PITA ANNUAL REVIEW

2012-2013

P I T A

Paper Industry Technical Association
5 Frecheville Court,
Bury, Lancashire
BL9 0UF

Annual Review & Membership Directory*
2012-2013

Compiled by the PITA Office

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Paper Industry Technical Association

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Paper Industry Technical Association

Annual Review & Membership Directory 2012-2013

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Chairman's Message

Chairman's Message

Tim Klemz

2012 has, for business generally, been very hard work creating many challenges for all businesses, not just those in the paper sector.

But focusing on the paper sector, there are all the normal headwinds of price competition from overseas markets, energy costs, environmental costs, distribution costs etc. to be overcome and accommodated in the face of falling demand for some grades. For instance newsprint is forecast next year to be down 9MT from 2007 and falling demand for printings and writings has seen production decline by 7MT since 2007.

There are however, bright spots on the horizon, with tissue forecast to grow by 4.5% next year, an increase of 6MT on 2007 production levels, and containerboard demand is expected to rise by 4% following a 2.5% growth this year. In fact, containerboard has bucked the trend since 2007, growing by 18% or an additional 23MT. However, very little of this growth will be home grown and in fact, according to RISI, developed economies will have seen consumption pared by 34MT or 16% between 2007 and the end of next year.

Against this backdrop, there are further hurdles that are likely to be installed over the coming years. There will be new government targets on carbon emissions and energy and water use and the BREF (Best available technology Reference document) will be launched next year and this is where PITA comes to the fore in providing guidance and advice.

With excellent technical capabilities and some great minds amongst the membership, PITA should be viewed as a combined technical resource available for the benefit of its members and should be used as such.

The PITA office manage to keep abreast of the changes and disseminate their findings to the membership via Paper Technology and the PITA Affairs newsletter, which are of great use.

Other areas where is PITA has been active and intends to remain so in the future, is in facilitating the provision of specific training for the industry and instigating an industry wide approach to both training needs and delivery. The first, very well attended meeting in Mansfield sparked both debate and interest and identified a clear need for coordinated training in the industry. This meeting also allowed us to introduce PapierZentrum Gernsbach to the membership. Gernsbach is quite rightly highly regarded and PITA will be working with them to develop courses over the coming years for the benefit of the members. It is also our intention to tailor courses suitable for delivery in a number of European countries where the domestic associations lack the critical mass to make training worthwhile. The intention here is twofold: firstly to increase the reach of PITA and secondly to increase the association's revenue.

For the last few years, the finances of the association had been heading in the wrong direction and to stem the losses it was decided to replace the previous full time chief executive with Barry Read on a notional part time basis. Barry has done and continues to do a fabulous job and I am very happy to report that this year, not only has the association broken even but, we are able to report a small profit.

On a final note I would like to extend my thanks to Helen and Barry, who are the collective glue that holds the association together and ensure that we all receive the information, invitations and calling notices throughout the year. Without their hard work and dedication there would be no association.

Tim Klemz

PITA Board

2012-2013

Martin Wroe	*National Chairman*
Graham Moore	*Deputy Chairman*
Tim Klemz	*Immediate Past Chairman*
David Dredge	*Publications Director*
Stephen Hutt	*Financial Director*
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PITA Office/Paper Technology

Barry Read
Chief Executive

Helen Dolan
Company Secretary

Daven Chamberlain
Editor
Paper Technology

Review of the year

A number of contributions have been sought from various people within the paper industry to supply a comment on a particular subject and a review of that subject during the year.

Hawkins Wright Symposium 2012

by Daven Chamberlain

Editor, Paper Technology

It's November, I'm in London surrounded by pulp and paper specialists from around the globe, so it must be the eagerly awaited Hawkins Wright Symposium – surely the focal point of London Pulp Week. This year I sat in the impressive IET auditorium surrounded by 220 delegates – a record for this meeting – which goes to show the pulling power such a top-notch event can exert.
Before summarising the five excellent presentations, it is worth highlighting the major companies that see the benefit of sponsoring an event that brings together so many paper professionals in such a convivial atmosphere; thanks from both the organisers (**Hawkins Wright**) and the audience are due to: **Akzo Nobel; Altri; April; Cenibra; CMPC Pulp; Energia y Celulosa; Fibria; Gearbulk; Ilim; Mercer Pulp; Metsä; Metso; Omya; Södra** and **Stora Enso.**
And so, without further ado, to the talks:

Andrea Boltho (University of Oxford)
Undoubtedly the most anticipated speaker of the day! If you think that economics is boring, think again. Professor Boltho brings alive what can be a rather dry subject, injecting humour and a vast amount of common sense, along with a unique delivery that is a joy to behold.
In very simplistic terms the Professor relayed the following:

1. The Chinese economy, whilst not in recession, is slowing noticeably. However, with low debt levels, it remains strong, although, interestingly, confidence appears fragile.
2. The US economy has rebalanced significantly, confidence is moderate, house prices have decreased along with personal and corporate debt, and bank lending remains strong.
3. The EU economy still has a way to go. Confidence remains low; personal debt has decreased but corporate and public sector debt is high; and lending to the business sector is still poor.

Overall, the Chinese and US economies look set for steady growth in the coming years, whereas the EU is not out of the woods and could still fail. The most likely scenario were this to happen would be for the North European countries to continue in a more limited Eurozone, with the Southern European countries reverting to local currencies.
As regards the EU, the conclusion is: the immediate problem is one of excessive deficits and debt in a number of Southern countries; the medium-term problem is one of insufficient competitiveness in a number of, again, Southern countries; and there could be an even longer-run problem to do with different and diverging governance standards between Northern and Southern Europe.
Only time will tell how these will work out. In the meantime, Professor Boltho for once forbore from making any predictions.

Julian Ingram (McCann Worldgroup)
Starting with a quotation dating back two-and-a-half millennia is an interesting way to open a presentation. Julian Ingram chose Sun Tzu's classic *Art of War* as his text, noting - "He who knows when he can fight and when he cannot, will be victorious".
Are we at war? Well in many ways, yes, and what's more, depending upon the sector, it could be argued we are losing - badly. This talk focussed in particular on the 'losers' – the graphical grades such as newsprint, magazine and book papers. For many years these have been viewed as the great 'knowledge distribution products', but technology has, over the last two decades, disrupted their dominance to the extent that today various technologies can be used in their place that claim the benefits of being cheaper and more up to date. The result – "move over paper, your time has passed."
We were then exposed to the only equation of the event:

$$CV = (PP + BE) / (P + AC)$$

where: CV = Customer Value; PP = Product Performance; BE = Brand Experience; P = Price; AC = Access Costs

CV is the big driver in determining success or failure. It is increased when P or AC are low, and paper generally scores well here compared to most other media. However, CV is also improved when PP or BE increase. Products like the Ipad™ tend to score high in PP, and all forms of digital media tend to have higher BE than paper.
So what can be done to turn things around for paper? In terms of P and AC, not a lot – the Paper Industry has driven down costs, and the product already scores relatively highly on these indices. Rather, it is PP and BE where graphical paper has to make a stand – tactile and sensory properties,

and emotional connection (e.g., the value of a hand written letter against an email) need to be stressed. However, to make the most of these qualities the graphical paper industry needs to invest in research to define how best to 'sell' its products to the general public.

In conclusion, don't try to sell on environmental benefits; these may be important to other sectors, such as packaging, but for graphical products, find out what people value about paper as a communication medium, and focus upon that. Alternatively, accept the fate that technology is forcing upon the sector – and close capacity.

Emanuela Bona (PPPC)

Emanuela is another consummate orator whose presentation focussed upon world trends in two areas: Tissue and P&W grades. Copious statistics and forecasts were presented about both sectors, but, because we are covering tissue elsewhere in this review section, I will focus solely upon P&W grades here.

P&W production peaked in 2007, since when it has declined, predominantly in North America and Western Europe – the drop this year is forecast to be a further 2.3%. However, the drop has not been consistent across all grades; both coated and uncoated woodfree papers have certainly decreased, but to a lesser extent than mechanical printing grades. Furthermore, some future growth is forecast for woodfree grades, whereas further decline is anticipated for mechanical products.

Looking at the sector geographically (*Figure 1*), Western Europe is doing better than North America. Western Europe is also the largest exporter of P&W grades in the world, but that is also declining as China starts to export more, especially back to Europe, although the introduction of trade barriers has slowed this trade.

Market	Demand (year to date)	Demand fc (2011-2014/yr)	Shipments fc (2011-2014/yr)
China	5.4%	5.1%	6.0%
North America	-7.6%	-3.7%	-3.8% (mech -4.2%; WF -3.4%)
Western Europe	-6.5%	-3.7%	-3.2% (mech -3.8%; WF -2.7%)
Eastern Europe	0.1%	1.5%	1.2%
Latin America	2.6%	2.5%	1.9%
Japan	-1.6%	-1.0%	-0.9%
South Korea	-0.9%	-0.2%	0.9%
Other Asia	1.5%	3.8%	4.1%
Africa	11.0%	5.5%	3.0%
Oceania	-0.8%	-2.6%	4.3%

Figure 1: Current and forecast P&W market figures (courtesy PPPC)

Looking to the future, the world is likely to require almost 2MT more graphical paper capacity in the coming years, mainly for Latin America and Other Asia. Meanwhile, the substitution effect of digital products for graphical grades, which started in North America and Europe, is now starting to affect China.

Haidong Weng (Xiamen C&D Pulp & Paper Ltd)

After an introduction to Chinese economics, where the reasons for the slow-down in the economy were outlined, the speaker concentrated upon the pulp and paper industry in China, its near term problems of over capacity due to the massive projects still on-going, and long term issues with fibre supply and environmental sustainability.

Figure 2: BHKP market price against the start-up of recent pulp mills (courtesy Hawkins Wright)

Environmental issues were illustrated by the fact that, whilst the pulp and paper industry only contributes around 1.5% to China's GDP, it is the main producer of waste water and COD pollution discharge. To this must be added the fact that many of China's provinces are starting to experience water shortage due to the rapid expansion of the industrial base; and almost two-thirds of the pulp and paper industry is located in regions of high water stress.

Great strides have already been made, such that by 2010 the total COD discharge volume had decreased 40.4% from 2005 values, largely due to a policy that has seen over 2000 inefficient mills and 10 million tons of old capacity closures during the intervening years. Meanwhile, the Chinese government is continuing to address these issues in the current 5-year plan. Afforestation is being implemented, to increase the amount of indigenous resources available for industrial utilisation; challenging pollution and water usage reduction plans are pushing forward; more outdated capacity is to be closed (particularly non-wood pulp mills); energy consumption is to reduce; domestic fibre recovery to increase; and further expansion of the pulp and paper industry is to be controlled centrally.

The effect of these proposals is already being felt. Paper production was set to expand at 4.6% YoY (equivalent to an increase of about 23MT) from 2011-2015, but now this is being strictly controlled. Currently, upgrade projects aimed at energy efficiency and curbing pollution are allowed to proceed. Meanwhile, although several new paper and pulp mills have obtained the go-ahead from the Ministry of Environmental Protection, only one (Shandong Tralin, an integrated graphical paper and tissue mill based upon straw) has received approval from the National Development and Reform Commission.

The talk ended with a summary of how three different market grades are faring in China: P&W, packaging and tissue. P&W is starting to see a decline in newsprint, although magazine and book consumption is still increasing - as is digital consumption. Packaging is seeing a big shift away from wooden crates to paper- and biomass-based materials, including: wheat straw particle board, OSB, honeycomb paperboard and high-strength corrugated cardboard. Finally, tissue is showing a very significant rise, allied to the greater disposable income of many Chinese workers.

In conclusion, fibre deficit and environmental sustainability have become the most critical issues for China's pulp & paper industry going forward. The indigenous industry must carry out its obligations by reducing total pollutant emissions. Meanwhile, government policies to promote conservation mean development of new mills is being restricted.

Tom Wright (Hawkins Wright)

The final session saw the familiar face of Tom Wright, whose talk was ostensibly about conditions for the market pulp sector, but inevitably the presentation focussed, as always, mainly upon China.

Starting with the basic economics - pulp is a commodity like any other and both price and demand are being driven mainly by the business cycle. As proof of this, *Figure 2* shows the price of BHKP against time for the last decade; price has shown a steady rise, albeit with the occasional fluctuation, but there has been no correlation with the installation of any of the new pulp capacity over this period. The driving force has been macro-economics.

Looking at the world as a whole, BCP demand has grown roughly 2% over the first nine months of this year. However, take China (which experienced a 16% rise in demand) out of the equation, and world demand contracted almost 2%. China is still the dominant force in determining global pulp demand, and this shows no sign of abating, although, with a slowing of growth the degree of pull will be reduced.

As regards pulp grades, China has installed significant hardwood pulping capacity (that relies mainly upon imported chips) such that internal woodpulp production has doubled in just three years, from around 4MT in 2009 to over 8MT in 2012. As a result, the last two years have seen softwood pulp imports to China exceed hardwood, and in 2012 this differential is forecast to exceed 1MT.

Turning to the world market we are likely to see increased product substitution as significant new eucalyptus capacity comes on line. Already eucalyptus is starting to displace other hardwoods and some softwoods. Meanwhile, significant kraft capacity has been taken off-line as mills convert to dissolving pulp. Also, as the availability of high quality recovered raw material diminishes, the cost of quality recycled fibre will increase, so the differential between RCF and market pulp will narrow, which again will encourage substitution of market pulp for previously 'low cost' fibre.

Overall, it is forecast that we are in for a period of structural change, as integrated mills continue to close, recovered fibre markets saturate as, certainly in the West, a ceiling to the recovery rate is reached, and all the while, new market pulp producers continue to come on-line (*Figure 3*). Therefore expect turbulence for the foreseeable future in the pulp supply market.

Category	Capacity (MT)			Market Share (%)	
	2000	2012	Growth	2000	2012
RCF	149.3	204.3	55.0	45	53
Market pulp	41.4	56.2	14.8	13	15
Integrated pulp	137.9	122.3	-15.6	42	32
TOTAL	328.6	382.8	54.2		

Figure 3: Fibre demand trends (courtesy Hawkins Wright)

Recovered Paper Review: Is Waste Legislation Aligning with the Needs of the Recycler?

by Peter Seggie,
External Affairs Manager
Smurfit Kappa Recycling UK

Background

Over 80% of fibrous raw material input into UK paper mills emanates from the UK waste stream as paper for recycling so the industry is a major stakeholder in how this material is collected and recovered. Any quality deterioration of this material has significant knock on effects on mill efficiency and costs. Yet the UK has, over recent years and particularly in the household waste stream, been driven not by reprocessor needs but by legislation and blunt weight-based targets. Particularly prevalent in the UK has been the rush towards co-mingled collection where waste paper is collected mixed with other materials (plastics, metal cans, glass etc.) and sorted in materials recovery facilities (MRFs) but there is little doubt that this has led to a significant amount of low quality material entering the market. The revision of the European Waste Framework Directive (WFD) in 2008, legislation that Member States had two years to bring into domestic law, was a significant chance to reverse this trend by building quality into the ethos of all waste legislation. Indeed an article was added to the WFD calling for "separate collection" of paper, plastic, metal and glass to support "high quality" recycling. However, as many UK Local Authorities had already invested heavily in co-mingled infrastructure, UK governments were less than happy to accept this as a *fait accompli* and set about moulding the WFD to match their situations. This may have slipped under the radar to the cost of UK paper mills had it not been challenged by a collective group of reprocessors. The story continues….

The Development of UK Legislation

In 2011 the Department for Environment, Food and Rural Affairs (Defra) alongside the Welsh Assembly Government (WAG) published new waste Regulations, *The Waste (England and Wales) Regulations 2011*. These Regulations transposed the WFD into English and Welsh domestic law. However, a Judicial Review was immediately launched against these Regulations by the Campaign for Real Recycling (CRR) and its supporters, centred on the transposition of Article 11(1) relating to the requirement for "separate collection" of key recyclable materials. Basically CRR objected to the Defra and WAG interpretation that "co-mingled collection" was to be regarded as a form of "separate collection". In order to avoid almost certain judgement against them, Defra and WAG reached agreement with the judiciary to postpone the Review while amendments were made. A further consultation was launched in 2012 with proposals to amend the Regulations and, after some adjustments, these subsequently passed into law in October 2012. However, the CRR Judicial Review continues and is still likely to call the amended Regulations before a judge in 2013 as a failure to correctly transpose article 11(1).

