

Case Study - The Kent Art Printers Ltd

Company Background

The Kent Art Printers Ltd (KAP) has provided quality design, print and fulfilment services and solutions for over 65 years.

One of KAP's unique benefits, developed over the last 12 years, is the 100% alcohol free dampening in its litho production facility, thus reducing ground ozone production from Volatile Organic Compounds (VOCs). Isopropyl Alcohol used in print is believed to contribute 10% of the UK's VOC emissions.

Another strength is KAP's extensive use of 'no-waste' digital techniques as part of its environmental commitments.

Sustainability Initiatives

Business Link Environmental Management Club is assisting KAP to gain ISO14001 certification.

Key Achievements

- 'Alcohol-free' production saves over two tonnes of VOC emissions per year. This has made the factory a cleaner, healthier and safer place to work.
- Proactive marketing to customers and potential customers, challenging them to consider 'greener' options for print.
- Engaged with customers regarding the effectiveness of 'print-on-demand'.
- Developed a series of briefing sheets exploring technical and green print issues to help customers make informed choices about the production of marketing materials.
- Moved to increase recycling of office waste paper, together with reducing paper use in the first place.
- Moved to vegetable-based inks. KAP have absorbed the cost differences.
- Started to market on-line aqueous Anilox coating.
- Invested in state-of-the-art on-press "closed-loop spectrophotometry" allowing faster and more accurate print runs.

Resource Efficiency

Printing is a highly competitive industry, and it is vital that resource use is minimised from an economic and environmental standpoint.

As part of KAP's EMS new machinery, techniques and materials are evaluated for their resource efficiency potential in the procurement process.

KAP has purchased an on-press colour control system at a cost of £50,000. This has increased consistency of printed work and led to resource and cost savings due to a faster set up and fewer wasted sheets. Sheets are scanned by a sophisticated colour analysis device, which calculates the most effective settings of the ink ducts on the press. The machine operator can then initiate up



The KAP Factory, Kent

to 120 adjustments being made instantaneously (the less accurate traditional approach takes 15-20 times longer!).

KAP has also invested in a new press which was supplied with £100,000 worth of Anilox coating and extended drying equipment. This allows economical and recyclable protective finishes to be achieved online. This is environmentally beneficial as film laminates use finite petroleum resources, and UV cured varnishes and coats use a substantial amount of power for curing processes. This process also simplifies end of life recycling processes.

KAP has adopted digital techniques to reduce its environmental impact. These include remote proofing where changes can be made on the internet, thus reducing the need to transport hard copies to customers.

The office and studio have sophisticated laser printers with online finishing. These machines double side and saddle stitch and can reduce the amount of paper used by 50%. KAP has also switched to 100% recycled 'Evolve Office' paper from M-real which is made locally, thus supporting recycling and local industry.

The company has adopted a comprehensive IT system with many internal documents available online, thus reducing the amount of office paper used.

Waste pallets have been one of KAP's largest disposal issues. KAP reuses what it can for outgoing goods and has negotiated a commitment from its major suppliers to collect surplus pallets. This should encourage the use of stronger, re-useable pallets.

Where possible, KAP reuse their aluminium printing plates, otherwise the plates are recycled.

KAP has a regular employee forum where issues are openly discussed. Employee suggestions have increased efficiency and improved health and safety.

Energy and Water Efficiency

KAP monitors its energy and water usage and is committed to making reductions where possible. This includes:

- Studio computers switch off once data has been backed up.
- Driers on presses only switched on when required. KAP have found that on a particular press one drying lamp is sufficient although the manufacturer recommended using six lamps.
- Water recirculation systems on presses.
- Water minimisers in urinals.

KAP reviewed its factory heating system and considered using heat exchangers to extract energy from press drying exhausts. This was not found to be currently practical as the dryers would have to run continually to derive a heating benefit.

The company uses 'Ecotricity' as their electricity supplier, thus supporting the development of wind-power in the UK.

Social Responsibility

As a small family company, KAP has always demonstrated its concerns for employees, customers and the local community, as well as the environment.

KAP actively shares its environmental knowledge with others in the print industry, through presentations at forums such as the Business Link 'Enviroprint' group.

KAP feels that despite turmoil within the print industry, it is still its duty to adopt best practice, and to nurture good relations with local schools, colleges, the local authority and charities.

This year KAP has sponsored a Design Award for students of the Kent Institute of Art and Design. A total prize fund of £1,000 was awarded between students and their college. KAP provided opportunities for winning students to work in the commercial environment and also to see their job through the production process.

KAP offers work experience placements for students from local schools. School visits for 9-10 year olds are also arranged as part of their 'science in action' week.

The company has excellent relations with a local recycling and regeneration charity and donates redundant equipment for refurbishment and re-use.

Charities tend to be related to staff interest and involvement. KAP employees donated all the money they would have spent on 2002 Christmas cards to the Kent Air Ambulance.

Staff organise an annual quiz which is run during company time - funds raised go to the MacMillan Nurses.

Suggested donations are set for waste that staff can make use of at home and funds raised go to the RNLI.

Staff training and apprenticeship is something KAP prides itself on. One of its staff has just completed a three year day release course at the London College of Printing. Comprehensive training in Health & Safety, forklift operation, and first aid is conducted regularly.



On-press colour control in action

Supply Chain Management

KAP is proud of its close relationships with suppliers. All suppliers are managed through an 'approved supplier' scheme as part of ISO 9001 certified Quality Assurance, with rigorous procedures for non-conformance/non compliance.

As part of the drive to ISO14001 KAP will be asking more suppliers to provide their environmental credentials and assurance that their own EMS is up to scratch.

Dialogue is already underway with suppliers about current environment issues.

Transport

There are two areas where KAP can exert control or give guidance:

- Staff transport to and from work.
- Transportation of finished goods.

KAP has a wealth of experience in dispatching products to minimise cost and pollution. It runs a pan-European literature project, which has been in place for over 10 years to coordinate the production and distribution of different pieces of literature throughout 13 countries. Proactive management and grouping of ordering processes, production and distribution has minimised costs to the client and reduces transport pollution.

For deliveries and collections in KAP's vehicles, schedules are controlled centrally on a daily and weekly basis to maximise efficiency.

When the fleet is due for replacement, LPG vehicles will be considered. All recent company car purchases have been low CO₂ emission vehicles.

With regard to staff transport, KAP encourages car sharing, public transport, walking and cycling. Recent figures from an internal survey shows that 30% of staff are using 'green' options to get to and from work, with another 20% identified as having access to a practical green alternative. KAP is helping these employees to switch where possible. Bicycle racks are soon to be installed to provide a secure storage area.

Awards

- Winner of Environmental Innovation Award, Environment Awards for Kent Business.

Contact

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