

VEGA PRESS

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Water Management

Vega has been able to achieve reductions in water usage as a result of replacing the processing units on its Computer to Plate lines in December 2006 (approx. 350,000 litres per annum), installing Dampening Filtration Units on all four of its Offset Presses – two in May 2007 and a further two in August 2007 (approx. 8,000 litres per annum) and by adhering to the garden watering restrictions.

Initiatives that have achieved these outcomes were:

1. Vega's new Elantrix plate processors are equipped with a water bath that holds 34 litres. The contents of this bath are recycled and only changed after 150-200 square metres of plate have been processed. Our previous plate processor used 12 litres of water for every A1 plate processed. In the 2006/2007 financial year approximately 38,000 printing plates were processed.
2. Vega's water saving program recycles water used in the printing process. A closed loop cycle has been implemented and water can be used more than once before being discarded. The printing process is not completely water-free because of the extra chemicals involved in this process. The installation of these units was critical to the implementation of alcohol free printing. The systems operate continuously in a bypass connection to the dampening solution tank of the circulator. They rely on a two-step filtration method. The pre-filter system with its filter cartridges is used to pre-clean the dampening solution and to relieve the strain on the main filter module. The main filter is used for intensive cleaning of the dampening solution, using a powerful deep-bed filter.

The quality of the filter modules is monitored by integrated pressure sensors. The result of this continuous bypass cleaning process is a perfectly decontaminated dampening solution and a clean system, from the dampening solution tank to the dampening solution trays of the printing units.
3. Vega's next project will be the installation of water tanks for the collection of rainwater to use for filling header tanks which supply toilet cisterns.

Waste Management

In July 2005 Vega embarked on a journey to achieve certification for ISO 14001:2004 (Environmental Management Systems). This process was deliberately progressed slowly to ensure full understanding of the requirements involved. In November 2006 certification was confirmed. As part of that process many environmental initiatives have been implemented and as part of Vega's commitment to continual improvement, this will continue into the future.

1. One of the major strategies implemented as part of the ISO 14001:2004 process was a complete recycling program:
 - Paper Products – "white" waste paper from the printing presses has been recycled for many years. The natural extension was to separate and recover office paper and cardboard. The recycling of these products was arranged with the contractor used for collection of "white" paper
 - Plastic – separation of recyclable plastic products has been successfully achieved
 - Film – since the implementation of Computer to Plate technology in 2004 the amount of film recycled is negligible. Film has always been recycled for the plastic and silver content
 - Rubber – after exhaustive investigation, a contractor was located that uses the rubber from printing blankets to make flip flops
 - Aluminium products – printing plates have been collected for recycling for many years. Staff are also encouraged to recycle drink cans
 - Wooden pallets – Until 2006 these pallets went to landfill. Vega now has arrangements with paper merchants to recover the "best" of these pallets for reuse. The damaged pallets are taken away for chipping
 - Ink canisters – Progressively over the past two years Vega has moved to implementation of plastic ink cartridges for process inks. The plastic cartridges are recyclable. This strategy has been the main reason for the reduction in prescribed waste by minimising the use of ink tins
 - Office toner cartridges – Vega has been recharging its office toner cartridges for nearly ten years

2. Soft proofing via its FTP file transfer service means Vega uses less paper for hard copy proofing. This service has been available to clients for around three years. It is anticipated that this mode of proofing will escalate when flat screen resolution reaches higher standards at more competitive prices.
3. Vega uses soy-based process inks and offers soy based varnishes. Unfortunately most PMS inks still include some measure of petroleum product. Vega offers alcohol-free printing, which reduces the use of harmful chemicals and carbon outputs into the environment.

Energy Management

1. Installation of Light Eco Units
 - Fluorescent lights are normally operated within standard Utility supply voltage. The nominal supply voltage is only required to allow the lights to strike; thereafter the operating voltage can be reduced, still within the range of the Power Utility, with only a small reduction in light output
 - When a bank or strip of lights is turned on Light Eco holds the voltage at normal for a preset time and then returns to economy mode
 - Light Eco uses an auto transformer to switch from normal to economy voltage. After a start up period, the auto transformer switches to the reduced voltage. The drop in current is dependent on the age and type of fluorescent fittings. Cases documented show consistent savings in excess of 25%, many over 30%. (EES measures kW not Amps.)
 - Light Eco is not affected by the switching on or off of adjacent banks.
 - In addition to savings in power consumption, Light Eco extends the life of the fluorescent tubes and in areas where cooling is required, reduces the cost of air-conditioning. Further cost savings of up to 33% of the capital cost can be achieved

2. A special SkyCool Roof Coating on the Vega factory eliminates solar heat load entering through the roof. It is more effective than conventional insulation and mechanical cooling. It lowers the temperature of the air and reduces the requirement for cooling and assists machinery operate more efficiently during the warmer months
3. Implementation of Power Factor Correction – a method that reduces power usage and emissions of greenhouse gas by increasing energy efficiency. Low-power-factor loads increase losses in a power distribution system and result in increased energy costs.

Programs currently participating in

- Grow Me The Money
- Carbon Down.

Strategies Implemented

- ISO 14001:204
- Forest Stewardship Council Chain of Custody.

Accolades Received

- Inaugural Grow Me The Money Platinum Award
- VECCI Environmental Ambassador.

Projects to be Completed

ISO 14064 GHG Reporting Certification.