Similar things are happening in Scotland and Northern Ireland with their new waste Regulations but as yet no Judicial Reviews have been sought, although legal challenge has not been ruled out.

The New England and Wales Regulations

Despite the amended Regulations removing the explicit statement that "co-mingled collection" is a form of "separate collection" they continue to give concern that they do not adequately transpose the requirements of the WFD. They do not replicate the WFD text and as such retain much uncertainty as to where co-mingled collections fit within the law. This spectre of uncertainty for both the supply chain and the reprocessing industries puts a question mark over investment; particularly galling when other government departments are championing manufacturing investment to rebalance the UK economy towards production and exports. Vibrant UK recycling sectors will be key elements of a rebalanced UK economy.

Necessary "Quality Standards" for a Vibrant UK Manufacturing Economy

Smurfit Kappa has two UK paper mills and, like all manufacturing plants, each has quality standards absolutely necessary for efficient reprocessing of raw materials into new products. Without raw materials to these standards both mills would become less efficient and competitive in European and global markets. This would manifest itself in a number of ways including higher waste disposal costs (getting rid of unwanted contaminants), greater wear and tear on machinery (paper machine systems are designed to deal with known contaminants), higher energy and chemical costs (needed to manage poor quality inputs) and higher machine down time (due to mechanical breakdowns and system clean ups). As with any business, inefficient and uncompetitive operations are not sustainable and the knock on economic and social impacts to the UK would be significant. Smurfit Kappa UK directly employs over 2,500 skilled workers through collection, paper making and corrugated production, bringing half a million tonnes of paper for recycling back into active life. The company also creates significant employment through its service and supply chains and supports other UK businesses with its product portfolio. This shows the economic and social value to the UK in getting the first stage of the recycling process right and emphasises why "quality standards" are absolutely essential.

A sadly missed point in much of the discussion to date is that "quality standards" are not just about the here and now. In order for UK reprocessing industries to grow, remain competitive and contribute to government policies external to waste, "quality standards" need to improve beyond where they are today. In its recent 2012 report on the UK paper industry (*How can paper be made more sustainable?*) Defra set out actions for the paper industry to achieve greater sustainability through waste prevention, reduced waste generation and lower process emissions. Each action is achievable but is hugely dependent on the supply of quality raw materials, particularly paper for recycling.

Future Opportunities in Getting it Right

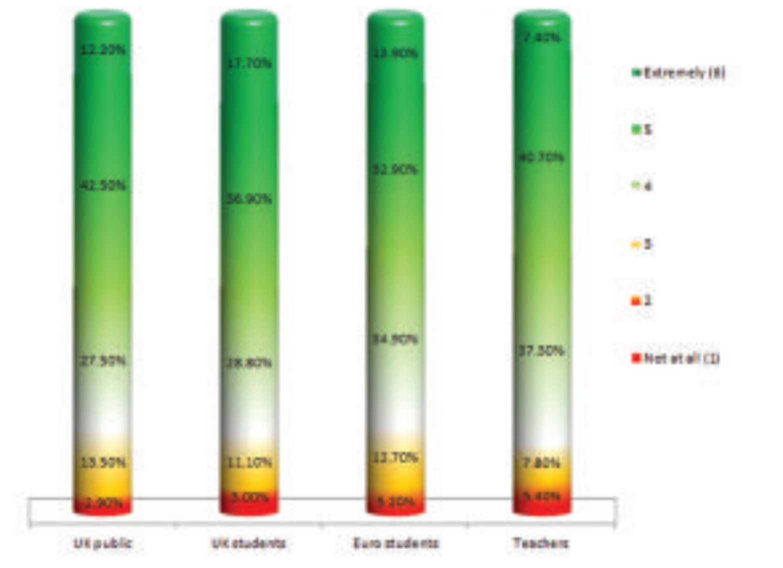
With the UK consuming over 10 million tonnes of paper products per annum, collecting over 8 million tonnes of paper for recycling, yet making only 4.3 million tonnes of paper domestically there are clear opportunities for the industry to grow if the investment environment is right. Clearly raw material supply is a key element in this and UK governments have an opportunity to take decisions now that support growth rather than act as a barrier.

Carton Industry: Should they know better?

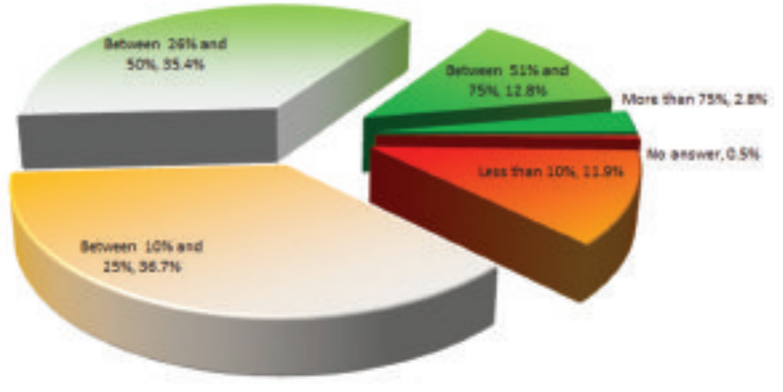
by Neal Whipp
BPIF Cartons

There is often a frustration among those involved with Trade Associations that they seem obliged to present the same old messages time after time. However, the first session of the Carton Conference 2012 showed that this duty must remain a task for members of BPIF Cartons for some years to come. We commissioned a survey of the general public to establish what they knew about cartons – 'Over a quarter of those polled thought that cartons use timber from tropical rain forests' was the opening message from Peter Martin of Shape the Future who carried out the research.
For years BPIF Cartons has explained that not only is tropical hardwood not suitable for cartonboard production but, in practice, the growing of softwood species has doubled the size of European forests. This has helped to compensate for the reduction in tropical rainforests caused entirely by increasing demands for agricultural land, with no impetus from paper or board industries at all. Yet despite this, more than half the respondents thought cardboard and paper packaging caused a reduction in the area dedicated to world forestry.

How environmentally conscious would you say you are?



What proportion of cartons do you think are made from recycled materials?



Clutching perhaps at straws rather than branches, BPIF Cartons set out to find out which groups had absorbed our environmental messages. Surely for instance students in Scandinavia, which supplies a majority of pulp within Europe, would know the facts, but their level of environmental consciousness even lagged behind their UK counterparts. In practice there was not much to choose between the responses from the most conscious group – teachers - and the least conscious – general public. They professed to be concerned which was reflected by the fact that when comparing cartons to other forms of packaging they correctly recognised the relative ease with which cartons can be recycled. Also, the high proportion of cartons made from recycled material. However, the survey also revealed the worrying attitude that somehow packaging threatened the environment. One of the highest responses was to the statement 'Far too much packaging is used in products these days'.
The readers of this journal are likely to recognise that many shop trials have revealed that packaging can have an enormous influence over purchasing decisions. The excellent print clarity that cartons provide is a key reason why they are the best medium for promoting brand awareness. However, in our survey when the public were asked - 'How important is each of the following in deciding what products to buy?', they rated packaging as the least important criterion.
Delegates to the conference then heard Ohto Nuottamo explode some of these myths, not least the assertion of too much packaging. He pointed out that in economies where there is less packaging the percentage of product waste – particularly food - rises hugely. He commented that 30% of the food that should go to hungry people is being lost due to poor packaging and an inadequate supply chain. A later speaker – David Nussbaum the CEO of WWF UK – repeated this message – 'the challenge for your industry is to communicate the message that one calorie in three throughout the world is lost in poor food supply chains'.
So while each trade association will work away to continue to advocate the merits of their material we all need to recognise that we have a long way to go in explaining to the consumer not just what role our material plays but the absolutely vital role which packaging generally can play. Currently, consumers are most conscious of packaging once the product has been removed. The product has been placed in the oven or put away on the shelf. They are left holding the packaging and have the burden of disposal so it is then regarded as waste. Our objective must be to change that perception to emphasise what a good job the packaging has done in delivering the product to them in good condition.
Can we live in hope that one day an answer from a public survey will be 'Thank you packaging'. It would be rather nice wouldn't it?

Newsprint Review

by Otto Leskijärvi
Senior Consultant,
Pöyry Management Consulting Oy

Economic woes are shaking the newsprint market again

As the global economy has barely recovered from the Great Recession, we are again facing turbulent times, especially in Europe, where the economic environment has deteriorated rapidly in the second half of 2012. Not surprisingly, the dismal economic situation has impacted newsprint demand, which in Western Europe touches double digit decline for 2012 – a decline of such magnitude has been witnessed only once before, in 2009.

In North America, the demand has also continued its expected decline, although the rate has moderated somewhat in 2012. We can expect to see a demand decline of around 5%, which in comparison to a compound annual growth rate (CAGR) of -8% between 2000 and 2011, does not feel that drastic. Also, it should be remembered, that the smaller the annual demand volume is, the smaller the absolute demand decrease of each percentual change. This year the demand is expected to decline by slightly over 200,000 tons, which is a fraction of the 1.2 and 1.8 million ton decreases in 2008 and 2009 respectively. Basically, this year, we are talking of a demand decrease corresponding to a single mid-sized newsprint machine.

In China, the newsprint demand is expected to resume growth in 2012, almost reaching the demand levels of 2010. The peak in 2009 remains still somewhat higher, though. The demand drop in 2011 can be partially attributed to media substitution, but also largely to after effects of the 2009 crisis: in late 2008 the Chinese government introduced a 4 trillion RMB stimulus package to mitigate the impacts of the financial crisis. This stimulus package helped the housing market to overheat. To counter the soaring property prices, the government introduced restriction policies in the housing market, which in turn led to a sharp decline in property ads in the newspapers in 2011.

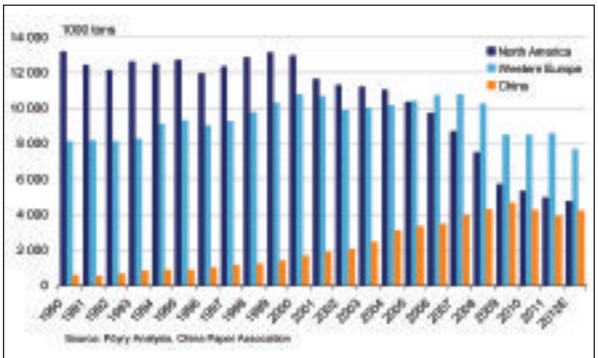


Figure 1: Newsprint demand development

Year of the paywall

For years the newspaper publishing industry has been struggling to find profitable ways to maintain their business in the continuously developing media environment. One way to get revenues in the digital format is to put up a paywall, which was first introduced by Wall Street Journal in 1997. For many years, the situation with paywalls has remained rather stable. Every now and then some major newspaper opts for this solution and some drop back to free content. However, it seems that in 2011 and especially in 2012 the number of newspapers going for a paywall has started to increase rapidly. This is seen especially in the US, where according to mashable.com there are over 300 newspapers with some sort of digital paid-for subscription model, a number that has doubled in a year.

Also in Europe we observe movement towards paid-for content, as e.g. Axel Springer AG has announced its intention to raise a paywall for its flagship national daily, *Die Welt*, by the end of 2012. An interesting paywall solution has emerged in Central-Eastern Europe, where a company named Piano Media has introduced a paywall portal which allows a readership of several publications with one subscription. Piano Media introduced this service first in Slovakia, and has since expanded to Slovenia and Poland. While consumers increasingly accept paying for online content, in many cases their willingness to pay for the same news in paper format will decrease. The rapid adoption of tablet computers also accelerates this trend, as they offer a user friendly interface for online news. We can thus expect the decline in newsprint demand to continue in North America and also in Western Europe. For China, the jury is still out whether or not we saw the newsprint demand peak in 2009, but this we should learn in a couple of years' time.

Persistent overcapacity

Given the declining demand environment, it is no wonder the European and North American newspaper industry is suffering from chronic overcapacity. The industry has shed millions of tons of less efficient capacity in the past years, and the painful process is expected to continue. The most recent examples of major capacity reductions in 2012 in Europe are the Norske Skog Follum mill closure, and the announced closure of Stora Enso Hylte PM1 by the end of this year. However, to balance the supply and demand, the industry usually seems to come a few steps behind.

Energy Issues
by Steve Freeman
Director of Environmental & Energy Affairs,
CPI

2012 saw no real shocks in UK energy prices as costs stabilised around the higher levels set towards the end of 2011, with a subdued economic outlook reigning in any sustained move towards higher prices. With no short-term panics, attention focused on the unexpected impact of shale gas on the North American energy market and the long-term price impact of Government policies, especially in relation to competitors elsewhere. The long awaited draft Energy Bill (published towards the end of 2012) finally provided some clarity on the shape of the future electricity market, with the Government betting billions of pounds of taxpayers' money that increases in the cost of gas will make renewables relatively more cost effective.

The exploitation of shale gas has become an increasingly emotive issue, with exploration and development of European resources being delayed by high profile anti campaigns and a lack of Government leadership. Meanwhile, in North America, reindustrialisation is underway as gas prices have plummeted, and American carbon emissions are falling as low-price, low-carbon gas displaces high carbon coal for power generation. This North American low gas price is giving American firms a massive advantage over their European competitors and will last as long as the highly expensive liquefaction export terminals don't exist.

By contrast, in Europe policies continue to decarbonise energy markets and reduce the reliance on fossil carbon. For pulp and papermaking, the main driver remains the EU Emissions Trading Scheme (EU ETS) with Phase III starting in 2013. As a 'cap and trade' scheme, the intention is to deliver the emissions reduction (as set by the cap) at the lowest price. An economic recession and a focus on energy efficiency would be expected to reduce the demand for allowances below that forecast – as has happened. However, EU Member States and the Commission are largely united in seeing low prices as a symptom of a broken system and are determined to push prices up, both by limiting the number of free allowances given to industry and restricting the total amount issued.

For EU ETS Phase III, it looks like UK paper mills will be approximately one third short of allowances against what has historically been required. This has largely been caused by zero free allowances being given for electricity generation and some older mills not reaching the heat benchmarks as set by the most efficient mills. On top of these costs (affecting the whole of the EU), the UK Government is instigating a Carbon Price Floor (CPF) from April 2013 to set a minimum price for carbon (when used to generate electricity) which will impact on UK installations only. Critically, these extra costs are on top of other policy costs, such as the Renewables Obligation, Feed in Tariffs and increased distribution costs. The lack of historic investment in the distribution network is a real problem, meaning the infrastructure needs to be renewed, just as changes are needed to cater for renewable generation. Much of the new generation is located far from energy users; while the intermittent nature of renewables is frequently discussed, the connection costs for hilltop and offshore wind are often neglected in economic discussions.

These policies will impose additional costs on Energy Intensive Industries (EIIs) and we are finally starting to see evidence that Government is accepting the argument that EIIs cannot pass these costs through to customers without becoming internationally uncompetitive. The partial compensation from CPF relief mentioned in the Energy Bill and the New Climate Change Agreements (increasing the value of the Climate Change Levy Discount) are all welcome evidence that CPI's lobbying is working. 2013 will require Industry to continue to drive the message home that it's the cumulative impact of Government policies that damages long-term competitiveness. It makes no sense to reduce national emissions by driving industry out of the UK and then reimporting emissions embedded in manufactured goods.

