Field control technology - both hardware and software - for the expansion project at the pulp mill. Includes Neles valves and Kajaani analyzers - control and automated on-off valves, intelligent valve controllers and consistency transmitters. The FieldCare asset management software features open technology and is suitable for life cycle management of field devices. The mill produces bleached pulp from eucalyptus, sisal, abacá and other natural fibre for the domestic and international market. The modernised mill, which starts up in October 2005, will have a capacity of 210,000 tpy. website: www.metsoautomation.com
Marusumi Paper Japan	JP Engineering Jaakko Pöyry	Andritz has commissioned Jaakko Pöyry to provide engineering services for a 252,000 tpy fibre line which will replace the mill's 100,000 tpy fibre line. The new line is scheduled for start-up in 2Q 2007. The €1 million engineering contract includes several options.

Mill	Supplier	Equipment review
MD Lang Ettringen Mill Germany	Voith Paper Automation	An OnV WebVision sheet analysis system with 8 colour cameras and a control station for PM 3, a machine which produces enhanced newsprint. The investment is expected to pay itself off within a year by reducing the number of 'unknown' sheet breaks. The Vision System utilises xenon light technology. It captures extremely small changes in the paper and provides high resolution photographs. The cameras are protected against contamination by an air curtain directly in front of the lens.
Mercer International Rosenthal Mill Germany	Aker Kvaerner	The upgrade of the brown stock washing system to improve efficiency. The upgrade comprises a Kvaerner Pulping Compact Press and a pressure diffuser. Both will be used as post-oxygen washers and will, among other things, replace old wash filters, delivering environmental benefits - through the reduction of Chemical Oxygen Demand (COD). Start-up in June 2006.
Mondi Packaging Paper Czech Republic	Sandusky	The rebuild of the pulp machine which has a wire width of 4620 mm and currently produces bleached pulp of 800 to 1000 g/m^2, at a maximum speed of 85 mpm. To improve express dryness, the 3rd press will be double felted and new framing, felt stretcher and guide equipment and felt rolls will be installed. A new rubber covered top press roll will also be installed. The supply air pre-heating of the dryer section will be upgraded to improve efficiency and capacity. Sandusky has total responsibility for the project which includes design engineering, manufacture, erection and commissioning services. TM Systems of Finland will handle the dryer section improvements. Installation and commissioning is scheduled for this autumn.
Norske Skog Albury Mill Australia	MIPAC	The upgrade of the control system which was completed 15 hours ahead of schedule, saving more than $250,000 in lost production revenue. In 2002, MIPAC upgraded all the mills measurement and automation systems. In this phase, the PM control system was changed over from a number of disparate legacy systems to one consistent system which automates the entire operation. The legacy systems, each with a proprietary user interface, made it difficult for operators to visualise an end-to-end process. MIPAC has provided a fully automated system with a single user interface, improved control strategies and alarm management.
Papierfabrik Schoellershammer Duren, North Rhine Westphalia Germany	Metso Paper	The rebuild of PM5, a 5.5 m machine which produces 180,000 tpy of testliner and fluting in the 90 to 170 g/m^2 range. The rebuild will increase speed from 870 mpm to 1000 mpm and enable the mill to improve strength properties and increase output of corrugating materials with lower basis weights. Includes: a new compact press, a size press for pond sizing and a reel with a speed of 1,200 mpm. The dryer section will also be modified and a new tail threading system will be installed. There are plans for a further increase in machine speed - to 1200 mpm but this will require additional investment which is not yet in place.
PT Pabrik Kertas Tjiwi Kimia East Java Indonesia	GAW, Styria	The upgrade of the coating colour preparation system and the implementation of an automation system for the kitchen and coating machine. The new systems will serve PM12 and OMC III. Includes: unloading and storage of synthetic binders; preparation and storage of CMC, PVA and starch; the installation of colour online quality measurement and working stations. The GAW-AutomationX process control system integrates the supply of coating colour and the control of the coater. The control-technology is continuously connected and therefore secures an optimal process cycle. Tjiwi Kimia is Indonesia's leading paper producer.
Rondo Ganahl Frastanz Mill Germany	Voith Paper Automation	A sheet break analysis system for PM 2 which produces coated linerboard. To detect sheet defects such as pinholes or tears, the sheet inspection sytem has an additional software function. The system comprises 16 colour cameras with a control station and 4 live-video monitors. It can be accessed directly from the office network through a remote access server. By reducing the number of 'unknown' sheet breaks the system will provide payback within a year. The OnV WebVision System utilises xenon light technology. It captures extremely small changes in the paper and provides high res photographs. The cameras are protected against contamination by an air curtain directly in front of the lens.