CEPI Energy facts:

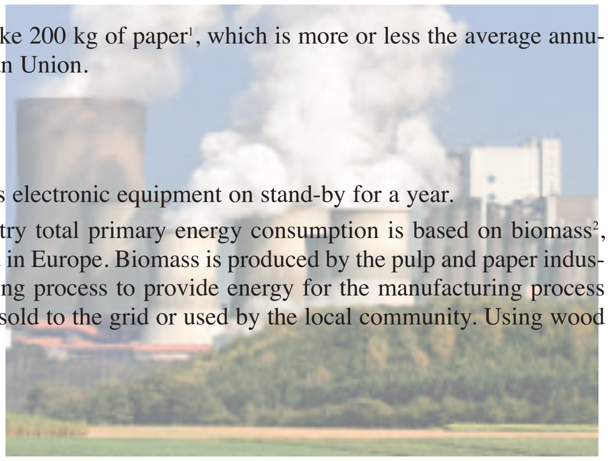
Energy is required for all industrial production and the paper industry is no exception: it requires energy to operate its machines and to dry the paper web. You would expect that, being a large scale undertaking, the paper industry consumes huge amounts of energy, yet it doesn't. For economical and environmental reasons the paper industry works continuously to optimise its processes by becoming more self-sufficient. The mix of fuel it uses has continued to evolve, with most mills producing much of their electricity and most of their heat on site. More and more electricity is supplied to the national grid too.

Around 500 kWh of energy are required in Europe to make 200 kg of paper[1], which is more or less the average annual per capita consumption in the countries of the European Union.

500 kWh is equivalent to:

- powering one computer continuously for five months;
- burning a 60Watt light bulb continuously for one year;
- The energy consumed by a typical household leaving its electronic equipment on stand-by for a year.

Overall, more than half of the EU pulp and paper industry total primary energy consumption is based on biomass[2], which corresponds to one fifth of the bio-energy produced in Europe. Biomass is produced by the pulp and paper industry by using residues and waste materials from the pulping process to provide energy for the manufacturing process itself. Often excess heat and power is produced which is sold to the grid or used by the local community. Using wood for paper first and energy last creates more value.



1. paper & the environment, ATS consulting 2007
2. CEPI sustainability report 2011

Biomass-Based Energy Review

by Bernard de Galembert
Director Social Affairs,
Forest and Research,
CEPI

The EU ambition to reach 20% of renewable energy by 2020 faces difficulties and criticisms. Does it actually create the anticipated climate benefits? Will there be enough feedstock? Is the feedstock coming from legal and sustainable sources? All questions where answers are still to come!
In 2007, the EU announced ambitious targets in the field of renewable energy, explaining that it would be beneficial for both the climate and the security of supply of the Union. At the time, the European paper industry had raised several of the shortcomings of the policy proposal, in particular the absence of a supply policy, the risk of exporting problems by importing biomass, the potential limited climate benefits.

Food vs. fuel
Since then, growing arguments have been pointing at the competition "fuelled" by the EU policy at the expense of food. The same argument that the forest industries have been constantly raising with respect to their raw material, wood. Recently, the EU publicised a proposal to amend its Renewable Energy Directive with a view to alleviate the pressure on food crops. This represents a partial response to the competition issue, since it displaces and reinforces the problem on other feedstock, especially wood, by artificially boosting the ligno-cellulosic fuels' contribution to the 2020 target of the EU.

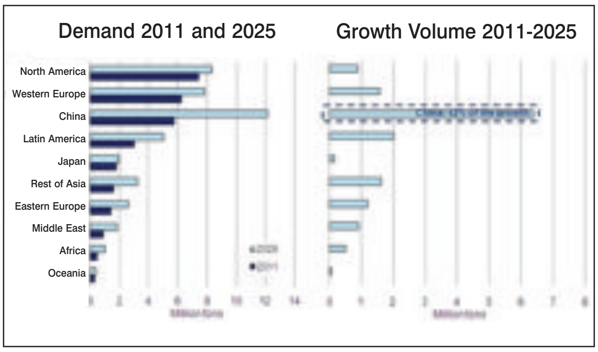
Land use
Criticisms related to the likely high dependence on biomass imports and, by this, the export of the ecological footprint of the European renewable energy have also been growing over the last years. Already today, Member States of the European Union are importing biomass from Canada, the United States, etc. in order to reach their national binding renewable energy targets. In several of these countries exporting biomass to Europe, the climate impact of land use and land use change is not at all accounted for.

Carbon neutrality
All together, the sometimes poor conversion efficiency levels in generating electricity or biofuels from biomass, the impacts of renewable energy policies on land uses within and outside the European Union, the flaws in the carbon accountancy - even the absence of such accountancy in some cases -, the competition with other uses of biomass - in particular food crops -, have risen concerns about whether renewable energy from biomass was really a solution to mitigate climate change. Scientific studies and articles, and policy discussion in the US Environment Protection Agency (EPA) have fuelled that worry that was further stressed in a scientific opinion of the European Environment Agency (EEA).

Sustainable sourcing, efficiency and accurate carbon accountancy
Preserving and enhancing the benefits of biomass as a source of energy and a solution to climate change requires the further adoption of a series of measures to ensure the comprehensive robustness of the European policy.
These measures should firstly address the accurate accounting of carbon emissions and removals from agricultural and forest ecosystems. The agreement reached by the parties to the UN Framework Convention on Climate Change (UNFCCC) in Durban last year provides the rules and mechanisms to carry out such an accounting. The EU is currently transposing it in its own legislation.
In addition, the legal and sustainable origin of the biomass, both from domestic and overseas origin, should be ascertained on the basis of well accepted and suitable criteria.
Then, the renewable energy targets of the EU should include several efficiency criteria – resource efficiency to ensure that limited feedstocks are not wasted and allocated to the valorisation that creates more jobs and value (cascading of use principle), and conversion efficiency to ensure that the feedstocks are converted into energy with the highest climate and energy benefits.
Finally, the availability of feedstocks should be ensured through mechanisms that would support the production of more biomass, both in agriculture and forestry, but also the mobilisation of the biomass in a more efficient way (e.g. collection of logging residues …). In that context, the Common Agricultural Policy (CAP) is one of the potentially most powerful instruments to secure a European-wide biomass supply policy.
When all these measures and mechanisms would be in place, the legitimacy of biomass-based energy would be much less questionable and its benefits better acknowledged.

Tissue Review
by Pirkko Petäjä
Principal Consultant,
Pöyry Management Consulting Oy

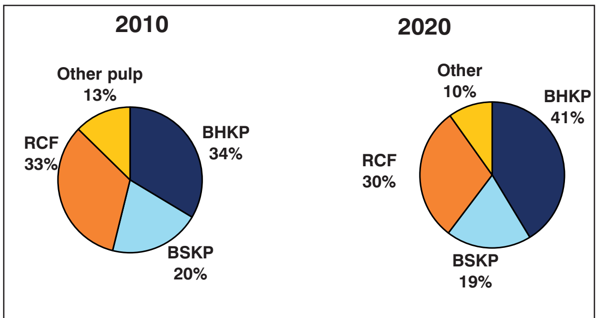
Tissue is a Growth Business
Tissue demand is expected to grow from the global close to 30 million tonnes to some 40 million tonnes by 2020. Projected production growth is 3.5%/a. Some others forecast the growth at over 4%/a rate. Opinions differ but all are of the same opinion that the growth is driven by Asia, especially China. The consumer (at home) segment grows slightly faster (3.6%/a) than AfH (Away from Home) segment, and toilet paper would grow relatively faster (3.9%/a) than other product categories and account for most of the growth as toilet is globally the most dominant category accounting for 57% of the total, and especially as it has a large share in the emerging markets where the demand growth is the strongest.
The projected growth is modest (around 1%/a) in North America, stable in Europe (close to 3%/a) and fast in emerging markets some 6%/a in MENA and 6-7%/a in China. Of the total global growth of tissue business 53% takes place in Asia and over 42% in China alone. All machine manufacturers, fibre and equipment suppliers are therefore focusing on China. This is also resulting from the fact that many other market pulp consuming paper grades are seeing negative growth and diminishing markets.
In the distress of many other paper grades, attracted by the growth of the tissue business, many traditional paper and pulp industry players have entered into the tissue sector erecting world scale projects on top of installations by focused producers and regionally oriented companies. Overcapacity threatens in many areas, including China where the demand is strong but capacity increases are even faster. Consequently, even as a growth business tissue has its global challenges and concerns that are valid also in Europe.



Most demand growth takes place in emerging economies.
Some 53% from the total additional demand volume from 2011 to 2025 is estimated to take place in Asia, China alone accounts for over 40% of the total growth.

Consolidation Developments
Despite the growth, due to many reasons, tissue business especially in Europe shows fairly modest profitability numbers in comparison with for instance the North American counterparts. This has led to developments where the North American tissue giants have been exiting Europe one after another: Procter & Gamble first, then Georgia Pacific have given up in Europe and latest Kimberly Clark has announced exit from diaper business and divestment or closure of many of its consumer tissue mills (Alanno, Klucze, Reisholz). This development has made a change in the European tissue landscape. Consolidation has increased and is expected to further increase. Forming of truly significant and strong players like SCA and Sofidel is good for the whole sector, and will increase the negotiation power of tissue producers against the strong retail chains.
The key considerations in the sector are: who will take over after Kimberly-Clark now when SCA is not anymore a potential buyer; what will happen with some other rather distressed European players; will somebody and in that case who be taking over? Are the Asians coming to the European tissue market?

Fibre: a Topical Issue in Tissue
In addition to the consolidation developments, there have been recently also other general interest areas in the tissue sector. The development of the tissue fibre furnish has been awakening the attention of several interest groups.
Recovered paper availability in grades used for tissue production tightens due to the decline of graphic paper consumption in the industrialised world. Recovered fibre real prices gradually increase and average quality weakens. Tissue's fibre paying capability is one of the lowest among paper and board grades using high quality recovered fibre. Printing and writing papers and white surface board used for printing purposes have the benefit of the mineral content in the recovered paper raw material, while in tissue the ash is mostly removed. With the resulting fairly low yield tissue cannot pay from the fibre as much as the other grades. In addition, recovered paper used in tissue consists of the grades that are hit hardest in the development of paper free offices and reduction of advertising, prints and publications. Virgin fibre share has started to grow in tissue in Europe and the increase of the share has at least plateaued in North America. In addition to this development there has been discussion about alternative fibres such as non-wood fibres like for instance Bamboo. Kimberly Clark has announced its intention to replace fibre from natural forests with Bamboo, or potentially, straw. It remains to be seen whether these developments will ever lead to a significant role for these alternative fibres.



Note: RCF as pulp (i.e. yield of RCP processing taken into account).

Development of tissue fibre furnish globally.
Usage of BHKP in tissue paper furnish will increase globally. On the other hand, furnish shares of RCF in most regions will decrease.

A Review of Corrugated Packaging: A Vibrant Industry for the 21st Century

by Andrew Barnetson
Corrugated Sector Manager, CPI

This year has seen a triumphant Olympics in London and the nation has also celebrated the Queen's Diamond Jubilee. However, 2012 was also an auspicious milestone for corrugated packaging: this year corrugated packaging is 130 years old.

Corrugated paper has come a long way since 1871 when it was first developed in the United States for wrapping fragile items such as bottles. However, it was Robert H.Thompson, who patented the machinery to produce corrugated board in 1882. In doing so, he is credited with becoming the grandfather of the modern Corrugated Industry.

The industry is looking forward not back, with significant investment in new plant and technology to ensure it remains the nation's favourite packaging material.

Industry Developments

The UK Corrugated Industry has seen significant consolidation in recent years with the takeover of the Linpac corrugated division by DS Smith and the global merger of Smurfit and Kappa. At the same time we have also seen major multinationals such as Mondi and International Paper departing the UK corrugated market.

New groups have formed and developed, with the emerging Logson Group taking on many of the Mondi plants. The departure of International Paper saw the entry of Saica as it took on former IP plants; Saica Pack saw a significant development with the later purchase of many SCA conventional plants. Those SCA packaging plants that remained after the Saica purchase, have mostly now joined the enlarged DS Smith.

The European Commission instructed DS Smith to sell a small number of facilities and in the UK this has included the heavy duty Triwall plant at Monmouth and the Darlington facility. At the time of writing, while there are some rumours about which existing companies may acquire these two sites, nothing has yet been confirmed.

Through all of these changes, there have been remarkably few site closures. While a few sites have been closed and others regrettably gone out of business, essentially we are making corrugated on the same sites that we were ten years ago. However, we are doing so in a much more efficient and increasingly sustainable manner.

The net effect of this consolidation is that a small number of companies now have a significant combined presence across the UK Corrugated Industry. Nevertheless, outside of these major groups the industry has a substantial number of independent corrugators that are seeing some reasonable growth and there also many opportunities for a vibrant sheet plant sector. Across the industry we have 'new blood' at the helm of a number of significant groups and can expect some interesting developments in coming months.

Confederation of Paper Industries (CPI) and Other Association Activity

One of the most important tasks for the CPI Corrugated Sector is to promote the positive image of corrugated as a packaging material. While there are several important technical and regulatory issues that we face, packaging does not face the same range of issues as papermakers. We can usefully turn our attention to engaging with the customer and the retailer.

A recent study was commissioned by CPI to assess the views of 100 customer companies from the FMCG Industry. The results indicated that corrugated packaging is leading the way as a tool for optimising the appearance and performance of a variety of branded products. Environmental issues also came to the fore and, among other results, we learned that 84% of respondents believe the sustainability of corrugated is better than plastic packaging.

Given the nature of the UK Retail Industry, CPI has also sought engagement with retailers, both individually and through the Institute of Grocery Distribution (IGD). Retailers have stated that they are seeking to regain the trust, and build brand loyalty with the consumer who is increasingly able to make instant price comparisons using their mobile devices. A strong part of this loyalty comes from demonstrating a responsible and sustainable approach. Corrugated is well placed to be the strategic partner for this approach.

Conclusion

A review of corrugated statistics demonstrates a downward trend in volumes, measured by either tonnage or area. However, industry focus has rightly moved beyond volumes as an indicator of success. The financial turnover of the UK Corrugated Industry remains buoyant and overall the industry is strong; it has weathered the recent difficult years and stands in a good position to face the future.

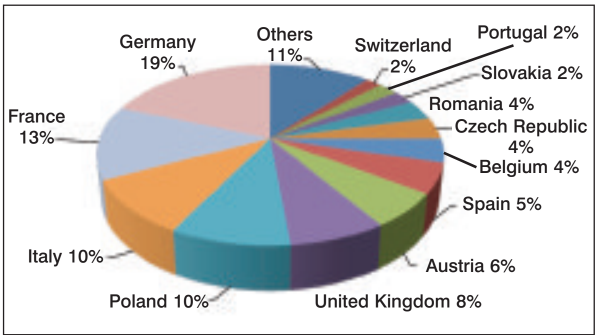
UK Corrugated Board Statistics
(courtesy of FEFCO)

	2010	2011
Total Shipments (KT)	1819	1783
Total Shipments (Mill m^3)	3952	3870
UK Companies	23	25
UK Plants	60	59
Total Number of Corrugators	69	68
Average Grammage (gsm)	460	461
Production Employees	7359	7106
Total Employees	11150	10766

Wood-Based Panels Industry Review

by Isabelle Brose
Economic Adviser,
European Panel Federation

Following an upturn in 2010, the European particleboard production contracted moderately by 1.7% in 2011 and amounted to 30.2 million m³. This production level remains far below the output peak at 37.8 million m³ observed in 2007. Throughout the year 2011, the particleboard industry experienced different situations. Activity started well during the first quarter though its progress was offset by a significant slowing down during the second and, especially, the third quarter. An upturn of the activity was observed during the fourth quarter. Two main drivers are behind the particleboard activity: the furniture industry and the construction sector. The furniture sector did not perform as well as expected in 2011. The European construction sector is showing some signs of recovery such as increases in confidence and order books level at the end of 2011 only.



Breakdown of the particleboard production by country in 2011

Some countries experienced larger variations of their particleboard production. Countries such as Finland, Germany, Hungary and Ireland suffered from larger falls in output resulting from their reductions in production capacity. On the other hand, countries such as Estonia and Romania experienced important increases in production which can be explained by a fast recovery for the first and by a rise in production capacity for the second.

Germany remained the largest particleboard producer in Europe during 2011 despite a significant decline of its output by 12%. Its production accounted for less than one fifth of the EU-EFTA production volume. France and Italy continued to complete the particleboard producers' podium with increases in their production by 4.7% and 2.1% respectively. Poland increased its production to 2.9 million m³ and was just behind the third place of Italy. The United Kingdom was the last EU country to produce more than 2 million m³ of particleboard in 2011. Together, these five countries accounted for 59% of the total EU-EFTA production in 2011.

The expectations for the year 2012 are rather good. Only three countries have reported forecasts of a decrease in particleboard production: Finland, Ireland and Sweden. For the two first, the decline can be explained by the loss of production capacity. On the contrary, Estonia, Latvia and Norway are expecting improvements of the particleboard production by 10% or more. The remaining countries have projected slight increases in production while the rise in production in the EU-EFTA area as a whole is estimated at +2% for 2012. This should result in a particleboard production just below 31 million m³ in 2012.

Following the upturn of 2010, MDF production in Europe continued to progress slowly by 1.7% in 2011 reaching 11.7 million m³, excluding Turkish and Russian production. Compared to the peak of 2007 at 13.3 million m³, the current production level is still relatively low. Germany remains the largest European MDF producer in 2011 with a production of 3.5 million m³. Poland consolidates its second position while Spain, Italy and France follow and complete the top five of the European MDF producers. Their output accounted for 68% of the overall European MDF production in 2011. The capacity utilisation rate stabilised around 76% throughout Europe. In 2011, MDF consumption in Europe decreased by 3% and amounted to 10.7 million m³.

In 2011, production of OSB in Europe recovered further at a very moderate growth rate of 1% and amounted to 3.6 million m³. This level remains somewhat below the production peak at 3.7 million m³ in 2007. Germany is still the largest European OSB producer, followed by Poland, although Romania is also now developing large production capacities. In 2011, the building activity remained subdued though around 50% of the European OSB production was sold to it. Consequently, the European OSB demand continued to improve at a very slow pace (+1%). Nevertheless, the construction activity in Europe is now giving signs of recovery: construction sector's confidence and order books indicators are improving. This is expected to support a higher growth rate for the OSB consumption and production in 2012.

Following the fierce economic downturn, the wood-based panels industry is slowly returning towards better market conditions though the ride is not an easy one. The wood-based panels sector continues to face significant increases in production costs, especially resins and energy. The competition for wood with the energy use also remains an important challenge.

2010 UK & Ireland Statistics
(courtesy of WPIF)

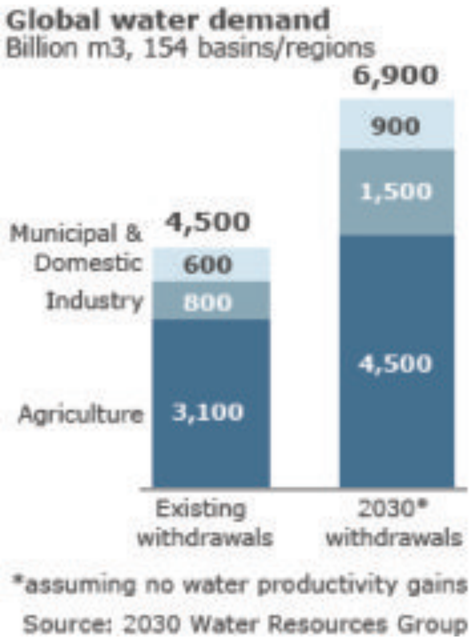
	Production Capacity (m³)	Consumption (m³)
MDF	1,370,000	1,250,000
Particleboard	2,280,000	2,697,000
OSB	640,000	

There are 11 panel board mills in the UK and Ireland, making particleboard, MDF, OSB and a special softboard material.

Water – a risk to our business?

by Debbie Stringer
Energy and Environmental Manager,
CPI

It may seem difficult to visualise in a year that has seen unprecedented rainfall patterns and flooding but water is set to be an increasingly scarce resource. With population growth increasing the demand, and climate change predicted to impact the availability, the supply of fresh water is an increasing business risk, particularly so in the paper sector where it is a process-critical resource. As it was for carbon, there is increasing pressure from the regulators, investors and customers alike for businesses to quantify and account for their direct and indirect water.



Tools are being developed to aid in the measurement, communication and mitigation of risk, principle amongst which are Water Footprint and Water Stewardship Standards. Water Footprint looks at the amount of fresh water consumed throughout the production chain of a product with the water divided into three different types - green, blue and grey. Green water represents the natural water cycle - the water evaporated by trees. Blue water refers to water abstracted from rivers, lakes and groundwater. Grey water is the amount of water needed to assimilate the remaining pollutants after waste water treatment, so that the water quality is equal or close to the natural status.

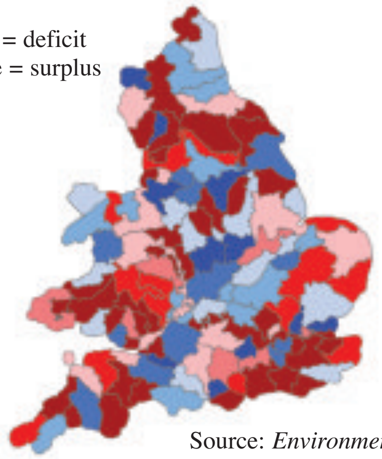
Pilot studies for paper products show that water for growing trees is 60% of the total water footprint of paper. In other words, most of the water needed to produce one sheet of A4 is used in the forest as part of the natural water cycle. According to the pilot study, 60% of the water footprint of paper is green water, 1% is blue water and 39% is grey water. Around 99% of the water footprint comes from the supply chain, and the remaining 1% comes from the actual paper mill production processes. The Water Stewardship Standard, piloted during 2012, has been developed by the European Water Partnership on the lines of a management system for sustainable water management. Confederation of Paper Industries (CPI), through Confederation of European Paper Industries' (CEPI) partnership with the Water Footprint Network and the European Water Partnership, continues to be involved with the development of both these standards, looking to ensure a more meaningful application for the Paper Sector and focusing on areas we can actually impact.

At a more local level, water resource was a focus for the Environment Agency in 2012, with water audits carried out in a number of mills. Along with identifying areas of good practice, a number of issues were identified, not least of which being an understanding of the complexity of paper mill operations by the auditors! The Environment Agency is planning to work with CPI on disseminating best practice to continue the focus on minimising water use … and to address the understanding of the complexity of the industry.

The final area of significant development with respect to water in 2012 is the Reform of the Abstraction Regime. In light of future water scarcity the current regime of abstraction licensing is not sustainable.

Uncontrolled demand, Scenario K, Fixed EFIs

Red = deficit
Blue = surplus



Source: *Environment Agency – Case for Change*

UK Government, starting with England and Wales, is drawing up policy options to reform the system of abstraction licensing beyond 2020. The process has to start now as the impact of the changes is potentially so significant because stakeholder engagement and extensive impact assessments have to form a major part of that process. Options being considered are 'Smart Regulation', where abstraction limits vary with availability of water, 'Tradable water shares' and a 'Pay as you Go' form of licence where the costs vary with availability. Case Study catchment areas have been established to model the impact of the policy options on water supply costs and environmental impact. A number of mills have been involved in the stakeholder engagement process for abstraction reform and CPI is a member of the Abstraction Reform Advisory Group, feeding the interests of the industry into the reform process.

The key messages for 2012 … and beyond are:

- A consistent quality water supply is critical to paper-making operations. Having water available in the morning but not the afternoon, is not an option.
- Measurement tools must reflect areas where operators can have a direct impact and where changes can make a difference.
- The Paper Industry is a "User" not a "Consumer" of water. Over 85% of the water abstracted is put back into the environment.

Press Release

Contamination Control

by Geoff Grant
Product Manager, MP Filtri UK
Tel 01451 822522
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Email sales@mpfiltri.co.uk

Most hydraulic systems are contaminated with solid, liquid and gaseous particles, either generated externally or internally through fluids, component wear and tear, or just bad housekeeping. These contaminates can cause system inefficiencies or system failures.

One of the first questions asked when presenting or training about condition monitoring products is "How much is this going to cost me?" Our response is always "How much is this going to save you"? Let's look at a few points where investing in condition monitoring can help you save costs.

We know that around 70 – 90% of hydraulic breakdowns can be attributed to particulate contamination. That's quite a high figure in anyone's terms if we can reduce this figure by 30 – 40% then surely there is a cost saving there.

So what are the costs of these breakdowns? The biggest cost is system downtime especially in production. Add manpower to this, the time to fault find as well as remove and replace the component that has failed. So is the question really - How long can you afford not to have your production working?

Components are being subjected to contaminants before actual component failure, therefore losing component efficiency right from the start. Whereas at new, the system will run at full pressures, loads and speeds. When contamination is a problem, over a period of time, these can all be affected by causing wear and cracks at critical component surface areas and therefore begin to lose the efficiency of the component and how well it operates. Sometimes the component may even stop operating due to the blocking of small orifices by large contaminates. Typically we are looking at component clearances of 0.5 micron up to 50 micron. It doesn't take much to block an orifice, to reduce or stop the flow of hydraulic media, hence stopping or slowing down the hydraulic application.

Costs can also be attributed to the product quality, scoring, wearing, and damaged components and finishes. Add all these together and the value can be quite high. How can we control this contamination problem and extend component life?

The first step is to add filtration. But which type of filtration do we install? Pressure, return, offline even a suction strainer. They all do a job but are they the right filter for the application?

We have to take each individual hydraulic application into consideration to see how it is operating, for example how sensitive the components are, flows, pressures, temperatures, environment and how critical the operation is. Only after considering all factors are we able to select the filters to suit the application. But how do we know we have selected the correct filters? We can analyse the oil using several different methods, but the quickest and most efficient method is online.

We know that applications are becoming far more sophisticated, using high-tech products, thus creating finer tolerances and more critical component clearances. For that reason we recommend fitting low cost particle monitors.

Online particle monitors can analyse your systems 24/7 initiating internal and external alarms should any levels of contaminate or in some cases moisture levels change. These alarms can initiate external functions from simply putting a warning light on, controlling a traffic light sequence, turning an offline filtration system on, or even shutting down the system. Protection is provided for your components and applications. Thus eliminating and reducing high cost breakdowns and unscheduled downtimes. All this, for a relative small cost.

So if your question is – 'can I afford contamination monitoring products?' the answer is – 'can you afford not to'.

The benefits of online particle counting are

- Saving money on total cost of filtration eliminating unscheduled filter changes
- Constant system monitoring = predictive maintenance = cost savings
- Constant system monitoring = tracking system cleanliness = cost savings
- Prolonging major component life due to predictive maintenance
- Save time – high cost processes effectively monitored
- Predictive control – low cost, efficient method of system monitoring when system cleanliness levels are exceeded.

Industry Statistics 2011

Information supplied courtesy of the CPI, CEPI and HM Revenue and Customs

2011 - Summary

This was another year of comparative calm, and mirrored 2010 very closely. Indeed, most of the graphs on the following two pages show the UK industry changed very little compared to the previous year; no mill or machine closures occurred, although some changes were announced that would take effect in 2012 or later.

2012 – Preliminary Assessment

The first part of 2012 continued much as 2011; the industry appeared to be weathering the financial storm, and production continued unabated. January saw start-up of Saica's 400,000tpy linerboard plant at Partington, Manchester, which will have a significant positive impact on forthcoming industry statistics. Plans to install new paper machines at Smurfit Kappa Group and Connect Hygiene Products Ltd were also announced; the former will not change mill capacity much, as it will replace two older machines (planned 2014), but the latter (completion date unspecified) will be new capacity.

It was only during the second half of the year that cracks started to show: Arjowiggins announced the closure of a tracing PM at Chartham Mill in August; they also published a plan to close Stowford Mill (10,000tpy of security grades on 2PMs) in early 2014; and DS Smith's Hollins Mill (100,000tpy of test-liner on 2PMs) was closed - this site is likely to be flattened and used for a new energy generation plant. However, offsetting these closures were announcements concerning new investment: James Cropper plc plans to build new steam generation plant based upon solid recovered fuel (for early 2014), and Arjowiggins submitted a planning application for a new CHP-biomass plant at Stoneywood Mill.

In terms of employment, action at Chartham and Hollins Mill, noted above, and at James Cropper plc, who announced a plan to cut 40 jobs across the Speciality Papers Division by the end of 2012, means the total employed in the industry for 2012 is likely to show a slight drop compared with 2011.

Three significant changes of ownership occurred over the year. In June 2012 SCA finalised purchase of the Georgia Pacific European tissue operation, which included Bridgend and Stubbins mills. Bridgend has since been put up for sale; at the time of writing no buyer has been identified. Meanwhile, tissue manufacturer Peter Grant Papers was purchased by Connect Hygiene Products Ltd, and in early October both SCA and Mondi sold their joint holding in Aylesford Newsprint Ltd to The Martland Holdings, LLC.

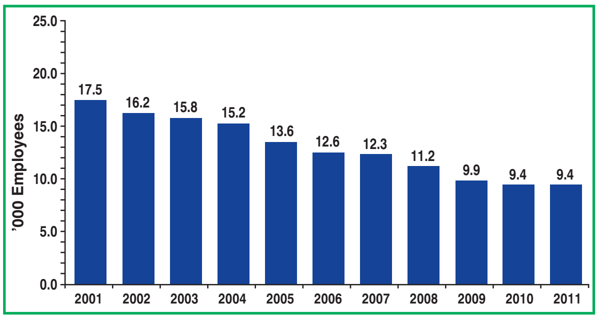
Aside from the paper manufacturing sector, Greenbottle opened a new moulded pulp manufacturing plant, whilst Sonae closed its wood panel plant. Also, Kimberly Clark announced planned changes in their European Consumer Division, which will result in closure of two nappy-making plants at Barton-Upon-Humber and the Delyn plant on the Flint site in Wales, although these plans should not take effect until 2013.

2013 - Preview

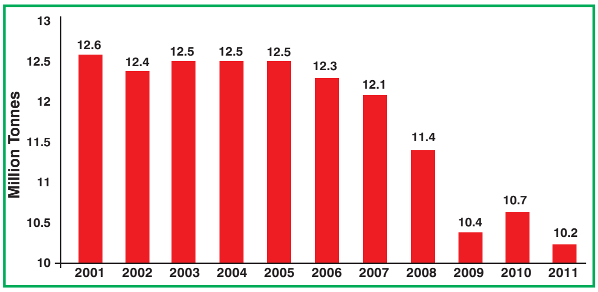
Forecasting is a notoriously difficult business! However, the business climate is unlikely to improve much compared with 2012, so it appears we could be heading for a more turbulent period. Currently no paper mill closures are on the cards for 2013, so if any do occur they will be new announcements. Meanwhile, on a positive note, two large biomass energy plants at paper mill sites (Tullis Russell and Iggesund) are due to start mid-year.