Mill	Supplier	Equipment review
SCA European Tissue Mills Sweden	Firefly AB	WebScan equipment which will standardise all the SCA tissue lines in Europe. Firefly is part of an ongoing investment programme in fire prevention. Webscan can detect if a fire problem has started to evolve in or around the Yankee dryer and can provide payback within days in mills where this is a liklihood. It also minimises the risk of fire in the warehouse - from smoulder or spark contaminated parent rolls.
SCA Mannheim Mill Germany	Aker Kvaerner	A new bleach plant, including medium consistency equipment and two Compact Press units. The aim is to improve quality, to enable the further closure of water cycles and to improve environmental performance. The Compact Press units are a repeat order, following two installations in 2003. The new bleach plant will start-up in June 2006. Kvaerner Pulping will provide engineering, procurement and supervision services.
SCA Graphic Östrand Pulp Mill Sundsvall Sweden	Honeywell	A production management system for the pulp line which produces raw material for hygiene products. The first start-up phase covering core production management functions took place in July. The second phase, which includes comprehensive reporting, was launched in November. The OptiVision Business Logic software to manage the quality of the pulp, monitor pulp rolls and improves production planning and dispatch warehouse management.
Shandong Chenming Paper Holdings Shouguang Mill Shandong Province China	Metso Paper	A €100 million order for the world's largest printings line. The 400,000 tpy PM is scheduled for the last quarter of 2006. Includes: a 1500 tpd deinking line, a PM with a design speed of 2000 mpm; two WinBelt winders, a wide range of automation, control and monitoring systems and various auxiliary systems. Also includes: systems for approach flow, broke collection and handling and fibre recovery as well as chemical handling systems for both the deinking line and paper machine.
Sodra Cell Värö Pulp Mill Sweden	Aker Kvaerner	The modernisation of the brown stock washing system including the supply of the patented Compact Press of Kvaerner Pulping. The aim is to improve washing performance and improve production yield. Start-up in March 2006.
UPM-Kymmene Nordland Papier Dörpen Mill Lower Saxony Germany	ECH Will Körber PaperLink Group (KPL) Hamburg	A GFS PRO folio-size sheeter with "mark-free sheeting" technology - an innovative sheet transport and overlapping system which enables the mark-free converting of paper and board. With a width of 2.83 m and a speed of over 400 mpm, the GFS PRO cuts both coated and uncoated paper and paperboard grades up to almost 1,000 g/m^2. The 1.2 million tpy mill produces fine paper. KPL is a holding company which brings together machinery makers: E.C.H. Will, Kugler-Womako, Pemco, Fabio Perini, Diatec and KPL Packaging (formerly Casmatic and Wrapmatic).
UPM Shotton Deeside North Wales	Metso Automation	A second PaperIQ Plus quality control system which will be installed on PM2 in September 2005. The first PaperIQ was installed on PM1 in 2001. The system will provide basis weight, moisture, ash, caliper and colour measurements at the reel. It will also have MD controls based on the IQWeightMD multivariable process control. CD controls will be supplied for weight, moisture and caliper. The latter will control the existing CD actuators to keep sheet profile within tight quality constraints. Also includes project management, training, control tuning, factory testing. At the same time, UPM Shotton will replace PLC and DCS with metsoDNA which will integrate seamlessly with PaperIQ Plus to provide comprehensive process troubleshooting and optimisation opportunities. The mill has a capacity of 500,000 tpy – some 20% of the UK's total newsprint consumption.
Werra Papier Wehrhausen Mill Germany	Kadant Lamort	For the new tissue line: one SPE10 centripetal screen for the approach flow plus ADS, CH, Diabolo for cleaning & screening in the stock prep section. The stock prep equipment will be installed in parallel with existing plant.
W. Hamburger Group Roeger Papier Trostberg, Bavaria Germany	Metso Paper	A WinDrum winder for the white top testliner machine. Start-up is scheduled for April 2006. The winder has a trim width of 2.5 metres and an operating speed of 2500 mpm. It is equipped with automatic set change and slitter positioning, a slitter dust removal system as well as a core feeding system for three different core sizes. The mill has 2 board machines which produce 140,000 tpy of white top testliner and folding boxboard.