Daven Chamberlain, Editor, Paper Technology

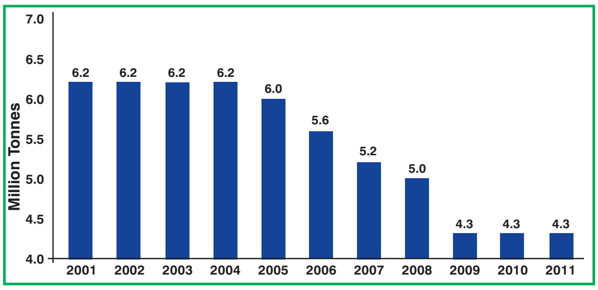
Numbers Employed in the Paper Industry 2001-2011



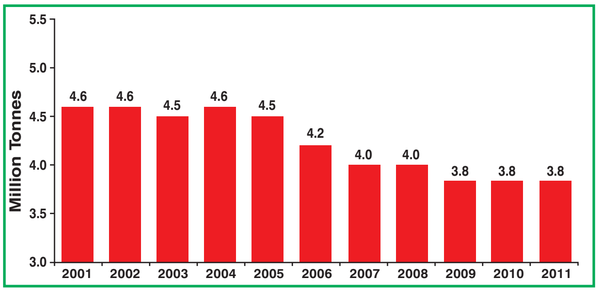
UK Consumption of Paper and Board 2001-2011



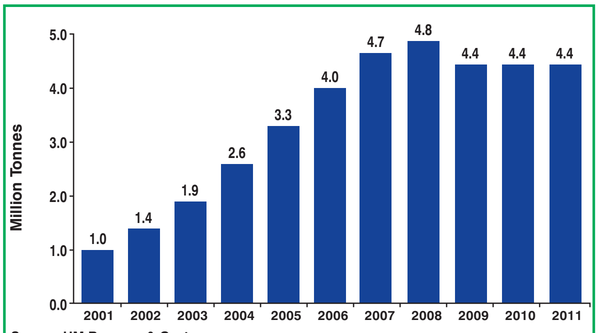
UK Production of Paper and Board 2001-2011



Recovered Paper Usage in UK Papermaking 2001-2011

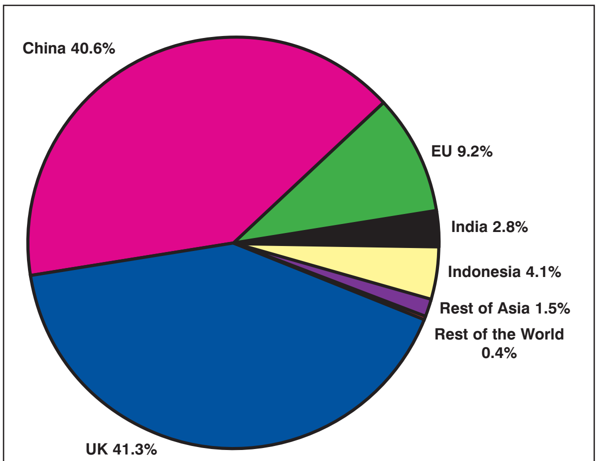


Recovered Paper Exports 2001-2011



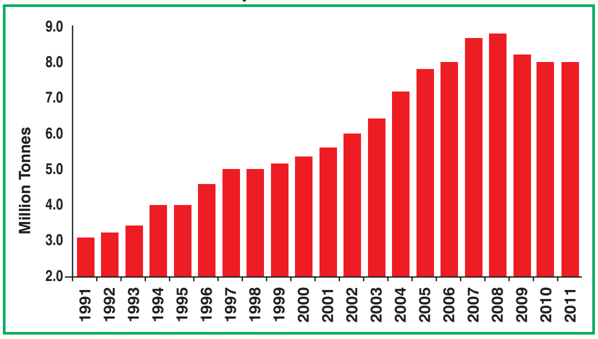
Source: HM Revenue & Customs

Recovered Paper Markets

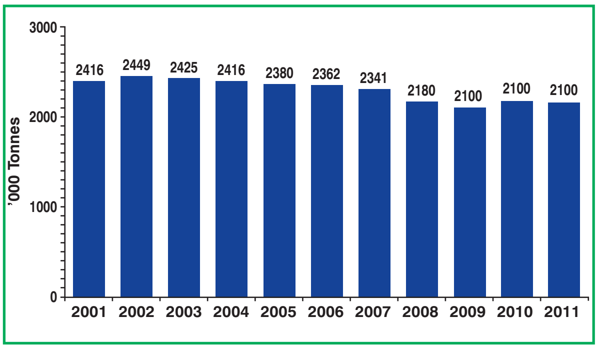


Sources: CPI, HM Revenue & Customs

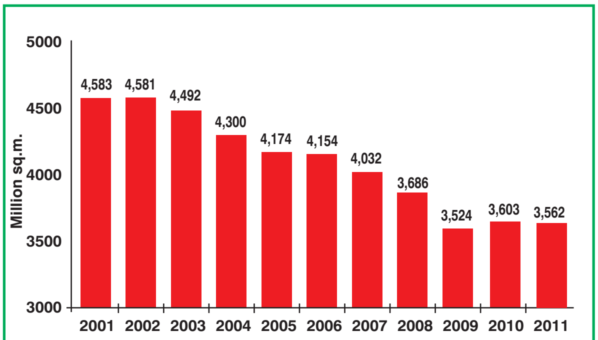
Recovered Paper Collection 1991-2011



Consumption of Paper by Corrugators 2001-2011



Corrugated Production of Corrugated Boxes 2001-2011



Sources: 2000-2003 FEFCO; 2004-2010 CPI

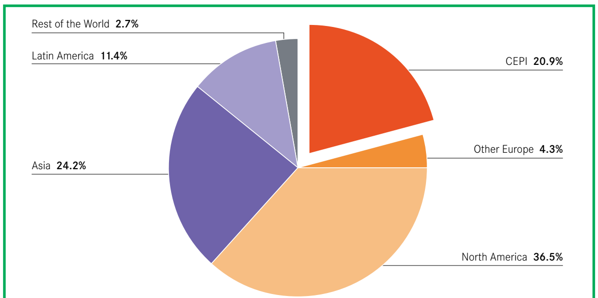
Industry Facts 2011

CPI MEMBER COMPANIES	70
CPI MEMBER EMPLOYEES	19,500
PAPER & BOARD PRODUCTION* ('000 TONNES)	4,341
CORRUGATED PRODUCTION (MILLION SQ. METRES)	3,603
RECOVERED PAPER COLLECTION ('000 TONNES)	8,035.7
TISSUE PARENT REEL PRODUCTION ('000 TONNES)	765

** includes parent reel production*

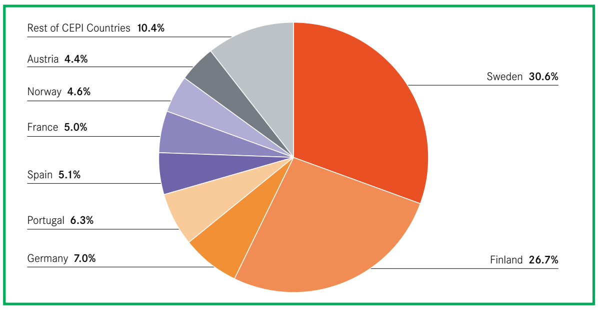
Pulp – Global View

Pulp Production by Region in 2010

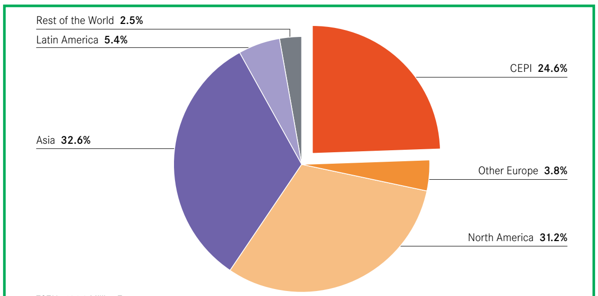


Source: CEPI, RISI

Pulp Production by CEPI Country in 2011

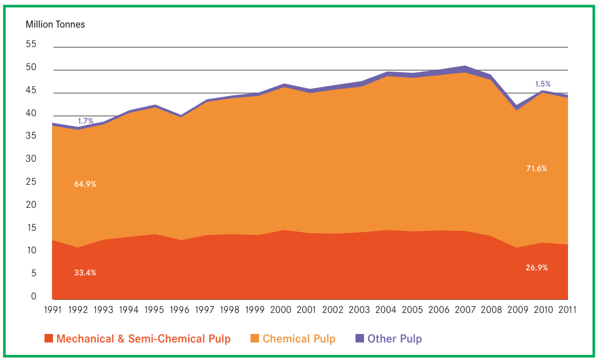


Pulp Consumption by CEPI Region in 2010



Source: CEPI, RISI

Pulp Consumption by Grade in CEPI Countries 1991-2011



Pulp

CEPI Exports of Pulp to Other Regions 2000–2011

000 Tonnes	2000	2005	2009	2010	2011	Share of Total %	% Change 2011/2010
Other Europe	333	405	355	451	551	18.3	22.2
North America	103	187	31	62	34	1.1	-45.7
Latin America	10	20	53	49	58	1.9	17.6
Asia	521	1,107	1,793	1,595	2,236	74.2	40.2
Rest of the World	85	116	143	142	136	4.5	-4.3
Total	1,054	1,835	2,375	2,299	3,014	100.0	31.1

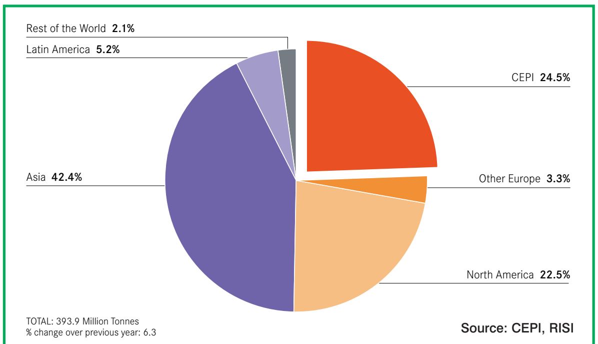
CEPI Imports of Pulp from Other Regions 2000–2011

000 Tonnes	2000	2005	2009	2010	2011	Share of Total %	% Change 2011/2010
Other Europe	632	520	319	446	492	6.2	10.3
North America	4,686	3,963	2,308	2,317	2,214	27.8	-4.4
Latin America	1,864	2,888	4,345	4,879	4,999	62.8	2.5
Asia	443	199	108	135	183	2.3	35.7
Rest of the World	376	433	143	82	78	1.0	-5.4
Total	8,002	8,003	7,223	7,859	7,966	100.0	1.4

Trade Flows of Pulp to and from CEPI Countries in 2011

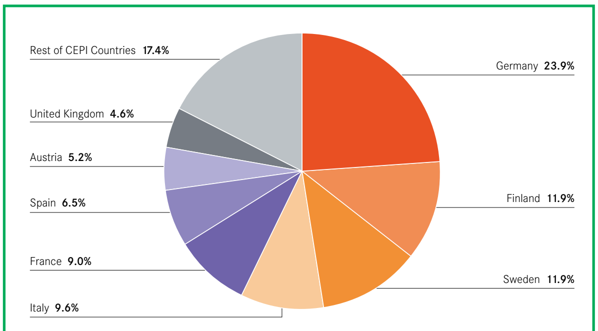
Paper – Global View

Paper & Board Production by Region in 2010

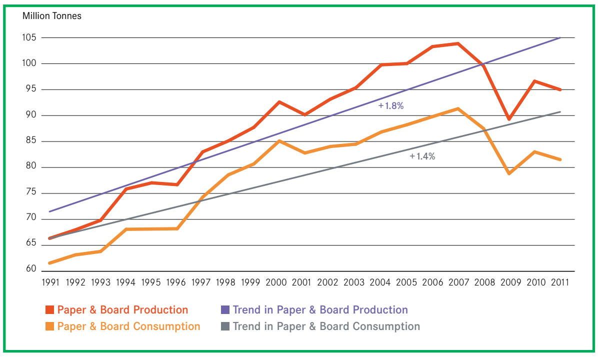


Source: CEPI, RISI

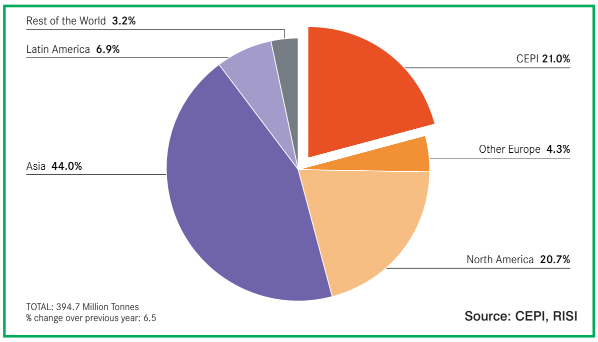
Paper & Board Production by CEPI Country in 2011



Paper & Board Production and Consumption in CEPI Countries 1991–2011



Paper & Board Consumption by Region in 2010



Source: CEPI, RISI

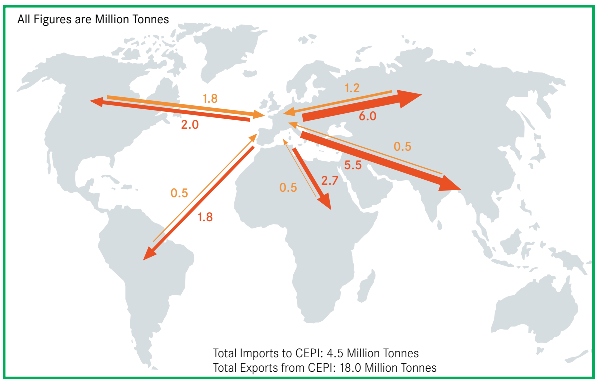
CEPI Exports of Paper & Board to Other Regions 2000–2011

000 Tonnes	2000	2005	2009	2010	2011	Share of Total %	% Change 2011/2010
Other Europe	4,394	5,736	5,320	6,257	6,049	33.6	-3.3
North America	2,203	2,813	1,503	2,064	1,954	10.8	-5.3
Latin America	860	1,197	1,077	1,884	1,796	10.0	-4.7
Asia	3,590	4,759	4,798	5,117	5,475	30.4	7.0
Rest of the World	1,915	2,239	2,294	2,789	2,738	15.2	-1.8
Total	12,963	16,745	14,992	18,111	18,013	100.0	-0.5

CEPI Imports of Paper & Board from Other Regions 2000–2011

000 Tonnes	2000	2005	2009	2010	2011	Share of Total %	% Change 2011/2010
Other Europe	2,441	1,764	1,292	1,217	1,231	27.2	1.2
North America	2,032	1,921	1,768	1,831	1,758	38.8	-4.0
Latin America	282	499	454	499	477	10.5	-4.4
Asia	298	397	655	626	522	11.5	-16.7
Rest of the World	394	372	330	308	546	12.0	77.3
Total	5,447	4,953	4,498	4,481	4,534	100.0	1.2

Trade Flows of Paper & Board to and from CEPI Countries in 2011



Conferences for 2013

4 – 8 Feb
PaperWeek Canada 2013
Montreal, Canada
www.paptac.ca

18 - 21 Mar
Tissue World 2013
Barcelona, Spain
www.tissueworld.com

9 – 13 Apr
IPX Russia
Moscow, Russia
www.adforumworld.com

27 Apr - 1 May
PaperCon 2013
Atlanta, USA
www.tappi.org

8 – 10 May
Appita Conference
Melbourne, Australia
www.appita.com.au

12 - 14 June
ZELLCHEMING
Wiesbaden, Germany
www.zellcheming.de

2 – 4 Sept
China Paper / China Forest
Beijing, China
www.chinapaperexpo.cn

9 – 11 Oct
MIAC
Lucca, Italy
www.miac.info

8 – 13 Oct
15th Fundamental Research Symposium
Cambridge, UK
www.ppfrs.org

24 - 27 Oct
Paperex
New Delhi, India
www.biztradeshows.com

PITA Membership brings...

The Paper Industry Technical Association (PITA) is an independent organisation which operates for the general benefit of its members – both individual and corporate – in promoting and communicating the technological aspects of paper manufacture. Formed in 1960, it has served the Industry – both manufacturers and allied trades - for over half a century.

Working Groups

Working Groups are a core activity of PITA, providing a forum for members to network and learn about the latest advances in paper technology. The four Groups mirror the key activities of paper manufacture, namely:

- Raw Materials, Chemicals & Stock Preparation
- Papermaking & Engineering
- Energy, Environment & Services
- Finishing, Coating & Converting

Membership of any Group is free to all PITA members. Formal meetings take place periodically, often at a mill; in between, in an acknowledgement to the difficulties some members have in leaving their workplace for extended intervals; 'Virtual Meetings' take place using the Internet.

Conferences

Conferences form another core activity undertaken by PITA. Throughout the year various events are organised, either in-house or in association with other leading learned bodies, on topics of importance to the Paper Industry. PITA members are offered preferential rates at such meetings.

Training Seminars

Maintaining skills and knowledge is of ever greater importance given the rapid rate of change in modern industry. PITA organises a rolling programme of Training Seminars with well-qualified lecturers, at which PITA members receive preferential rates.

Regional Events

The UK Paper Industry is concentrated in certain regions, therefore, regular regional meetings are organised allowing members to socialise, network and benefit from organised technical presentations. Such meetings generally take place in mills, or at supplier's premises, and where appropriate, involve a site tour.

Publications

Paper Technology is the prestigious technical journal published by PITA and distributed free to all members. Each issue contains several technical articles along with news, product and service information, updated reports on PITA activities and a full events programme.

The ***PITA Annual Review*** is an invaluable source of statistical information covering both the UK and Europe Industries. It also includes reviews on various sectors written by industry experts, and a full listing of individual and corporate member's contact details; mill and converting site information is also recorded, making it an invaluable source of data for the UK industry.

PITA also produces a range of other technical publications, including conference proceedings and the acclaimed ***Essential Guide to Aqueous Coating***.

Finally, in months where no 'paper' publication is circulated, the ***PITA Affairs*** e-newsletter keeps members informed about industry 'hot topics', time-sensitive material and training events.

Awards

PITA feels it is important to recognise the valuable contribution made by its members to both the Association and the wider Industry. As such it has organised a number of prestigious awards for which members can be nominated.

The Association also works closely with other awards (such as the Paper Industry Gold Medal and the Julius Grant Prize) to provide recognition for members at all stages of their career.

International Relationships

PITA is a leading member of EUCEPA, the European Liaison Committee for Pulp and Paper Technical Associations which represents 14 national Associations from 15 European countries. Outside of Europe, PITA maintains regular dialogue with its many sister organisations, including: TAPPI (USA); APPITA (Australia); PAPTAC (Canada) and TAPPSA (South Africa). In addition, PITA supports or is represented at several major pan-European Papermaking Exhibitions each year. Maintaining this level of contact throughout the world means PITA members obtain up to date information about all that is happening in the modern global Paper Industry.

To become a member of PITA
contact the PITA Office on 0161 764 5858

(for Members the following pages contain the full Members Directory)

Paper Industry Technical Association

PITA Affairs-*that was the year:*

Every two months (or so) I am charged with sitting down and preparing a few words to summarise PITA's activities over the past few weeks and comment on some of the highs (and lows) occurring in the Industry. It makes a change to sit down and reflect on an entire year and think back the events that have marked the year.

A commitment to training has been a major feature of 2012, both in the provision of training (moving into the European sector) and driving forward the initiative to develop a structured Training Environment for young UK Paper Makers. The benefits of high quality training are universally recognised and, in bringing Papierzentrum Gernsbach to the UK in 2013 the 'bar has been raised' significantly.

In 2012 (and continuing into 2013), we have seen the Paper Industry continue to change and evolve, becoming a major part of the Forest Products Sector. This has been reflected in the content of Paper Technology which has taken on a new lease of life under a new Editor and month on month losses have been replaced with modest profits and innovative new ideas (such as the recent Palm Paper Special Edition in November).

But most of all, 2012 was a significant turning point for the Association as several years of loss making turned into modest profitability, despite some of the most adverse trading conditions on record, putting PITA in a strong, enviable position at the start of 2013.

In the PITA Office, we are all mindful that this is your association and we welcome suggestions for new and innovative suggestions to carry the Association into the future. If you're passing the PITA Office, why not call in for a chat and let us know what we can do to make the Association work for you.

Barry R Read

Corporate Members

A

ALBANY INTERNATIONAL EUROPE GMBH
Paper Machine Clothing (Felts & Fabrics), Process Belts and Engineered Fabrics
Victor-von-Bruns Strasse 17,
Neuhausen, CH 8212, Switzerland
Tel: +41 7930 97275 Fax: +41 52 674 1109
Email: peter_slater@albint.com
Website: www.albint.com
Contact: Peter Slater

ARJOWIGGINS
Paper Manufacturers and Merchants
Fine Papers House, PO Box 88, Lime Tree Way, Chineham,
Basingstoke, Hants, RG24 8BA
Tel: 01256 728996 Fax: 01256 728849
Email: john.cooper@arjowiggins.com
Website: www.arjowiggins.com
Contact: John Cooper

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Website: www.arjowiggins.tracingpapers.com
Contact: Mark Hobday

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Website: www.arjowiggins.com
Contact: John Gaunt

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Website: www.security.arjowiggins.com
Contact: Clive Wilson

ASTENJOHNSON
Paper Machine Clothing Manufacture
46 – 50 Buschbergerweg, Eupen, 4700, Belgium
Tel: +32 87 591 591 Fax: +32 87 744 340
Email: russell.turner@astenjohnson.com
Website: www.astenjohnson.com
Contact: Russell Turner

AXCHEM UK
Chemicals for the Paper Industry
Axchem House, Waindyke Way, Normanton,
West Yorkshire, WF6 1TF
Tel: 0845 301 6710
Email: stuart.thomas@axchem.co.uk
Website: www.axchem.co.uk
Contact: Stuart Thomas

AYLESFORD NEWSPRINT LTD
Newsprint Manufacture
Newsprint House, Bellingham Way,
Aylesford, Kent, ME20 7DL
Tel: 01622 796086 Fax: 01622 796423
Email: anders.astrom@aylnews.com
Website: www.aylesford-newsprint.co.uk
Contact: Anders Aström

B

BETE LIMITED
Spray Nozzles
PO Box 2748,
Lewes, East Sussex, BN8 4BA
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Website: www.beteuk.com
Contact: Ivan Zytynski

BILLERUD BEETHAM LTD
Paper Manufacturer
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Milnthorpe, Cumbria, LA7 7AR
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Email: ying.sou@billerud.com
Website: www.billerud.com
Contact: Ying Sou

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Email: info@bbchem.co.uk
Website: www.bbchem.co.uk
Contact: Steven Lamb

BPMSA EXECUTIVE
Promoting the British Paper Machinery Suppliers
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Bury, Lancashire, BL8 4QG
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Email: a.pope2@btinternet.com
Website: www.picon.com
Contact: Tony Pope

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Website: www.buckman.com
Contact: Sean Sunley

C

CARGILL PLC
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Website: www.cargill.com
Contact: Simon Collier

CRISTAL PIGMENTS (UK) LTD
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Website: www.cristal.com
Contact: Michael Rhoades

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Email: felts@cristini.it
Website: www.cristini.com
Contact: Colin Rothwell

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Printers
27A Poland Street, London, W1F 8QW
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Email: elgin@color.co.uk
Website: www.color.co.uk
Contact: Elgin Loane

D

DE LA RUE SECURITY PAPERS
Security Paper Manufacture
Bathford Paper Mill, Bathford, Bath, BA1 7QG
Tel: 01225 855632 Fax: 01225 852128
Email: andrew.nash@uk.delarue.com
Website: www.delarue.com
Contact: Andrew Nash

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Tissue
Waterside, Disley, Cheshire, SK12 2HW
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Email: chris.wickham@connecthygiene.co.uk
Website: www.connecthygiene.co.uk
Contact: Chris Wickham

DS SMITH PAPER LTD
Paper Manufacturers
Head Office, Kemsley Mill, Sittingbourne, Kent, ME10 2TD
Tel: 01628 518900
Email: mike.collins@dssmithpaper.com
Website: www.dssmithpaper.com
Contact: Michael Collins

DS Smith Paper Ltd
Divisional, Technical Engineering Services Department
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Tel: 01795 414252 Fax: 01795 414393

DS Smith Paper Ltd
Kemsley Mill, Sittingbourne, Kent, ME10 2TD
Tel: 01795 414200 Fax: 01795 414212
Email: chris.rosser@dssmithpaper.com
Contact: Chris Rosser

DS Smith Paper Ltd
Wansborough Paper Mill
Brendon Road, Watchet, Somerset TA23 0AY
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Email: craig.nicol@dssmithpaper.com
Contact: Craig Nicol

E

ENVIRONMENT AGENCY
Environmental Regulator
Operational Technical Services
Manley House, Kestrel Way, Sowton Industrial Estate, Exeter, Devon, EX2 7LQ
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Email: js.seaman@environment-agency.gov.uk
Website: www.environment-agency.gov.uk
Contact: Spence Seaman

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Website: www.envirosystems.co.uk
Contact: Liz Russell

ERIKS UK
Engineering stores management and PRO procurement
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Park, Ullesthorpe Road,
Bitteswell, Leicestershire, LE17 4LR
Tel: 01455 556487 Fax: 01455 552842
Email: paul.lynch@eriks.co.uk
Website: www.eriks.co.uk
Contact: Paul Lynch

F

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Contact: Peter Duxbury

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Website: www.furlongmills.co.uk
Contact: Richard E Gruning

G

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Contact: Adrian Iley

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Contact: Christopher Kershaw

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Honeywell

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Email: sales@icsindustrialservices.co.uk
Website: www.icsindustrialservices.co.uk
Contact: Peter Thomson

IMERYS MINERALS LTD
Kaolin, talc & calcium carbonate suppliers
Par Moor Centre, Par Moor Road, Par, Cornwall, PL24 2SQ
Tel: 01726 818040 Fax: 01726 818194
Email: graham.pring@imerys.com
Website: www.imerys.com
Contact: Graham Pring

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Contact: Yannick Rabot

INGREDION UK LTD
Ingredient Solutions
Prestbury Court, Greencourts Business Park, 333 Styal Road,
Manchester, M22 5LW
Tel: 0161 435 3346 Fax: 0161 435 3341
Email: catherine.cooper@nstarch.com
Website: www.nationalstarch.com
Contact: Catherine Cooper

INTERTEK PAPER TECHNOLOGY GROUP
Testing and Development Service for the paper industry
Unit 7, St George's Industrial Estate, White Lion Road,
Amersham, Bucks, HP7 9JQ
Tel: 01494 544811 Fax: 01494 766798
Email: nick.kite@intertek.com
Website: www.intertek.com
Contact: Nick Kite

Intertek

INTERTISSUE LTD
Tissue
Brunel Way, Baglan Energy Park, Briton Ferry,
Neath, SA11 2HZ
Fax: 01639 825 381
Email: giuseppe.munari@sofidel.it
Contact: Giuseppe Munari

INVISTA LTD
Manufacture of process and environmental sensors for the paper industry
Unit 16, Belle Vue Enterprise Centre, Ivy Road, Aldershot,
Hampshire, GU12 4QW
Tel: 01252 345000
Email: john.middleton@invista-sensors.com
Website: www.invista-sensors.com
Contact: John Middleton

INVISTA

J

JAMES CROPPER PLC
Papermakers
Burneside Mills, Kendal, Cumbria, LA9 6PZ
Tel: 01539 722002 Fax: 01539 818205
Website: www.cropper.com
Contact: Patrick Willink

James Cropper

JARSHIRE LTD
Equipment for Paper, Board and Converting Industries
Levels House, 4 Bristol Way, Slough, Berkshire, SL1 3QE
Tel: 01753 825122 Fax: 01753 694653
Email: davidjobson@jarshire.co.uk
Website: www.jarshire.co.uk
Contact: David Jobson

JARSHIRE

K

KADANT UK LTD
Papermaking Engineers
Woodhill Road, Bury, Lancashire, BL8 1BD
Tel: 0161 764 9111 Fax: 0161 762 7192
Email: philip.drury@kadant.com
Website: www.kadant.com
Contact: Philip Drury

KEMIRA CHEMICALS (UK) LTD
Specialty paper chemicals
Bowling Park Drive, Bradford, Yorkshire, BD4 7TT
Tel: 01274 762215 Fax: 01274 762288
Email: james.atkinson@kemira.com
Website: www.kemira.com
Contact: James Atkinson

kemira
Water is the connection

KONECRANES UK LTD
Electric Overhead Travelling Cranes
Industrial Crane Division, Peel Park Place, College Milton,
East Kilbride, Glasgow, G74 5LR
Tel: 01355 220591 Fax: 01355 263654
Email: gordon.adie@konecranes.com
Contact: Gordon Adie

KONECRANES

KWI (UK) LTD
Specialist in DAF technology and filtration for effluent & white water clarification
Units 8/9, Cambrian Business Park, Bromfield Industial Estate, Mold, Flintshire, CH7 1NJ
Tel: 01352 700224 Fax: 01352 700396
Email: office-uk@kwi-intl.com
Website: www.kwi-intl.com
Contact: Phil Woollen

M

METSO PAPER LTD
Manufacturing and Refurbishment Engineers for the Paper Industry
Waterside Business Park, Johnson Road, Eccleshill, Darwen, Lancashire BB3 3BA
Tel: 01254 819078 Fax: 01254 819077
Email: jorma.jarvinen@metso.com
Website: www.metso.com
Contact: Jorma Järvinen

MP FILTRI
Manufacturers and Suppliers of Hydraulic Filtration and Associated Equipment
Bourton Industrial Park, Bourton on the Water, Gloucestershire, GL54 2HQ
Tel: 07831 538364
Email: cdurkin@mpfiltri.co.uk
Website: www.mpfiltri.com
Contact: Chris Durkin

O

OMEX ENVIRONMENTAL
Wastewater Treatment Specialists
Riverside Industrial Estate, Estuary Road, Kings Lynn, Norfolk, PE30 2HH
Tel: 01553 770092 Fax: 01553 776547
Email: danh@omex.com
Website: www.omex.co.uk
Contact: Dan Hanks

OMNIA-CHEM
Speciality Chemicals for the Paper Industry
Waterside Business Park, Hadfield, Glossop, Derbyshire, SK13 1BE
Tel: 01457 858777 Fax: 01457 858785
Email: s.finch@omnia-chem.co.uk
Website: www.omnia-chem.co.uk
Contact: Steve Finch

P

PAQUES BV
Anaerobic & Aerobic Effluent Treatment Systems, Biogas Desulphurization
P O Box 52, T. De Boerstraat 24, Balk, 8560 AB, The Netherlands
Tel: +31 514 608500 Fax: +31 514 603342
Email: w.driessen@paques.nl
Website: www.paques.nl
Contact: Willie Driessen

PARSONS REISS
Paper Machinery Engineers
Eton Way South, Eton Hill Road, Radcliffe, Manchester, M26 2ZT
Tel: 0161 724 6634 Fax: 0161 723 1661
Email: chriswright@parsonsreiss.com
Email: alanmorley@parsonsreiss.com
Website: www.parsonsreiss.com
Contact: Christopher Wright/Alan Morley

PERCEPTIVE ENGINEERING LTD
Performance Improvement in Pulp & Paper using Advanced Process Control
Suite FO8, Vanguard House, Daresbury Science and Innovation Campus, Keckwick Lane, Daresbury, Cheshire, WA4 4AB
Tel: 01925 607150 Fax: 01925 607161
Email: paper@perceptiveapc.com
Website: www.perceptiveapc.com

PILZ AUTOMATION TECHNOLOGY
Machinery Safety Automation Products, Training and Services to ensure the safety of plant or personnel in the Paper Industry
Willow House, Medlicott Close, Corby, Northants, NN18 9NF
Tel: 01536 460766 Fax: 01536 460886
Email: d.bromme@pilz.co.uk
Website: www.pilz.co.uk
Contact: David Bromme

PROCAL LTD
Calibration and maintenance of paper test equipment
Communications House, Woodfield Lane, Ashtead, Surrey, KT21 2BT
Tel: 01372 271313 Fax: 01372 270100
Email: mark@procal.co.uk
Website: www.procal.co.uk
Contact: Mark Ransom

Q

QISOFT LIMITED
Product and Process Information Software
Alexander House, Station Brow, Leyland, Lancs, PR25 3NZ
Tel: 01772 641133 Fax: 01772 641155
Email: graeme@qisoft.com
Website: www.qisoft.com
Contact: Graeme Parkinson

R

RAKEM LTD
Pigments, Fillers, Kaolin Clay, PCC, Talc, Additives
Wellington Street, Bury, Lancashire, BL8 2BD
Tel: 0161 762 0044 Fax: 0161 762 0033
Email: sales@rakem.co.uk
Website: www.rakem.co.uk
Contact: Kieran Rafferty

RAUMASTER PAPER OY
Finishing systems for Paper Mills (winding, core & broke handling, roll handling & wrapping, warehousing and shipping)
Sahankatu 2, Rauma, 26100, Finland
Email: Kaarlo.Talvinen@raumaster.fi
Website: www.raumasterpaper.fi
Contact: Kaarlo Talvinen