Coming Events

Printed Electronics Conference in London

A two day conference on Printed Electronics will be held from 14 - 15 September 2005 at Thistle Marble Arch, London, by Pira International.

Semi-conductors have made it possible to print circuits onto almost any substrate at low costs. The result is a new generation of smart paper and packaging which can create new markets and significant value added for the paper industry.

The conference will cover the latest developments in this very young technology and the innovative products it is creating. Speakers will describe the development of substrates and the latest print techniques along with the advances in conductive inks and print machinery. Above all, they will address the cost issues.

The key topics for discussion include:

- Commercialisation - making the dream a reality.
- Making it profitable - future applications.
- Advances in inks, print machinery and substrates.
- Printing RFID tags and OLEDs.
- Real life case studies of practical applications.

annea@pira.co.uk; www.piranet.com

The 2005 European Paper Recycling Conference

The European Paper Recycling Conference will be launched on 3-5 October 2005, at the Hilton Brussels in Belgium by The Recycling Today Media Group.

The conference will bring together the supply and consuming sides of the business - recovered paper merchants, brokers, mill representatives and equipment and service providers, government and waste management officials.

The programme will focus on the market and operational trends in the European and international secondary fibre industry. In panel presentations, industry executives will cover supply and demand in Europe and the world; the growing Asian market; Mill procurement; the quality issues and the developments in recycling technology.

The programme will be covered in the following sessions:

Forecasting The Future: A Look at the Potential of Paper Recycling.This session will be moderated by Bill Moore of Moore & Associates, USA. The panelists will include Hebert Noichl of Mayr-Meinhof Karton, Austria.

Recovered Paper Quality: Both Sides of the Coin. The moderator is Maarten Kleiwig of the European Recovered Paper Association, Belgium. The panel will include Guillermo Valles of SAICA, Spain and Patrick Plew of The Paper Technology Specialists, Germany.

Asia: In this session, the theme is The Growth of Asian Export Opportunities. The Moderator is R.S. Baxi of J & H Sales (International), UK and the panelists will include Wade Schuetzeberg of ACN Europe, Netherlands and Andreas Otto of Germany's Melosch Export.

Demand: The ever increasing demand for recovered paper will be covered in the session on Tons of Pressure: Meeting Europe's and the World's Supply Needs. Chris White of Aylesford Newsprint will be on the panel.

The second day of the conference will focus on paper mills, with sessions on recycling technology and mill procurement.

Technology: The Recycling Plant of the Future is the theme of the the opening session. Panelists will discuss developments in Recovered Facility Design.

Procuring recovered paper: In the final session of the conference, a panel of paper industry executives will discuss the issues involved with paper procurement and where the European market is headed in this area. Henri Vermeulen of Kappa Packaging, Netherlands will lead the discussion on The Procurement Puzzle: Mill Buying Considered. Peter McGuinness of Severnside, UK is among the panelists who also include: David Barrio Alvarez of ASPAPEl (Spain); Johan van der Zwaag of Norkse Skog, Belgium and George Falcon of Harmon International (UK). The session is scheduled for 5 October 2005 from 10.15 to 12.00.

For information on the conference programme contact Bill Moore at marecycle@aol.com. The Conference Web Site is at: www.paperrecyclingeurope.com. Delegates can register on the website or by calling Congrex at +31 20 5040200 or visit www.paperrecyclingeurope.com

The Conference will feature a display area which will enable equipment and service providers to showcase the latest products and technology. Jim Keefe will provide information on Sponsorship, Display & Sales: Tel: +1 330 657 2872, e-mail: jkeefe@giemedia.com

FPIRC Autumn Courses

The Forest Products Industry Research College of Sweden is holding several courses this autumn:

Paper Surfaces - Characterisation and Properties. This is FPIRC course No 14 and it will be held from 5-8 September 2005 at the Royal Institute of Technology (KTH in Stockholm.

Process Chemometrics: FPIRC course No 17 will be held at MIUN (Mid Sweden University), Örnsköldsvik from 19 to 23 September 2005.

Paper Chemistry Research Front FPIRC course No 11 will be held at KTH in Stockholm from 3 to 6 October.

The courses will be held in English. On line registration can be found at www.fpirc.kth.se/courselist

Metso Fibre Lines Seminar

Metso Paper is to hold a Fibre Lines Seminar from 7-8 Sept. 2005 at The Last Drop Village, Bolton. The focus will be on technical solutions, economics and paybacks of rebuilds.

The seminar is open to all mill technical, engineering and project personnel. Attendance is free, but delegates are asked to pay their own hotel fee which is at a special rate. Tel: 01204 591131.

The programme begins at 12 Noon on 7 Sept. It will cover the following topics: Fibre Systems Processes; Screening Systems; Kajaani analysers; The Economics of Screen Rebuilds; Pulping systems and energy savings; Refining systems; Refiner fillings and energy consumption; Refiner upkeep and rebuild.
Contact Martin Chistmas on: Tel: 01925 286854; martin.christmas@metso.com

Baden-Baden to host 22nd PTS Coating Symposium

The 22nd PTS Coating Symposium will be held at the Kongresshaus in Baden-Baden from 20 to 22 September 2005.

The Symposium will provide an overview about the most recent developments in the coating of paper and board. Besides coating technology and the composition of coating colours, marketing aspects will be discussed. The exchange of experiences among international colleagues will be the centre of attention.

The presentations, which will be translated simultaneously in German and English, will focus on:

- Trends and markets: The Development of coated paper markets with a look to the future.
- The manufacturing of coating base papers.
- New and improved coating technologies: machines and facilities, applicators, drying techniques.
- Enhancing product quality and improving printability from the viewpoint of printers and papermakers.
- Adapted raw materials and optimised processes.
- Pigments, binders, additives.
- Optimised processes and runnability.
- Coating colours and their characterisation. The Interaction of coating colour components.
- Developments in measuring technologies.
- The calendering of coated paper.
- Improved efficiency of production processes and cost savings possibilities.

Up-to-date information on the symposium and technical exhibition can be found on the following website: www.streichereisymposium.de.

COST Symposium on paper and ink properties

A one and a half day Symposium on *Paper/Ink Properties and their Relation to Offset Printability* will be held from 6-7 Oct 2005, in the Assembly Hall, Ciudad University, Madrid, Spain.

This Symposium is organized within the COST E32 Action of the EU. The Action focuses on the Characterization of Paper Surfaces for Improved Printing Paper Grades.

The scope of the Paper/Ink symposium will be to discuss the latest trends in offset printing applications with special focus on paper/ink/fount properties and their interactions.

The aim is to create a meeting place for researchers and technical staff working at universities, research institutes and industry, where knowledge can be shared and new ideas discussed.

The programme will be covered by the following sessions:

- Introductory lectures.
- Ink and fountain solution.
- Ink-paper interaction in various offset printing processes.
- New/unique characterization methods of paper surfaces for improved printability.

The speakers will include:
Dr. Patrick Gane, Omya;
Dr. Schaschek, KBA
Dr. Erich Frank, BASF Drucksysteme;
Dr. Janet Preston, Imerys
Dr. Paul Piette, CTP

Further information can be found http://www.pfi.no/gary/COSTE32.htm; or from Göran Ström, +46 8 6767309 or goran.strom@stfi.se; or Marjatta Kleen, +358 20 7477601 or marjatta.kleen@kcl.fi

Focus on RFID at Smart Labels Europe 2005

The implementation of RFID will be the theme of Smart Labels Europe 2005, a two day conference which will take place from 20-21 September in Cambridge, UK. The focus will be on the experiences, and opportunities associated with implementation, the integration issues and current and emerging RFID systems.

The event, which is Europe's biggest RFID showcase, is back for its sixth year in Cambridge, with key sponsorship by Avery Dennison. The conference will be preceded by optional masterclass sessions on 19 and 22 September.

The latest RFID applications and technology will be covered by speakers from the leading companies in the field, including Avery Dennison, Aveso Printed Electronic Displays, the Korean Government, Tesco, Marks & Spencer, GlaxoSmithKline, Cisco Systems etc.

They will describe the requirements of brand owners, retailers, product manufacturers, healthcare, transport, and other vertical sectors, which looking to adopt RFID.

Smart Labels Europe 2005 is organised by IDTechEx, a knowledge based company specialising in RFID smart labels, smart packaging and printed electronics: www.idtechex.com; c.jennings@idtechex.com. The web site is: www.smartlabelsEUROPE.com

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creating markets for recycled resources

Project Monitor – Shotton Newsprint Project

In 2001, WRAP (the Waste & Resources Action Programme) conducted an open competition for the provision of financial support towards the development of additional newsprint reprocessing capacity. The objective of this support was to increase the capacity to use recovered paper in the production of newsprint, thus substantially reducing the amount of waste paper sent to landfill.