RENAISSANCE CHEMICALS LTD
Silver Biocide, Aloe Vera, Natural Oils, Specialty Dyes and Fluorescers, Bespoke products for special applications
Unit 1, Blackwood Hall Business Park, North Duffield, Selby, Yorkshire, YO8 5DD
Tel: 01757 282101
Website: www.renchem.co.uk
Contact: Howard Weaver

ROQUETTE UK LTD
Suppliers of native and modified starches and starch derivatives
Sallow Road, Corby, Northants, NN17 5JX
Tel: 01536 273096
Email: martin.georgeson@roquette.com
Website: www.roquette.com
Contact: Martin Georgeson

S

SKF (UK) LTD
Rolling bearings, seals, mechatronics, lubrication systems and services
Sundon Park Road, Luton, Bedfordshire, LU3 3BL
Tel: 01582 490049 Fax: 01582 848091
Email: marketing.uk@skf.com
Website: www.skf.com
Contact: Samantha Tonge

SMITHERS PIRA
Research, Consultancy, Training and Information
Cleeve Road, Leatherhead, Surrey, KT22 7RU
Tel: 01372 802127 Fax: 01372 802249
Email: gmoore@smithers.com
Website: www.smitherspira.com
Contact: Graham Moore

SMURFIT KAPPA SSK
Paper Manufacturers
Mount Street, Nechells, Birmingham, West Midlands, B7 5RE
Tel: 0121 327 1381 Fax: 0121 322 6300
Email: paul.freeman@smurfitkappa.co.uk
Website: www.smurfitkappa.com
Contact: Paul Freeman

SONOCO ALCORE
Paper Manufacturer
Stainland Board Mills, Holywell Green, Halifax, Yorkshire, HX4 9PY
Tel: 01422 374741 Fax: 01422 371495
Email: george.farrell@sonoco-alcore.net
Website: www.sonoco.com
Contact: George Farrell

SPRAYING SYSTEMS LTD
Spray Nozzles
Farnham Business Park, Weydon Lane, Farnham, Surrey, GU10 8QT
Tel: 01252 727200
Email: david.yates@spray.com
Website: www.spray.com
Contact: David Yates

Spraying Systems Co.® Experts in Spray Technology

STEPHENSON RECYCLING CHEMICALS
Chemical Manufacturers
Brookfoot House, Low Lane, Horsforth, Leeds, West Yorkshire, LS18 5PU
Tel: 0113 205 0900 Fax: 0113 205 0901
Email: src@stephensongroup.co.uk
Website: www.stephensongroupuk.com
Contact: Ramesh Patel

SULZER PUMP SOLUTIONS SWEDEN AB
Pump/Aerator/Mixer Manufacturer
Unit 24 Parkview Industrial Estate, Brenda Road, Hartlepool, TS25 1PE
Tel: 01429 850195 Fax: 01429 235180
Email: john.wright@sulzer.com
Website: www.sulzer.com
Contact: John Wright

T

TULLIS RUSSELL PAPERMAKERS
Paper & Board Manufacture
Markinch, Glenrothes, Fife, KY7 6PB
Tel: 01592 753311 Fax: 01592 755872
Email: mollisona@trg.co.uk
Website: www.tullis-russell.com
Contact: Angus Mollison

U

UPM-KYMMENE (UK) LTD
Newsprint Manufacturer
Shotton Paper, Weighbridge Road, Shotton, Deeside, Flintshire, CH5 2LL
Tel: 01244 280000 Fax: 01244 280363
Email: jonathan.edwards@upm.com
Website: www.upm-kymmene.com
Contact: Jonathan Edwards

W

WEIDMANN WHITELEY LTD
Pool Paper Mills, Pool in Wharfedale, Otley, West Yorkshire, LS21 1RP
Tel: 0113 202 7018 Fax: 0113 284 2272

Paper, Pulp & Coating Mills in the UK

AHLSTROM CHIRNSIDE LTD
Chirnside Paper Mill
Chirnside, Duns, Berwickshire, TD11 3JW
Tel: 01890-818303 Fax: 01890-818256
Products: Teabag, Speciality
Machinery: 2PM & dry-laid

AHLSTROM CHIRNSIDE LTD
Mount Sion Works
Sion Street, Manchester, M26 3SB
Tel: 0161 725 5320 Fax: 0161 724 9113
Products: Pulp mill (10,000tpy)

APSLEY PAPER TRAIL
Frogmore Paper Mill & Visitor Centre
Apsley, Hemel Hempstead, Herts, HP3 9RY
Tel: 01442-234600 Fax: 01442-275749
Products: Fine, Speciality, Artist / Watercolour
Machinery: 1PM & hand-making

ARJOWIGGINS CHARTHAM LTD
Chartham Paper Mill
Station Road, Chartham, Canterbury, CT4 7JA
Tel: 01227-813500 Fax: 01227-730026
Products: Tracing
Machinery: 1PM

ARJOWIGGINS FINE PAPERS LTD
Stoneywood Mill
Bucksburn, Aberdeen, AB21 9AB
Tel: 01224-802200 Fax: 01224-802373
Products: Fine, Industrial (Casting)
Machinery: 4PM & 1Coater (tandem)

ARJOWIGGINS IVYBRIDGE LTD
Stowford Mill
Ivybridge. Devon, PL21 0AA
Tel: 01752-612100 Fax: 01752-612102
Products: Security, Fine
Machinery: 2PM

ASIA FILE CORPORATION BERHAD
Higher Kings Mill
Cullompton, Devon, EX15 1QJ
Tel: 01884-863600 Fax: 01884-836333
Products: Recycled coloured paper and board
Machinery: 1PM

AYLESFORD NEWSPRINT LTD
Newsprint House, Bellingham Way,
Aylesford, ME20 7DL
Tel: 01622-796000 Fax: 01622-796001
Products: Standard Newsprint (100% RCF)
Machinery: 2PM (No13 & No14) & DIP

BILLERUD BEETHAM LTD
Waterhouse Mills
Beetham, Milnthorpe, Cumbria, LA7 7AR
Tel: 01539-565000 Fax: 01539-565033
Products: Speciality (food, health care, industrial)
Machinery: 2 MG; 2 off-line wet crepe machines.

CARLSON FILTRATION LTD
Butts Mill
Barnoldswick, Lancs, BB18 5HP
Tel: 01282-811000 Fax: 01282-811001
Products: Speciality Filter

CONNECT HYGIENE PRODUCTS LTD
Disley Mill
Waterside, Disley, Cheshire, SK12 2HW
Tel: 01663-762701 Fax: 01663-762461
Products: Tissue
Machinery: 1TM & DIP

DE LA RUE INTERNATIONAL LTD
Overton Mill
Overton, Hampshire, RG25 3JG
Tel: 01256-770770 Fax: 01256-770937
Products: Banknote, Security
Machinery: 4PM (cylinder)

DE LA RUE SECURITY PAPERS
Bathford Paper Mills
Bathford, Bath, BA1 7QG
Tel: 01225-858243 Fax: 01225-852128
Products: Security (not Banknote)
Machinery: 1PM (cylinder)

DS SMITH PAPER
Wansbrough Paper Mill
Watchet, Somerset, TA23 0AY
Tel: 01984-631456 Fax: 01984-634123
Products: Coreboard, Testliner 3, Envelope, Wrappings
Machinery: 2PM

DS SMITH PAPER
Kemsley Paper Mill
Sittingbourne, Kent, ME10 2TD
Tel: 01795-414200 Fax: 01795-564555
Products: Fluting, Testliner, Plasterboard and DIP (all from 100% RCF)
Machinery: 3PM (No3, No4 & No6) & DIP

FOURSTONES PAPER MILL CO LTD
South Tyne Mill
Fourstones, Hexham, Northumberland, NE46 3SD
Tel: 01434-602444 Fax: 01434-607046
Products: Creped grades
Machinery: 1TM

FOURSTONES PAPER MILL CO LTD
Sapphire Mill
Lesley, Glenrothes, Fife, KY6 3AQ
Tel: 01592-328652 Fax: 01592-328652
Products: Tissue
Machinery: 1TM

GLATFELTER UK LTD
Lydney Paper Mill
Church Road, Lydney, Gloucestershire, GL15 5EJ
Tel: 01594-842235 Fax: 01594-844213
Products: Teabag
Machinery: 3PM

HOLLINGSWORTH & VOSE COMPANY LTD
Postlip Mills
Winchcombe, Cheltenham,
Gloucestershire, GL54 5BB
Tel: 01246-602227 Fax: 01246-604099
Products: Speciality Filter, Battery Separator
Machinery: 2PM

IGGESUND PAPERBOARD (WORKINGTON) LTD
Siddick, Workington, Cumbria, CA14 1JX
Tel: 01900-601000 Fax: 01900-605000
Products: Folding Boxboard
Machinery: 1BM & RMP Pulping Plant

INNOVIA FILMS LTD
Wigton, Cumbria, CA7 9BG
Tel: 01697-342281 Fax: 01697-341417
Products: Regenerated Cellulose Film

INTERTISSUE LTD
Brunel Way, Neath, SA11 2HZ
Tel: 01639-825380 Fax: 01639-825381
Products: Tissue
Machinery: 1TM

JAMES CROPPER PLC
Burneside Mills
Kendal, Cumbria, LA9 6PZ
Tel: 01539-722002 Fax: 01539-728088
Products: Fine, Industrial
Machinery: 4PM & speciality formers

KIMBERLY CLARK LTD
Barrow Mill
Barrow in Furness, Cumbria, LA14 4WZ
Tel: 01229-495000 Fax: 01229-495001
Products: Tissue

KIMBERLY CLARK LTD
Delyn Mill
Aber Road, Flint, Flintshire, CH6 5EX
Tel: 01352-805000 Fax: 01352-805001
Products: Hand Towel

KIMBERLY CLARK LTD
Coleshill Mill
Aber Road, Flint, Flintshire, CH6 5EX
Tel: 01352-805000 Fax: 01352-805001
Products: Tissue

KIMBERLY CLARK LTD
Northfleet Mill
Crete Hall Road, Gravesend, DA11 9AD
Tel: 01474-336000 Fax: 01747-336478
Products: Tissue

LPC UK LIMITED
Leicester, LE5 1TZ
Tel: 01162-460888 Fax: 01162-460222
Products: Tissue
Machinery: 2TM

NORTHERN TISSUE GROUP LTD
Lansil Way, Lancaster, LA1 3QY
Tel: 01524-844600 Fax: 01524-842800
Products: Tissue
Machinery: 1TM

LENZING FIBERS GRIMSBY LTD
Energy Park Way, Grimsby, DN31 2TT
Tel: 01472-244700 Fax: 01472-244708
Products: Lyocell fibre (40,000tpy) from wood pulp

PALM PAPER LTD
King's Lynn, Norfolk, PE34 3AL
Tel: 01553-782222 Fax: 01553-782223
Products: Standard Newsprint (from 100% RCF)
Machinery: 1PM & DIP

PETER GRANT PAPERS LTD
Lansil Way, Caton Road, Lancaster, LA1 3PQ
Tel: 01524-843678 Fax: 01524-843644
Products: Tissue
Machinery: 1TM

PHOENIX GREEN RESOURCES LTD
Rotherham
South Yorkshire
Products: Pulp mill (approx. 1000tpy)

POOL PAPER MILLS
Weidmann Whitely Ltd
Pool-in-Wharfedale, Otley,
West Yorkshire, LS21 1RP
Tel: 01132-842121 Fax: 01132-842272
Products: Insulation, Pressboard
Machinery: 2PM

PRESTON BOARD & PACKAGING LTD
Romiley Board Mill
Oakwood Road, Romiley, Nr Stockport,
Cheshire, SK6 4DZ
Tel: 0161-430-6061 Fax: 0161-406-6114
Products: Unlined Chipboard, Cardboard (tubes, edge protection, layer pad, sheets)
Machinery: BM, 6 spiral tube machines,
2 convolute tube machines, 1 sheeter

PURICO GROUP LIMITED
Devon Valley Mill Ltd
Exeter, Devon, EX5 4RF
Tel: 01392-881731 Fax: 01392-883550
Products: Teabag, Overlay, Sausage Casing.
Machinery: 1PM

PURICO GROUP LIMITED
Union Papertech Ltd
Simpson Clough Mill, Ashworth Road, Heywood,
Lancashire, OL10 4BE
Tel: 01706-364121 Fax: 01706-624944
Products: Teabag, Coffee Filter
Machinery: 2PM

SAICA CONTAINERBOARD
Manchester Road, Partington Wharfside,
Trafford, Manchester, M31 4QN
Tel: 0161-433-1651
Products: Fluting & testliner
Machinery: BM

SCA HYGIENE PRODUCTS LTD
Bridgend Paper Mills
Llangynwyd, Nr Bridgend,
Mid Glamorgan, CF34 9RS
Tel: 01656-684500 Fax: 01656-684501
Products: Tissue

SCA HYGIENE PRODUCTS LTD
Chesterfield Paper Mill
Walton, Chesterfield, S40 2PH
Tel: 01246-558557 Fax: 01246-558556
Products: Tissue
Machinery: 1TM

SCA HYGIENE PRODUCTS LTD
Oakenholt Mill
Oakenholt, Nr Flint, Flintshire, CH6 5PU
Tel: 01352-732101 Fax: 01352-732760
Products: Tissue
Machinery: 2TM

SCA HYGIENE PRODUCTS LTD
Prudhoe Mill
Prudhoe, Northumberland, NE42 6HE
Tel: 01661-806000 Fax: 01661-806002
Products: Tissue
Machinery: 2TM & converting & DIP

SCA HYGIENE PRODUCTS LTD
Stubbins Mill
Stubbins Lane, Ramsbottom,
Bury, Lancs, BL0 0NH
Tel: 01706-283000 Fax: 01706-283001
Products: Tissue
Machinery: 2TM & DIP

SCA HYGIENE PRODUCTS LTD
Trafford Park Road, Trafford Park,
Manchester, M17 1NX
Tel: 0161-888-6002 Fax: 0161-888-6195
Products: Tissue
Machinery: 1TM

SMURFIT KAPPA PAPER UK
Smurfit Kappa SSK
Mount Street, Nechells, Birmingham, B7 5RE
Tel: 0121-327-1381 Fax: 0121-322-6300
Products: Corrugated Case Medium (Recycled Fluting, Testliner 2 & 3)
Machinery: 1PM (No4 – twin-wire)

SMURFIT KAPPA TOWNSEND HOOK
Mill Street, Snodland, Kent, ME6 5AX
Tel: 01634-240205 Fax: 01634-248046
Products: Corrugating Medium, Testliner 2 & 3
Machinery: 2PM

SONOCO BOARD MILLS LTD
Stainland Mills
Holywell Green, Halifax,
West Yorkshire, HX4 9PY
Tel: 01422-374741 Fax: 01422-371495
Products: Coreboard, Laminate Board, Display Board Middles, Chipboard
Machinery: 1BM (multi-vat)

ST CUTHBERTS MILL LTD
Wells, Somerset, BA5 1AG
Tel: 01749-672015 Fax: 01749-678844
Products: Artist / Watercolour
Machinery: 1PM (cylinder)

TULLIS RUSSELL GROUP
Markinch, Glenrothes, Fife, KY7 6PB
Tel: 01592-753311 Fax: 01592-755872
Products: Fine
Machinery: 3PM (twin wire) & 2 coaters

TULLIS RUSSELL COATERS LTD
Church Street, Bollington
Macclesfield
Cheshire, SK10 5QF
Tel: 01625 573 051 Fax: 01625 572 085
Products: Coating plant

TWO RIVERS PAPER COMPANY
Pitt Mill, Roadwater, Watchet,
Somerset, TA23 0QS
Tel: 01984-641028 Fax: 01984-640282
Products: Artist / Watercolour
Machinery: 0 (hand-made mill)

UPM KYMMENE (UK) LTD
Caledonian Paper
Meadowhead Road, Shewalton,
Irvine, KA11 5AT
Tel: 01294-312020 Fax: 01294-314400
Products: Coated Magazine
Machinery: 1PM with coater; PGW Pulping Plant