UPM Kymmene (UK) Ltd was selected as the preferred bidder and the project was specified to deliver an additional 321,000 tonnes per annum of new reprocessing capacity in the UK at their Shotton site. Work on phase 1 of the project (the main reprocessing plant) is now complete and work is commencing on phase 2 (the sludge boiler). WRAP is looking for a project monitor to cover the implementation of phase 2 of the project as well as ongoing monitoring of the tonnage reprocessed by the main reprocessing plant.

The aim of this work is to monitor and verify compliance by UPM Kymmene (UK) Ltd with their obligations to WRAP. In particular the successful tenderer will independently monitor and verify progress and spend against project milestones, the requirements of the State aids clearance, the payment schedule and the budget. The successful tenderer will report this progress to WRAP and its subsidiary, WREB (the Waste & Resources Environmental Body Limited), so that payments can be made.

It is anticipated that this will encompass between 25 and 50 days work between October 2005 and May 2007. The project monitor role may be carried out by an individual or organisation.

Applications will be judged on criteria set out in the full Tender Invitation Document. This can be obtained from the WRAP website or by written request, quoting PITA PAP 0002 to david.powlson@wrap.org.uk.

Closing date for tender submissions: 26th September 2005, 12:30pm.

WRAP, The Old Academy, 21 Horse Fair, Banbury, Oxon, OX16 0AH.
Tel: 01295 819900 Fax: 01295 819911
E-mail: info@wrap.org.uk

www.wrap.org.uk

GENERAL MANAGER MILL/FACTORY MANAGER CHINA

Our Group is the majority shareholder in a successful and profitable papermaking joint company venture in China. As a result of expansion and promotion, we would like to hear from candidates who are experienced in, and knowledgeable of, papermaking and who would like to manage the development and running of certain of our companies in China. For each position, the relevant ability and experience is a pre-requisite.

The employment contract is negotiable in terms and duration. Support in China will be available from ourselves (we have 10 years experience of operating there) and also from our Chinese partners.

Apply by comprehensive C.V. to:-

Mrs Lynn Lewis
Bolton Plastic Components Ltd
Lever Street
Bolton BL3 6NZ
Email: llewis@boltonplastics.co.uk

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Calendar of World Events

Date	Event	Venue	Organiser
SEPT 2005			
7-8	Metso Paper Fibre Lines Seminar	The Last Drop Village, Bromley Cross, Bolton	Martin Christmas Tel: 01925 286854; Fax: 01925 286868 email: martin.christmas@metso.com
11-16	The 13th Fundamental Research Symposium	Robinson College, Cambridge UK	email: frc@pita.co.uk www.ppfrs.org.uk
19-23	Process Integration	Montreal, Canada	PAPTAC Tel: +1 514 392 6969; Fax: +1 514 392 0369 email: clato@paptac.ca; www.paptac.ca
19-23	FEFCO Marketing Congress	Feriye Restaurant and Conference Centre Istanbul , Turkey	FEFCO Tel: +32 2 646 4070; Fax: +32 2 646 6460 email: info@fefco.org; www.fefco.org
20-21	Smart Labels Europe 2005	Cambridge, UK	IDTechEx / Tarsus Group Tel: 01223 813703 email: info@idtechex www.smartlabelseurope.com
20-22	China Paper 2005	China International Exhibition	E.J. Krause & Associates Tel:+49 301 493 5500; Fax:+49 301 493 5705 email: deutch@ejkrause.com www.chinapaperexpo.com
20-22	22nd PTS Coating Symposium	Kongresshaus, Baden-Baden, Germany	PTS, Germany Tel: +49 89 1214 623; Fax: +49 89 1214 636; pta@ptspaper.de www.streichereisymposium.de
21-23	Pulp and Paper Industry of Southeast Europe	ARO-Palace Hotel, Brasov Romania	BPP: Contact Snezana Miljanovic Tel: +381 22 223 924; email: k.ing@eunet.yu www.paperbalkan.com
26-28	PPI Transport Sympsium 16	Bouwcentrum Antwerp, Belgium	PPI/Paperloop, Brussels Tel: +32 2 536 0752; Fax: +32 2 537 5626; agehot@paperloop.com
27-29	Ink on Paper Conference	New Orleans, Louisiana	Pira International Tel: 01372 802039 ciaranl@pira.co.uk www.piranet.com
28-30	XV International Papermaking Conference Efficiency of Papermaking and Converting Processes	Wroclaw, Poland	Association of Polish Papermakers Tel: +4842 630 01 17; Fax: +4842 632 43 65 email: info@spp.pl
OCT 2005			
3-5	European Paper Recycling Conference	Brussels Hilton Belgium	The Recycling Today Media Group Jeff Fenner Tel: +1 216 961 4130 ext 215; email: jfenner@giemedia.com
12-14	MIAC 2005 (International Exhibition of Paper Industry)	Lucca Exhibition Centre Lucca, Italy	Edinova Tel: +39 02 215 8021; Fax: +39 02 215 8023 email: miac@miac.info; www.miac.info
13-14	Pulp and Paper Foundation Annual Meeting	Sheraton Imperial Hotel Raleigh, N.C., USA	Pulp and Paper Foundation Tel: +1 919 515 5661 email: mike_ellis@ncsu.edu; www.pff.ncsu.edu
16-18	RISI North American Forest Products Conference	Omni San Diego Hotel San Diego, California	RISI/Paperloop Tel: +1 781 734 8936 thompson@resourceinfo.com www.resourceinfo.com/events_risi.html
17-20	ABTCP-PI 2005 International Pulp and Paper Congress & Exhibition	Transamérica Expo Center São Paolo, Brazil	ABTCP Tel: +55 11 3874 2720 email: fernanda@abtcp.org.br www.abtcp.org.br
20-21	Energy Management	Melbourne, Australia	APPI / Appita Tel: +61 3 9347 2377; Fax: +61 3 9348 1206 email: info@appita.com.au www.appita.com.au
23-26	Web Handling Applications Seminar	Wes Watkins Centre Stillwater, Oklahoma	Oklahoma State University Tel: +1 405 744 9217 rogerlm@okstate.edu www.engext.okstate.edu
24-25	BIR Convention	Marriott Milan, Italy	Bureau of International Recycling Tel: +32 2 627 5770 bir@bir.org www.bir.org
24-26	Energy Efficiency	Thunder Bay, Ont., Canada	PAPTAC Tel: +1 514 392 6969; Fax: +1 514 392 0369 email: clato@paptac.ca; www.paptac.ca
24-26	Pulp Technology Symposium	PTS, Dresden, Germany	PTS Germany Tel: +49 89 1214 623; Fax: +49 89 1214 636 email: pta@ptspaper.de; www.ptspaper.de

Date	Event	Venue	Organiser
OCT 2005			
24-28	Management Development for Enhanced Performance	Georgia Tech Conference Centre Atlanta, Ga., USA	CPBIS and PIMA Tel: +1 404 894 1488; Fax: +1 404 385 2414 email: charley.burney@cpbis.gatech.edu www.cpbis.gatech.edu/mgtdev
NOV 2005			
8-9	PTS Water and Environment Symposium	PTS Munich, Germany	PTS Munich Tel: +49 89 1214 623 pta@ptspaper.de www.ptspaper.de
10	PTS Energy Management Symposium	PTS Munich, Germany	PTS Munich Tel: +49 89 1214 623 pta@ptspaper.de www.ptspaper.de
15-17	Paperworld China	Shanghai New International Expo Centre Shanghai, China	Messe Frankfurt (HK) / China Chamber of Commerce Tel: +86 21 5292 9222; Fax:+86 21 5292 8777 email: Estelle.ni@china.messefrankfurt.com www.paperworld.messefrankfurt.com
17	The 5th Biennial Johan Gullichsen Colloquium – *Raw materials and processes*	Hilton Helsinki Kalastajatorppa Helsinki	Finnish Paper Engineers Association: Tel: +358 9 132 6688; Fax: +358 9 630 365; email: irmeli.hannula@papereng.fi www.papereng.fi
21-22	PTS Tissue Symposium	PTS Munich, Germany	PTS Munich Tel: +49 89 1214 623 pta@ptspaper.de www.ptspaper.de
22-24	International Converting Exhibition	MOC Exhibition Centre Munich, Germany	Nimble Shows & Media Tel: +49 8033 91231; Fax: +49 8033 91288 email: info@ice-x.com www.ice-x.com
22-25	PAPEXPO 2005	CED Sokolniki Moscow Russia	MVK/Russian Association of O+E of Pulp and Paper Industry Tel: ++7416 925 3666 eshatrova@mvkexpo.com www.papexpo.ru/defaulteng.stm
28-29	Pulp & Paper in Russia & the CIS	Vienna Marriott, Austria	Adam Smith Conferences Tel: 020 7490 3774 email: Stephen@adamsmithconferences.com www.asi-conferences.com
DEC 2005			
	CEPI Annual Meeting & European Paper Week 2005	Brussels, Belgium	CEPI Brussels Tel: +32 2 627 4911 www.cepi.org
7-9	FSC General Assembly	Manaus, Brazil	Forest Stewardship Council Tel: +49 228 367 66 0 fsc@fsc.org www.fscus.org
JAN 2006			
25-29	Paperworld Frankfurt	Messe Frankfurt Frankfurt, Germany	Messe Frankfurt Tel: +49 69 75 75 68 21 paperworld@messefrankfurt.com www.paperworld.messefrankfurt.com
FEB 2006			
6-9	Paper Week International PAPTAC Conference & EXFOR 2006	Palais des Congrès Montreal, Canada	PAPTAC Tel+1 514 392 0265; Fax: +1 514 392 0369 email: rwood@paptac.ca; www.paptac.ca
MARCH 2006			
9-11	NZ Forest Industries International Exhibition	Rotorua Racecourse, New Zealand	FI Events Tel: +64 7 362 7865; Fax: +64 7 362 7875 email: bal@wave.co.nz www.forestevents.co.nz
13-15	PITA Papermaking Conference 2006	The Cedar Court Hotel, Bradford	PITA, John Clewley Tel: 0161 764 5858; Fax: 0161 764 5353
14-17	Tissue World Americas 2006	Miami Beach Convention Centre Florida, USA	CMP Asia www.tissueworld.com
APRIL 2006			
9-12	International Conference on Pulp and Paper Mill Effluents	Vitória Convention Centre Espírito Santo, Brazil	ABTCP: Tel: +55 11 3874 2733 email: anapaula@abtcp.org.br; www.abtcp.org.br
9-12	Paper Week	Waldorf Astoria Hotel New York	AF&PA: Tel: +1 800 878 8878 email: info@afandpa.org; www.afandpa.org
25-27	TissueMEC 2006	Budapest, Hungary	email: Edinova: edinova@edinova.com www.tissuemec.com
MAY 2006			
7-10	International Pulp Week	Fairmont Hotel Vancouver, B.C., Canada	PPPC / Market Pulp Association Tel: +1 514: -861 8828 Fax: +1 514 866 4863 email: general@pppc.org; www.pppc.org Corrugated 2006
15-20	Paris Nord Villepinte	Paris, France	Reed Exhibitions Tel: 0208 910 7817; Fax: 0208 910 7848 email: corrugatedteam@reedexpo.co.uk www.corrugatedexpo.co.uk