UPM-KYMMENE (UK) LTD
Shotton Paper
Weighbridge Road, Shotton, Deeside,
Flintshire, CH5 2LL
Tel: 01244-280000 Fax: 01244-280363
Products: Standard Newsprint (from 100% RCF)
Machinery: 2PM & DIP

WHATMAN PLC
Springfield Mill
Maidstone, Kent, ME14 2LE
Tel: 01622-676670Fax: 01622-691425
Products: Speciality Filter, Blotting, Diagnostic grades
Machinery: 3PM (1 Fourdrinier, 2 cylinder)

Panel Board Mills in UK & Ireland

EGGER BARONY LTD (particle)
Barony Road, Auchinleck, Scotland, KA18 2LL
Tel: 01290-427400
Fax: 01290-424420

EGGER (UK) LTD (particle)
Anick Grange Road, Hexham,
Northumberland, NE46 4JS
Tel: 01434-602191
Fax: 01434-605103

FINSA FOREST PRODUCTS LTD (particle)
Scariff, Ennis, Co. Clare, Ireland
Tel: +353 61 64 04 00
Fax: +353 61 92 11 29

KRONOSPAN LTD (particle & MDF)
Holyhead Road, Chirk, Wrexham, LL14 5NT
Tel: 01691-773361
Fax: 01691-773292

MEDITE EUROPE LTD (MDF)
Redmondstown, Clonmel, Co. Tipperary, Ireland
Tel: +353 526 182 300
Fax: +353 526 121 815

NORBORD COWIE (particle & MDF)
Station Road, Cowie, Stirlingshire, FK7 7BQ
Tel: 01786-812921
Fax: 01786-817143

NORBORD INVERNESS (OSB)
Morayhill, Dalcross, Inverness, IV2 7JQ
Tel: 01463-792424
Fax: 01463-791764

NORBORD SOUTH MOLTON (particle)
Hill Village, South Molton, Devon, EX36 6HP
Tel: 01769-572991
Fax: 01769-572413

SMARTPLY EUROPE LTD (OSB)
Belview, Slieverue, Waterford, Ireland
Tel: +353 51 851 233
Fax: +353 51 851 130

SPANBOARD PRODUCTS LTD (particle)
10 Curragh Road, Coleraine,
Co. Londonderry, BT51 3RY
Tel: 028-7035 5126
Fax: 028-7035 8670

SUNDEALA LTD (softboard-type material)
Middle Mill
Dursley, Gloucestershire, GL11 5LQ
Tel: 01453-540900
Fax: 01453-549085

Moulded Pulp Mills in the UK & Ireland

In cooperation with the International Molded Fiber Association

ROBERT CULLEN LTD
10 Dawsholm Avenue,
Dawsholm Industrial Estate, Glasgow, G20 0TS
Tel: 0141 945 2222 Fax: 0141 945 3567

E2P LTD
18-19 Gelders Hall Road, Shepshed,
Leicestershire, LE12 9NH
Tel: 01509 507 399

ENVIROPULP
Newbridge Road, Pontllanfraith,
Blackwood, NP12 2AN
Tel: 01495 228838 Fax: 0845 458 0635

ERIN HORTICULTURE LTD
Birr, County Offaly Ireland
Tel: 353 57 9120161 Fax: 353 57 9133007

GREENBOTTLE LTD
3B Delph Court, Sullivans Way, St Helens,
Merseyside, WA9 5GL
Tel: 01744 451 559

HUHTAMAKI (LURGAN) LTD
41 Inn Road, Dollinsgtown, Lurgan,
Co. Armagh, BT66 7JW
Tel: 02838 327 711 Fax: 02838 321 782

PAPER PULP SOLUTIONS
Pulp Mill House, Banton Mill, Mill Road, Banton,
Glasgow, G65 ORD
Tel: 0870 770 8883 Fax: 0870 770 8884

VERNACARE LTD
Folds Road, Bolton, Lancashire, BL1 2TX
Tel: 01204 529 494 Fax: 01204 521 862

WHATMAN PLC
Springfield Mill, Maidstone, Kent, ME14 2LE
Tel: 01622 676 670 Fax: 01622 691 425

Paper Mills in The Netherlands

ARJOWIGGINS SECURITY B.V.
Postbus 648, 7300 AP Apeldoorn
Tel: +31 (0)55 - 533 21 32

COLDENHOVE PAPIER B.V.
D.W. van Vreeswijklaan 9
6961 LG Eerbeek, Postbus 6, 6960 AA Eerbeek
Tel: +31 (0)313 - 67 06 70

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1951 AZ Velsen-Noord, Postbus 30
1950 AA Velsen-Noord
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ESKA GRAPHIC BOARD B.V.
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ESKA GRAPHIC BOARD B.V.
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P.O. Box 90, 9610 AB Sappemeer
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GEORGIA PACIFIC NEDERLAND B.V.
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MEERSSEN PAPIER B.V.
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NORSKE SKOG PARENCO B.V.
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SAPPI MAASTRICHT B.V.
Biesenweg 16, 6211 AA Maastricht
Postbus 1009, 6201 BA Maastricht
Tel: +31 (0)43 - 382 22 22

SAPPI NIJMEGEN B.V.
Ambachtsweg 2, 6541 DB Nijmegen
Postbus 4, 6500 AA Nijmegen
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Tel: +31 (0)50 - 30 33 000

SCA HYGIENE PRODUCTS SUAMEER B.V.
Solcamastraat 24, 9262 ND Suameer
Postbus 6, 9250 AA Bergum
Tel: +31 (0)511 - 46 66 66

SCA PACKAGING DE HOOP B.V.
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Postbus 96, 6960 AB Eerbeek
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SMURFIT KAPPA ROERMOND PAPIER B.V.
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Postbus 1225, 6040 KE Roermond
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SMURFIT KAPPA SOLID BOARD B.V.
Hoofdstraat 34, 9693 AH Bad Nieuweschans
Postbus 5, 9693 ZG Bad Nieuweschans
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SMURFIT KAPPA SOLID BOARD B.V.
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SMURFIT KAPPA SOLID BOARD B.V.
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Tel: +31 (0)50 - 30 33 000

SMURFIT KAPPA SOLID BOARD B.V.
W.H. Bosgrastraat 82, 9665 PH Oude-Pekela
Postbus 5, 9693 ZG Bad Nieuweschans

SOLIDPACK B.V.
Kanaal Zuid 492, 7371 GL Loenen
Postbus 43, 7370 AA Loenen
Tel: +31 (0)55 - 505 82 22

VAN HOUTUM B.V.
Boutestraat 125, 6071 JR Swalmen
Postbus 9013, 6070 AA Swalmen
Tel: +31 (0)475 - 50 73 00

Panel Board Mills in The Netherlands

PRESSWOOD INTERNATIONAL B.V. (particle)
Lokhorstweg 13a-27, 3851 SE Ermelo
Tel: +31 (0)341 - 55 33 79

TRESPA INTERNATIONAL BV (MDF)
Wetering 20, 6002 SM Weert
Tel: +31 (0)495 - 45 83 58

Moulded Pulp Mills in The Netherlands

ENKEV B.V.
De Toek 2, P.O. Box 3, 1130 AA Volendam
Tel: +31 (0)299 - 36 43 55

HUHTAMAKI NEDERLAND B.V.
Zuidelijke Industrieweg 3-7,
8801 JB Franeker, Postbus 5, 8800 AA Franeker
Tel: +31 (0)517 - 39 93 99

PAPER FOAM
Hermesweg 22, 3771 ND Barneveld
Tel: +31 (0)342 - 40 16 67

Working Museums in The Netherlands

DE SCHOOLMEESTER PAPIERMOLEN
Guispad 3, NL-1551 SX Zaandijk
Tel: +31 (0)75 - 621 44 65
(wind-powered, hand manufacture)

NEDERLANDS OPENLUCHTMUSEUM
(The Netherlands Open Air Museum)
Schelmseweg 89
Postbus 649, NL-6800 AP Arnhem
Tel: +31 (0)26 - 357 61 11
(water-powered, hand manufacture)

PAPIERFABRIEK DE MIDDELSTE MOLEN
Kanaal Zuid 497
7371 GL Loenen (Gld)
Tel: +31 (0)55 - 505 29 11
(water-powered, Victorian paper machine)

Paper Mills in Belgium

AHLSTROM MALMEDY SA
Av. Du Pont de Warche, B-4960 Malmedy
Tel: +32 (0) 80 79 54 14

BURGO ARDENNES S.A.
Rue de la Papeterie 1, B-6760 Virton
Tel: +32 063 58 70 12

CATALA S.A.
Grand Route 302, 1620 Drogenbos
Tel: +32 (0)2334 06 11

IDEM PAPERS S.A.
Rue d'Asquempont 2, 1460 Virginal-Samme
Tel: +32 (67) 28-12-11

KARTONFABRIEK ST.-LEONARD NV
Vaucampslaan 84, 1654 Huizingen
Tel: +32 (0) 23565789

LPC BELGIUM N.V.
A. Stocletlaan 3, 2570 Duffel
Tel: +32 (0) 15/30 06 11

OUDEGEM PAPIER N.V.
Oude Baan 120, 9200 Dendermonde
Tel: +32 (0)52/26 19 11

SAPPI LANAKEN NV
Montaigneweg 2, 3620 Lanaken
Tel: +32(89) 71 97 19 / 089 71 96 66

SCA HYGIENE PRODUCTS SA/NV
Rue de la Papeterie 2, 4801 Stembert.
Tel: +32 (87) 30-66-11.

STORA ENSO LANGERBRUGGE PAPER
Wondelgemkaai 200, 9000 Gent
Tel: +32 (9) 25 77 211

PAPER MILL HERISEM (MUSEUM)
Fabriekstraat 20, B-1652 Alsemberg, Brussels
Tel: +32 (0)2381 07 70

Panel Board Mills in Belgium

NORBORD NV (OSB)
Genk, Eikelaarstraat 33, 3600 Genk
Tel: +32 (0)89 - 50 03 00

SPANO NV (particle)
Ingelmunstersteenweg 229, 8780 Oostrozebeke
Tel: +32 (0)56 - 66 70 21

SPANOLUX S.A. (MDF)
Zoning Industriel de Burtonville,
Route de la Fôret 2, 6690 Vielsalm
Tel: +32 (0)80 - 29 27 10

UNILIN BOSPAN NV (particle)
Breestraat 4, B - 8710, Wielsbeke
Tel: +32 (0)56 - 67 27 11

UNILIN BOARDS (particle & MDF)
Schaapdreef 36, 8710 Ooigem
Tel: +32 (0)56 67 25 11

UNILIN WIELSBEKE NV (particle)
Ooigemstraat 3, 8710 Wielsbeke
Tel: +32 (0)56 - 67 52 11

BELGIUM

B1	Ahlstrom Malmedy SA
B2	Burgo Ardennes SA.
B4	Catala SA
B5	Kartonfanriek St.-Leonard NV
B6	Idem Papers SA
B7	LPC Belgium NV
B8	Oudegem Papier NV
B9	Sappi Lanaken NV
B10	SCA Hygiene Products SA/NV
B11	Stora Enso Langerbrugge Paper

Working Museums

B12	Paper Mill Herisem

Panel Board

B13	Norbord NV (OSB)
B14	Spano NV (particle)
B15	Spanolux S.A. (MDF)
B16	Unilin Bospan NV (particle)
B17	Unilin Boards (particle & MDF)
B18	Unilin Wielsbeke NV (particle)

THE NETHERLANDS

Paper Mills

N1	Coldenhove Papier B.V.
N2	Crown Van Gelder N.V.
N3	Papierfabriek Doetinchem B.V.
N4	Eska Graphic Board B.V.
N5	Eska Graphic Board B.V.
N6	Georgia Pacific Nederland B.V.
N7	Van Houtum B.V.
N8	Mayr-Melnhof Eerbeek B.V.
N9	Meerssen Papier B.V.
N10	Norske Skog Parenco B.V.
N11	Smurfit Kappa Solid Board B.V. Bad Nieuweschans
N12	Smurfit Kappa Solid Board B.V. Coevorden
N13	Smurfit Kappa Solid Board B.V. Groningen-Hoogkerk
N14	Smurfit Kappa Solid Board B.V. Oude-Pekela
N15	Sappi Maastricht B.V.
N16	Sappi Nijmegen B.V.
N17	SCA Hygiene Products Suameer B.V.
N18	SCA Packaging De Hoop B.V.
N19	Papierfabriek Schut B.V.
N20	Smurfit Kappa Roermond Papier B.V.
N21	Solidpack B.V.
N22	Arjowiggins Security B.V.

Working Museums

N23	De Schoolmeester Papiermolen
N24	Nederlands Openluchtmuseum
N25	Papierfabriek de Middelste Molen

Moulded Pulp

N26	Enkev B.V.
N27	Huhtamaki Nederland B.V.
N28	Paper Foam

Panel Board

N29	Presswood International B.V. (particle)
N30	Trespa International BV (MDF)

European Liaison Committee for Pulp and Paper

President: Yrjö-Pekka Rautallahti (Finland) c/o UPM-Kymmene Corporation
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The General Secretariat remains in Paris primarily for legal reasons as EUCEPA is a French registered body. In practical terms the operation of EUCEPA is hosted on a six month rotation by the member Associations.

***NB** to dial any European telephone number from the UK, replace (+) by (00); to dial the UK from Europe prefix UK by (00) with the exception of Spain which is (07) and Sweden (009)*

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Fax: +43-1-588-86-222.
e.mail:zettl@austropapier.at
Year of Foundation: 1912
President: Max Oberhumer *General Secretary:* Claus Zettler

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Czech Paper Technical Association
Novotného lávka 5, CZ 116 68 Praha 1, Czech Republic.
Tel: +420-2-210-82272. Fax: +420-2-210-82272.
e.mail:ivocharvat@tiscali.cz
Year of Foundation: 1969
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The Finnish Paper Engineers Association
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Tel: +358-9-132-6696. Fax: +358-9-630-365.
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Year and Place of Foundation: 1914, Helsinki
Chairman: Martti Savelainen
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Year and Place of Foundation: 1947, Paris
Chairman: L. Lanat *General Secretary:* D. Gomez

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Tel: +39-02-62 91-13-08. Fax: +39-02-29-00-33-96.
e.mail: aticelca@iol.it
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Latvian Paper Makers Association
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e.mail: Ligatne.pap@apollo.lv or treiman@edi.lv
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e.mail: kari.bakken.ptf@norskindustri.no
Year of Foundation: 1914
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Technical Association of the Polish Paper Industry
Plac Komuny Paryskiej 5A, PL -90 950 Lodz,
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Year of Foundation: 1946
Chairman: M. Jarczynski *General Director:* Z. Fornalski

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Year and Place of Foundation: 1981, Tomar
Chairman: Maria Isolete da Silva Torres Matos
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Year and Place of Foundation: 1970, Ljubljana
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Year of Foundation: 1908
Chairman: Rikard Wallin *Executive Director:* Marina Asp

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President: Naboru Hasegawa
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President: Dong-So Shin *Chief Staff Officer:* Hak-Lae Lee.

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President: Francisco Vivaz

Recruitment

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For further details of this position and to apply online, please visit our website: **www.cristal.com**, alternatively please forward your CV and covering letter by email: **careers.stallingborough@cristal.com** or post: **Human Resources, Cristal, PO Box 26,Grimsby, NE Lincolnshire, DN41 8DP**

PITA L-I-N-K-S

Paper Industry Technical Association

Depending on the circumstances, looking for a new job can be a time consuming luxury or necessity. Keeping in touch with the latest job opportunities requires regular, repeated searches and any small advantage can make the difference between getting that job and not getting any job.

The new “PITA Links” service will ensure that PITA Members, who choose to register with the service, will receive an e-mail alert and link whenever a new recruitment advertisement appears on the PITA Web Site; making it “the place” to advertise the best job opportunities and “the place” to look for the best jobs.

The service is free to all PITA Members (£50 plus VAT per year to Non-Members) who wish to register. Naturally, details of registered individuals will be held in the strictest confidence.

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