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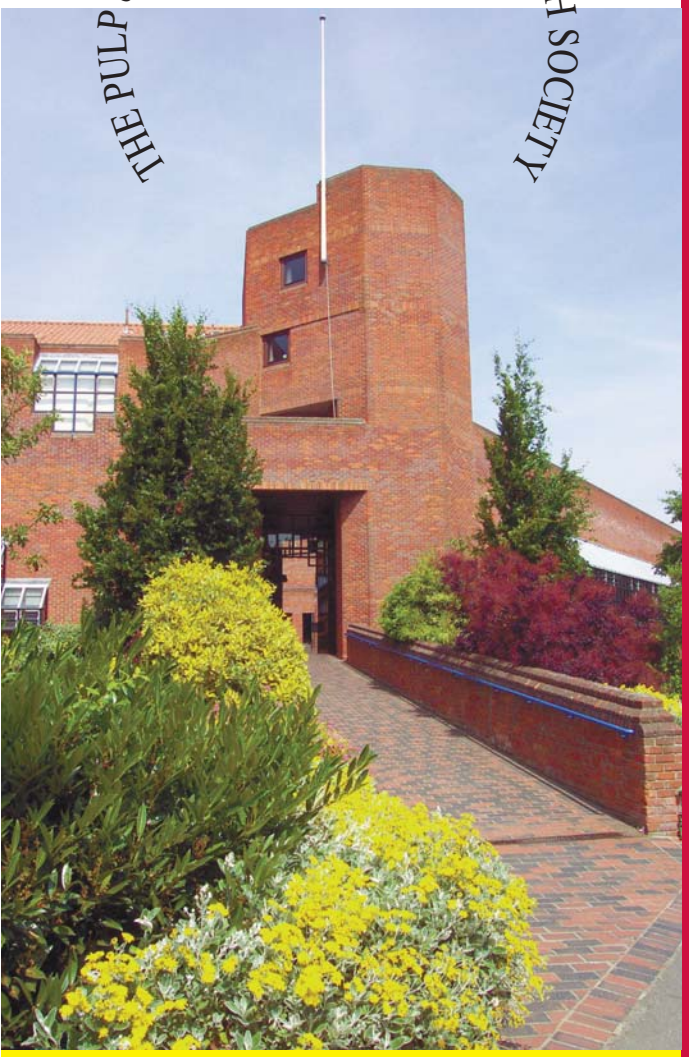

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11th-16th September 2005

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The Pulp & Paper Fundamental Research Society

Advances in Paper Science and Technology

13th Fundamental Research Symposium in the Oxford and Cambridge Series

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11th-16th September 2005

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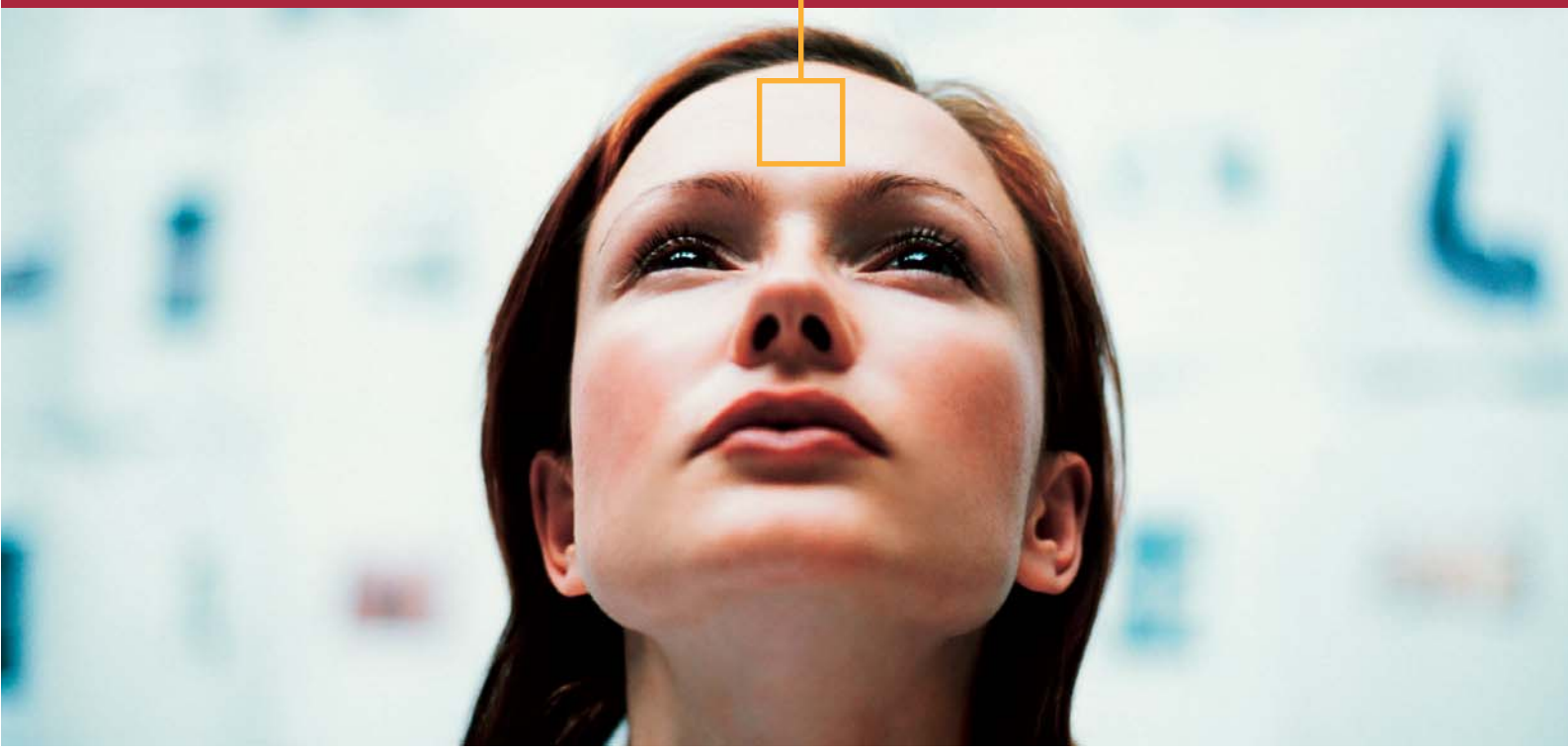

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